

BroadwayMalyan^{BM}

ceg:



Dunton Hills

Garden Village

Framework Masterplan
February 2020



CONTENTS

ES

EXECUTIVE
SUMMARY

01

INTRODUCTION

02

CONTEXT
ANALYSIS

03

MASTERPLAN
DRIVERS,
FUTURE TRENDS
AND DESIGN
EVOLUTION

04

LANDSCAPE:
GREEN AND BLUE
INFRASTRUCTURE

05

FRAMEWORK
MASTERPLAN



06

MOBILITY
STRATEGY

07

SUSTAINABILITY
STRATEGY

08

COMMUNITY,
STEWARDSHIP
AND LEGACY

09

PHASING AND
DELIVERY

A1

SUPPORTING
CONTEXT
ANALYSIS AND
TECHNICAL WORK

A2

SUPPORTING
DESIGN
INFORMATION

Unless stated, all images are the property of the project team or are in the public domain. In instances where this is not the case, we have been careful to acknowledge all copyright holders of the images used. If you claim ownership of any of the images presented in this document, and have not been properly identified, please contact Broadway Malyan and we will be happy to make a formal acknowledgment in an updated issue.





EXECUTIVE SUMMARY

ES.

EXECUTIVE SUMMARY

“DUNTON HILLS GARDEN VILLAGE IS A NEW SETTLEMENT IN A BOROUGH OF VILLAGES. IT IS A PLACE WHERE PEOPLE’S LIVES ARE SHAPED THROUGH UNDERSTANDING THE VALUE AND PROTECTION OF THE LOCAL NATURAL ENVIRONMENTS. EDUCATION AND COMMUNITY FACILITIES AND AMENITIES ARE CENTRAL AND WELL INTEGRATED, CREATING AN PLACE THAT BECOMES A BLUEPRINT FOR HEALTHY AND SUSTAINABLE LIVING.”

OVERARCHING VISION FOR
DUNTON HILLS GARDEN VILLAGE



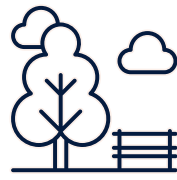
KEY COMPONENTS OF DUNTON HILLS GARDEN VILLAGE



Up to 4,000 new sustainable homes as well as provision for elderly residents



New sports facilities including football and cricket pitches



Approximately 123ha of attractive and accessible open space



New community facilities provided within the Village Centre and Neighbourhood Hubs



Homes provided over a range of typologies



Community food production centred around the existing farm house



Designated employment land as well as flexible working space within the Village Centre and Neighbourhood Hubs.



Community concierge for online deliveries and a range of retail facilities at the Market Square



3 new primary schools, each at the heart of the community



Centrally located secondary school with community sports facilities



Electric vehicle charging stations and car clubs



Mobility Hub and Mobility Corridor facilitating bus, walking and cycle connections to West Horndon Station.



Integrated network of pedestrian and cycle paths



Accessible play facilities for all ages



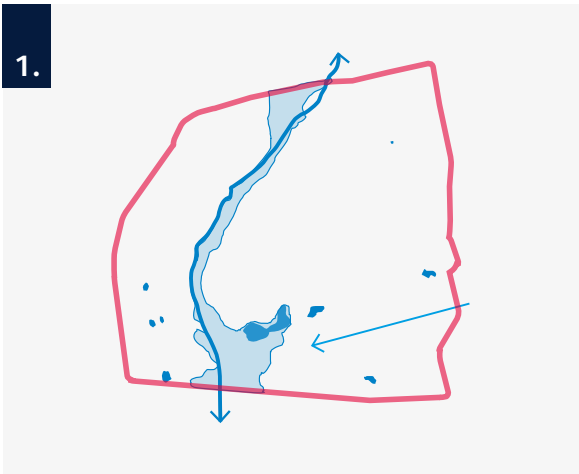
A 6.2 km wellness trail set within a landscaped setting



MASTERPLAN DRIVERS

PHYSICAL DRIVERS

Following on from an understanding of the sites constraints and opportunities, a number of spatial design drivers were developed for the site. As well as responding to the site features, the drivers reflect the discussions with Brentwood Borough Council, key stakeholder and Design South East.



BLUE - WATER

Several water elements influence the site:

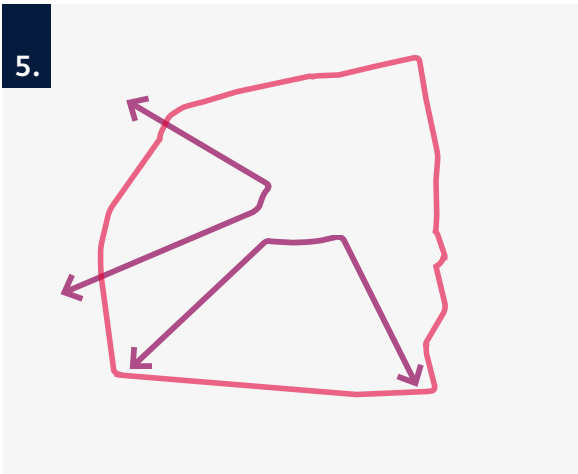
- Eastlands Spring, which runs north to south across the site
- The floodplain in the south of the site as well as the existing ponds. These together create a wetlands area



LANDFORM AND CHARACTER

There is a distinctive landform which the masterplan needs to respond to, comprising:

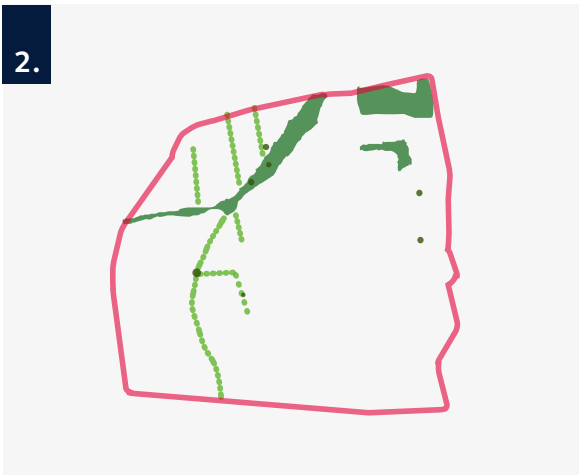
- A key ridge-line that snakes its way north to south
- Higher land to the north-east forming a plateau
- Low lying, reclaimed Fenn land to the west and south of the site



SCENIC VISTAS

The plateau in the north east of the site occupies an elevated position that:

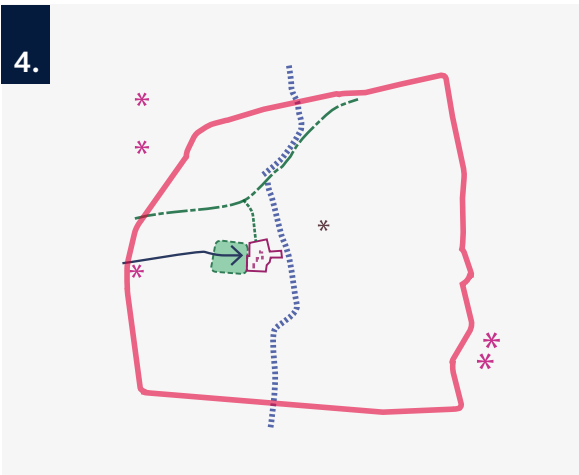
- Affords distant views towards the central London skyline in the west
- Allows distant views across to the North Downs in Kent to the south



GREEN - TREES AND WOODLAND

There is an established green framework across the site. This will be incorporated into the open space and ecology network and comprise:

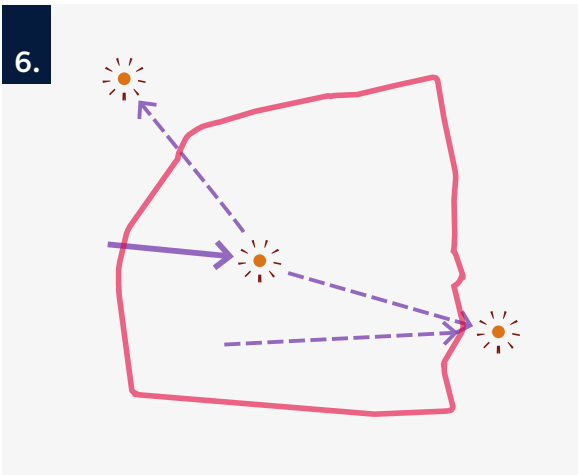
- Ancient woodland belt (in the north)
- Further woodland belts and blocks across the site
- Existing key (ecologically important) hedgerows and Cat A trees



PAST AND HERITAGE

There are a number of historic features both within and outside of the site, the setting of which needs to be preserved and respected. These comprise:

- Dunton Hills Farmstead which is a Grade II Listed Building and a prominent feature and orientation point within the agricultural and surrounding “Fanns” landscape
- Key historic features and routes through the site, including Nightingale Lane and the former Farmstead Driveway
- Key historic and gateway buildings surrounding the site



LOCAL VISTAS

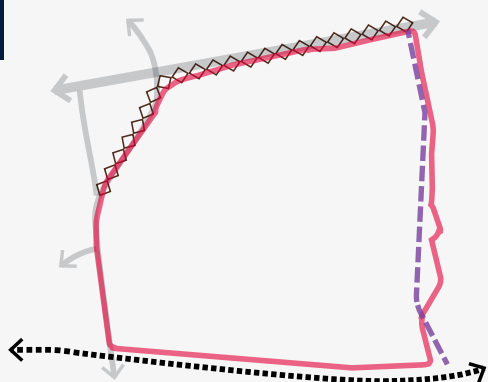
The site, its internal features and its immediate surroundings create a number of local vistas, comprising:

- Potential avenue view to Dunton Hills Farm from the A128 to the west
- Views out towards the neighbouring churches in the north west and south east

21ST CENTURY DRIVERS

Dunton Hills Garden Village must also be a place fit for the future and its design must take into account key trends, influences and societal changes. These include.

7.

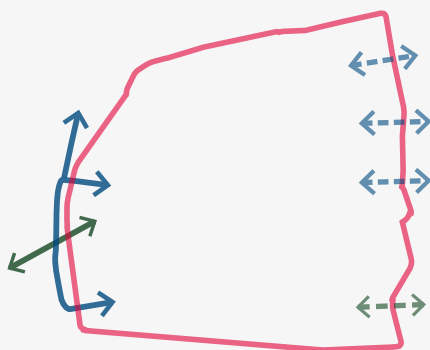


INFRASTRUCTURE

The site is bounded by transport infrastructure on three sides. These are major connectivity drivers but also barriers to movement/noise and pollution generators:

- A127 - busy, strategic road to the north
- A128 - busy, strategic road to the west
- A127/A128 interchange to the north west
- Main railway line to the south
- High pressure gas main line along eastern boundary

8.



ACCESS AND ARRIVAL

The configuration of the adjacent road network means that:

- The main vehicular access points will be from the A128 to the west
- The Station Road link to West Horndon Station to the west of the site is of key importance for pedestrians and cyclists
- Connections east towards Basildon need to be future proofed

SUSTAINABLE PLACE-MAKING



We need to plan and design for a village that is fit for purpose for current and future generations. Densities will not just seek to replicate our traditional impression of a rural village but will cater for a mixed community with housing facilities and spaces catering for families, the young and the old as well as those who choose to work from home. Renewable energy technologies will also need to be incorporated into the design of the village and its buildings.

MOBILITY



The Garden Village will accommodate a range of transport modes and have consideration for the role of new technologies such as automation and vehicle electrification. A Mobility Hub and Community Concierge will be provided at the heart of the village, providing for centralised deliveries, charging points as well as a car club and bike hire stands.

Mobility routes will provide dedicated pedestrian and cycle routes, promoting sustainable travel across and beyond the site.

EDUCATION AND LEARNING



Learning across different environments is becoming more and more important, particularly in relation to providing active social learning and apprenticeships.

For younger people within the community, the school locations will maximise their connection with the landscape, encouraging outdoor learning and promoting car free travel, ensuring children get regular exercise.

EMPLOYMENT AND WORK PATTERNS



Workspace will offer a wealth of opportunities for the next generation of workers including local co-work spaces that allow for people to live and work within the village and reduce the need to travel. The Garden Village will provide adaptable buildings and workshops with “grow on” floorspace for small start-ups to move to as they expand, helping to retain them within the village. New infrastructure with high speed digital connectivity will connect every home within the community, further facilitating working from home.

FOOD PRODUCTION



A productive landscape strategy is embedded in proposals for the new Garden Village. This could include provision of allotments and community gardens as well as orchards. Provision of these facilities not only promotes healthier lifestyles it also encourages community involvement, further physical activity, interaction with nature and provides opportunities for outdoor education.

RETAIL AND COMMUNITY FACILITIES



A 21st century village needs to respond to changes in the economy and consumer behaviour, particularly the growth of online shopping and the decline of the High Street. Community owned shops are a growing trend and shall be supported, alongside viable community and retail services and facilities. The importance of “meanwhile” and temporary uses will need to be explored to ensure the village is catered for at the offset.

A LANDSCAPE-LED MASTERPLAN

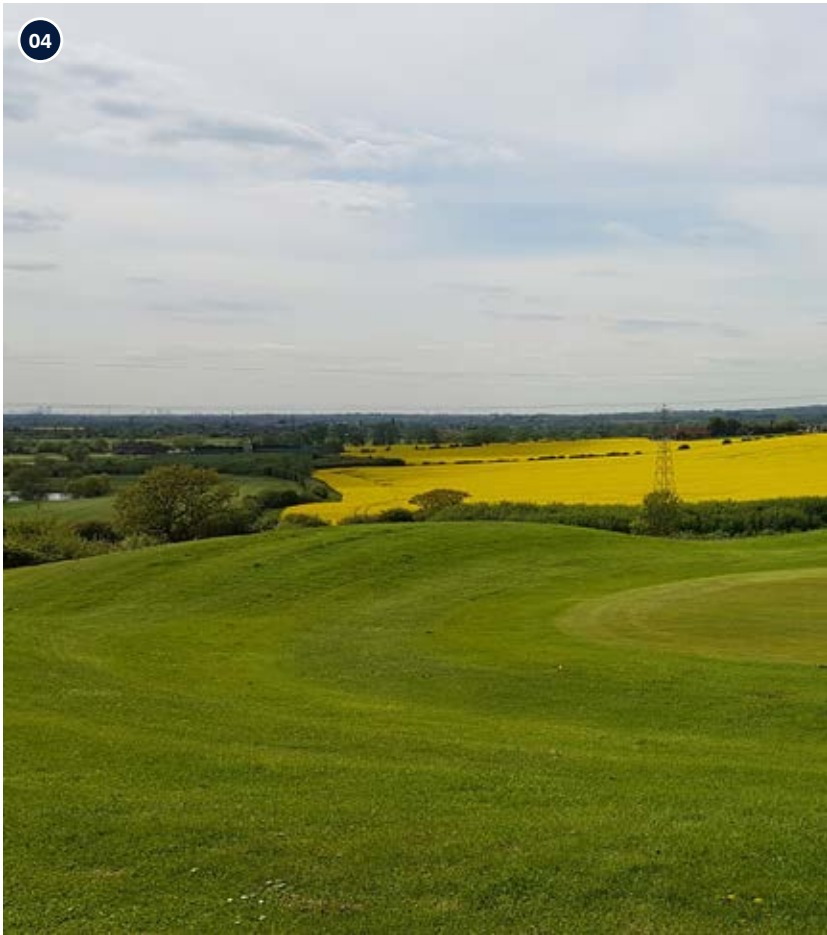
The landscape settings of the fenland and hills meet within the site, creating a diverse green and unique infrastructure network. A number of key existing character areas are identified that will be strengthened and interpreted into the design of the different neighbourhoods that will form the Garden Village. Significant areas of green infrastructure shall be safeguarded in the masterplan, celebrating the true and inherent nature of the site.

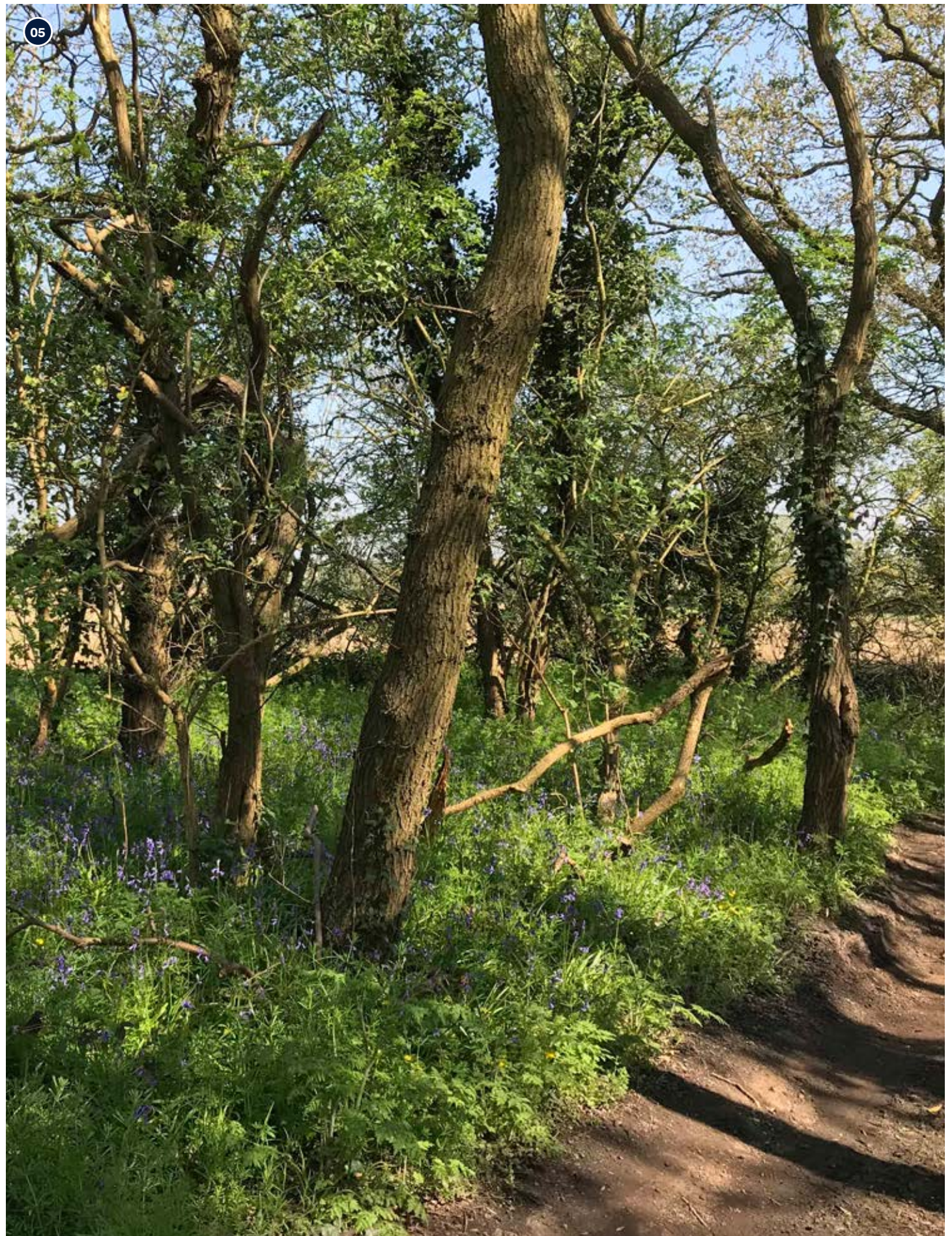
The distinctive landscape character areas are:

- 01 Dunton Fanns
- 02 Eastlands Spring
- 03 Dunton Wetlands
- 04 Ridge
- 05 Dunton Woods



Sitewide landscape character plan



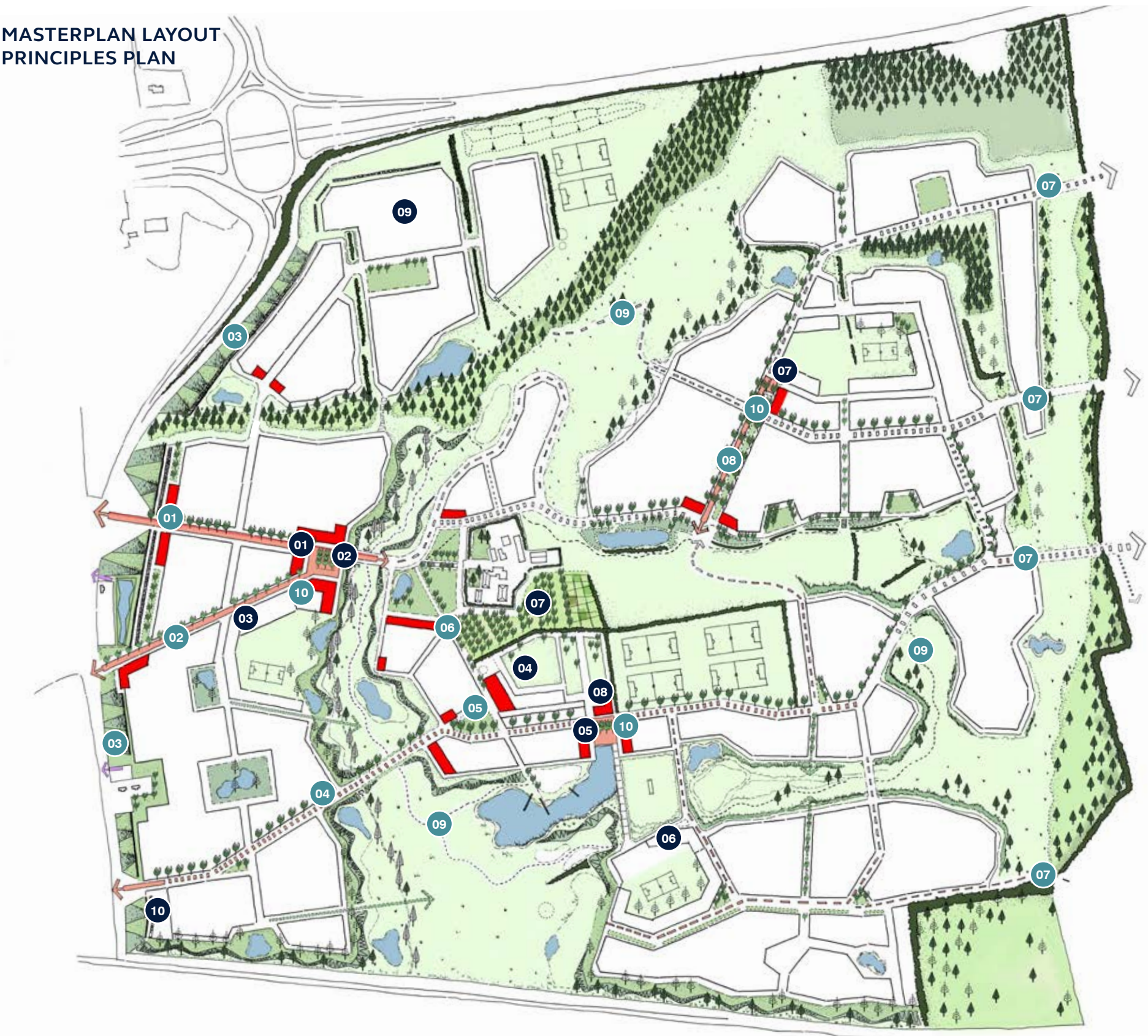


FRAMEWORK MASTERPLAN

MANDATORY SPATIAL PRINCIPLES

A framework masterplan has been prepared for the Garden Village. This is supported by a series of Mandatory Spatial Design Principles covering: Layout and Spatial Organisation and Vistas and Access and Movement. These are illustrated below and set out on the opposite page.

MASTERPLAN LAYOUT
PRINCIPLES PLAN



KEY

- | | |
|--|---|
|  Routes - mandatory alignment |  Routes - flexible landscape connections |
|  Routes - flexible alignment |  Indicative marker buildings |



MANDATORY SPATIAL PRINCIPLES

Further detail covering the themes outlined here can also be found in chapter 5 of the document alongside other Mandatory Spatial Principles including landscape, heritage, play, density and building heights. The aim of these Mandatory Spatial Principles are to ensure that the vision and objectives of the Garden Village are delivered through further design work and planning applications. Chapters 6-9 of this document also provide further Mandatory Overarching Principles relating to: Mobility; Sustainability; Community/Stewardship/Legacy; and Phasing and Delivery. These are equally important as the Mandatory Spatial Principles, but do not relate to the masterplan layout.

MANDATORY SPATIAL PRINCIPLES

LAYOUT AND SPATIAL ORGANISATION

- 01 Location and arrangement of the Market Square** - will be positioned at the heart of the Garden Village and on the eastern edge of Dunton Fanns, facing the proposed Village Green and the historic farmstead. The Market Square will be designed to a suitable size to support the quantum of non-residential uses intended and will be enclosed by taller buildings with employment, retail and community uses activating the public realm.
- 02 Definition of the Village Green** - will providing a setting for the historic farmstead as well a key communal open space for residents in which to interact and relax. The Green will be visible from the Market Square, across the landscape associated with the Eastlands Spring. The existing driveway will be retained and will become an important pedestrian route to Dunton Waters.
- 03 Location of Dunton Fanns Primary School** - will be a central component of the Fann’s community and will have frontage onto the proposed Mobility Corridor to promote sustainable travel.
- 04 Secondary School** - will be visible from the wetlands along an east-west route connecting Dunton Fanns with Dunton Waters. The school building will front onto a lane and frame an arrival ‘Schoolyard Square’, comprising a car free setting.
- 05 Location and arrangement of Neighbourhood Hub for Dunton Waters** - will be focused around a south facing lakefront plaza with views of the proposed cricket pitch and Dunton Waters Primary school, framed by buildings and activated by non-residential ground floor uses. The community element of the Secondary School will frame the northern edge of the plaza.
- 06 Location and arrangement of Dunton Waters Primary School** - will be focused on the threshold of the wetlands landscape, maximising opportunities for outdoor learning whilst being visible from the lake front plaza.
- 07 Location and arrangement of the co-located Dunton Woods Neighbourhood Hub and Primary School** - will be the central component of Dunton Woods, centred around a plaza at the northern end of a linear park which will form a view corridor to Dunton Waters. The plaza will be framed by taller buildings with non-residential ground floor uses.
- 08 Location and arrangement of sports pitches and sports hub**- will be provided within the Secondary School parcel allowing both students and residents to make use of the facilities. The pitches will support a range of sports, forming a hub for community activity for social and competitive recreation. Other sports facilities include the cricket pitch and football pitches.
- 09 Location of employment land** - will be in close proximity to the employment site proposed to the west of the A128. Employment land uses will be supported by a nursery and will adjoin open spaces, accessible for both workers and residents. Buildings will be positioned in an east-west orientation to establish a noise barrier against the A127.
- 10 Location of Gypsy and traveller site** - will be positioned to allow for direct access from the A128 and with an interface with the proposed landscape edge. The site will allow for 5 pitches in line with policy, with the final configuration to be determined upon consultation with potential occupants.

VISTAS, ACCESS AND MOVEMENT

- 01 Farmstead Avenue and view corridor** - will preserve a direct visual relationship between the A128 and the Grade II listed farmhouse. This is one of many masterplanning approaches that ensures the historic farmstead becomes a focal point within the Garden Village.
- 02 Mobility Corridor (Station Road extension)** - will be the main access point to the village, accommodating pedestrians, cyclists and public transport. The Mobility Corridor will extend into the village along the alignment of Station Road, with a direct pedestrian and cycle crossing over the A128. This will facilitate and promote sustainable travel to the Market Square at the Village Centre which will include the Mobility Hub.
- 03 Mobility route along the western edge** - will be incorporated into the landscape, facilitating safe and sustainable travel (for cyclists and pedestrians) north-south along the A128, but respecting the setting of the retained dwellings.
- 04 Secondary School approach and landmark** - a direct route and view corridor will be established from the Secondary School building to the wetlands, ensuring its prominence as a landmark within the wider Garden Village, as well as promoting wayfinding.
- 05 Schoolyard Square** - will be established in front of the Secondary School building, at the end of the proposed School Lane. The square will form a car free and landscaped gathering space for children and parents before and after school, as well as allowing for the retention of existing historic trees.
- 06 School Lane** - a key pedestrian and cycling priority route will be established, connecting the Village Green and Secondary School with the wetland. The lane will run past the community orchard one side and be fronted and activated by new homes on the other.
- 07 Potential future connections east towards Basildon** - will be safeguarded into the layout of the masterplan to allow for future expansion and connectivity.
- 08 Dunton Woods viewing corridor** - will establish a visual relationship between the Neighbourhood Hubs of Dunton Woods and Dunton Waters, promoting a sense of community cohesion within the overall Garden Village.
- 09 Wellness trail** - a pedestrian and cycling only trail will be provided within the landscape, promoting a healthy lifestyle within the Garden Village. The trail will connect the facilities provided within the Market Square and Village Green within Dunton Fanns to the other Neighbourhood Hubs and Schools.
- 10 Nodes at intersections** - the point at where two or more routes intersect will inform the location of Neighbourhood Hubs and associated non-residential uses.
- 11 Marker buildings (throughout masterplan)** - will be used to define key routes, vistas and places, promote placemaking and wayfinidng within the neighbourhoods or landscape setting. Marker buildings shall be distinguished from other buildings through either architectural treatment, height or positioning within a prospective layout.
- 12 Inter-neighbourhood connectivity (throughout masterplan)** - in conjunction with the wellness trail, pedestrian and cycle connections will be established to ensure a high degree of connectivity between the three neighbourhoods, further promoting safe and sustainable travel.



CHAPTER 1

INTRODUCTION

This section provides a brief overview of the project team, the document layout and its role in the creation of the exemplar sustainable new community of Dunton Hills Garden Village.



DUNTON HILLS: A NEW ESSEX GARDEN VILLAGE

DUNTON HILLS GARDEN VILLAGE

Dunton Hills Garden Village was designated as one of fourteen Garden Villages by the Government in January 2017 and is identified in the emerging Brentwood Borough Local Plan as a strategic housing allocation to meet the majority of the Borough’s housing need within the plan period and beyond.

The emerging Local Plan requires the site to deliver a mix of uses comprising at least 2,770 homes within the plan period and up to 4,000 homes in total, together with the necessary community, utility, transport and green and blue infrastructure to support a self-sustaining, thriving and healthy community.

THE DEVELOPMENT DESCRIPTION

This Framework Masterplan Document sets out the foundations for the Garden Village based upon the policies of the emerging Local Plan and will include the following:

- Up to **4,000 new homes**
- **A Village Centre** (to include local shops, services, cafés, healthcare provision, community facilities, employment and a Mobility Hub) and two further smaller **Neighbourhood Hubs**
- **Education facilities**, including a Secondary School, three Primary Schools and early years provision. The Secondary School could be co-located with a Primary School.
- Up to **5.5 hectares** of employment.
- **3 care homes**, the exact type of facility to be determined at later stages in conjunction with the relevant authority.
- **Green and blue infrastructure**, including parks, greens, natural and semi-natural green space, informal and formal recreation and water attenuation features.
- **Access and mobility routes** including routes for pedestrians, cyclists, public transport and vehicular traffic.
- Associated **infrastructure**.

HOW TO USE THIS DOCUMENT

This document has been structured around the chapters set out below. The Framework Masterplan (Chapter 5) contains the key information that will inform and control the spatial design of the Garden Village, with preceding chapters setting out the background and vision and subsequent chapters supporting the design.

Chapter 1: **Introduction** to Dunton Hills Garden Village.

Chapter 2: **Context Analysis** of the current planning policy position as well as an assessment of the site and its surrounding context.

Chapter 3: **Masterplan Drivers, Future Trends and Evolution** explores some of the 21st century influences that will shape future developments such as Dunton Hills, including transport innovations and how we may live and work in the future. In addition to this a range of design drivers are established, informed by the context analysis in Chapter 2. A summary of the masterplan evolution through the design review process is also set out.

Chapter 4: **Landscape: Green and Blue Infrastructure** are key components of the Garden Village and this section sets out the strategy within the Framework Masterplan, covering elements such as bio-diversity, play and drainage.



Chapter 5: **Framework Masterplan** sets out the key information that will control the spatial design of the Garden Village over a range of plans and topic areas including built form and landscape.

Chapter 6: **Mobility Strategy** sets out the approach to sustainable movement to, from and around the Garden Village.

Chapter 7: **Sustainability Strategy** sets out a wide ranging sustainability strategy covering community interaction, health and well-being, education, the economy, energy efficiency and renewable technologies.

Chapter 8: **Community Stewardship and Legacy** covers elements such as the community management of the Garden Village.

Chapter 9: **Phasing and Delivery** illustrates how the Garden Village could be phased showing what community facilities and infrastructure will be provided at different stages.

Appendix A1: **Supporting Context Analysis and Technical Work**

Appendix A2: **Supporting Design Information**

THIS DOCUMENT HAS BEEN PREPARED ON BEHALF OF COMMERCIAL ESTATES GROUP (CEG) AND THE LANDOWNERS AND IN PARTNERSHIP WITH BRENTWOOD BOROUGH COUNCIL. THE FULL CONSULTANT TEAM RESPONSIBLE FOR THE DOCUMENT ARE LISTED BELOW.

Broadway Malyan - Masterplanning

Lichfields - Planning and Socio-economics

Vectos - Transport

Brookbanks - Utilities, Noise and Air Quality

Tyler Grange - Landscape

Montegu Evans - Built Heritage

SES - Ecology

Orion - Archaeology

WSP - Drainage, sustainability, waste and lighting

Star Planning - Project Management

Gateley Hamer - Overhead Powerlines

EFM Education



MASTERPLAN PROCESS

This Framework Masterplan Document for Dunton Hills Garden Village has been developed through a thorough masterplan process which captures and safeguards the aspiration of multiple stakeholders.

MASTERPLAN EVOLUTION

Whilst a significant amount of design and feasibility work has been undertaken for Dunton Hills Garden Village in recent years, the masterplanning commenced in earnest in April 2019. The development of this Framework Masterplan has been led by Broadway Malyan on behalf of the landowners and in partnership with Brentwood Borough Council and in liaison with key stakeholders including Essex County Council. It has been the subject of a detailed design process involving a large number of interested parties at various workshops and events, co-ordinated by Brentwood Borough Council and an independent Design Review Panel – Design South East.

Between April and October 2019 a number of formal and informal reviews were undertaken as the Framework Masterplan evolved, incorporating the aspiration of multiple stakeholders as well as Brentwood Borough Council. A summary of the design evolution can be found in Chapter 3. The master planning process has, as far as reasonable at a Framework Masterplan stage, taken into account the content of other good practice design guidance and the published planning policy documents.

In preparing this document Broadway Malyan and CEG have sought to respond positively to the design advice of Design South East and the stakeholders.

FRAMEWORK MASTERPLAN

The masterplanning evolution culminated in the Framework Masterplan for the Garden Village that is the basis of this document. The Framework Masterplan seeks to capture and enshrine the vision, and sets out Mandatory Spatial and Overarching Principles to be adhered to.

DOCUMENT HIERARCHY

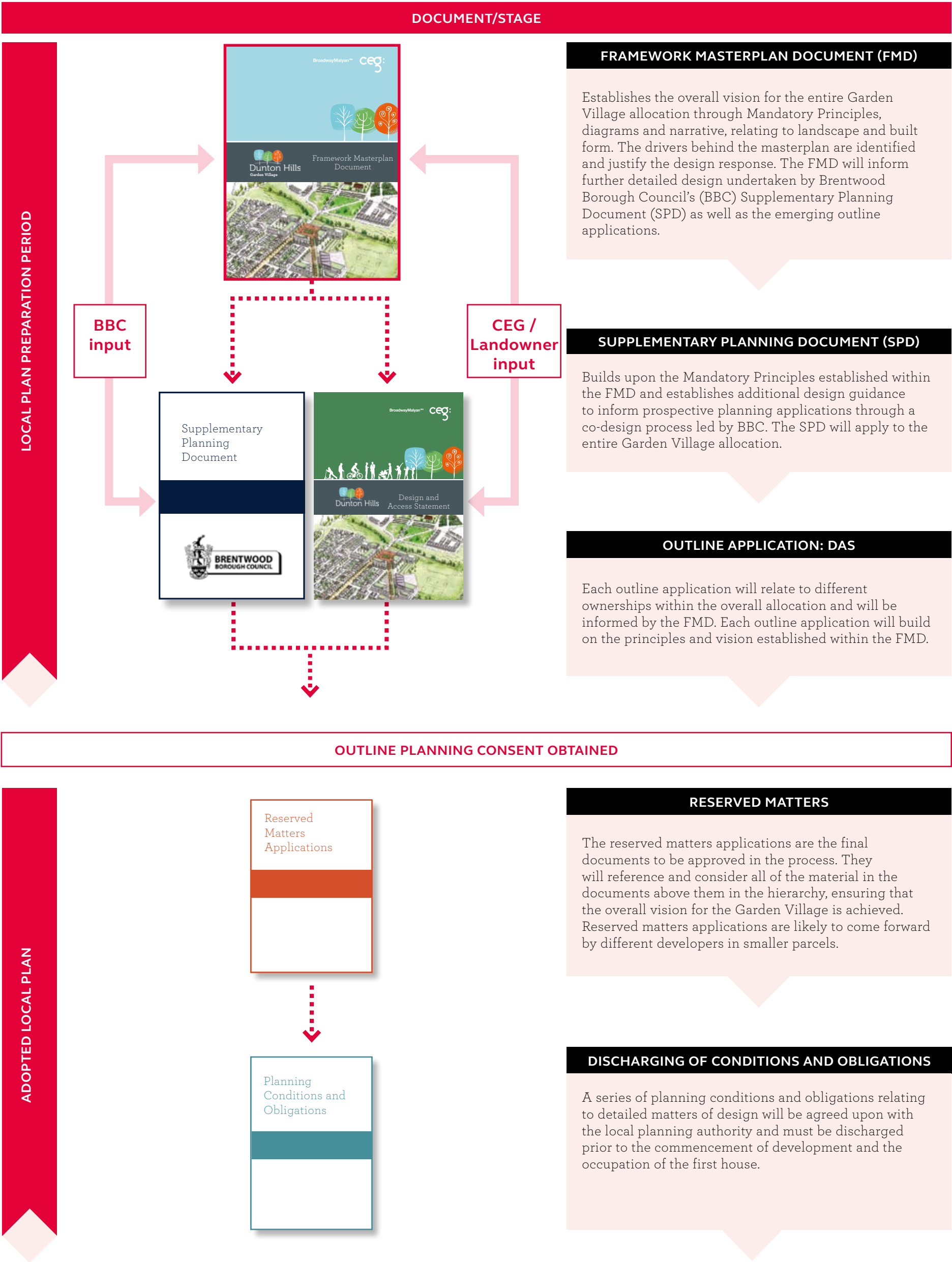
The starting point for the preparation of the Framework Masterplan is the emerging policy for Dunton Hills as well as other policies in the emerging Brentwood Local Plan.

The Framework Masterplan is the first in a series of documents which will control and guide the development of the Garden Village. Care has been taken to set out Mandatory Principles that go to the essence of the vision for the Garden Village, whilst also allowing for Brentwood Borough Council’s Supplementary Planning Document (SPD) to focus on more detailed elements of design guidance.

This Framework Masterplan will sit alongside Brentwood Borough Council’s SPD, and both will inform the design of future outline and reserved matters applications. As set out on the following page, each document in the hierarchy, will inform by the document sitting underneath.

Given that the Framework Masterplan is the first document in the hierarchy, the vision it establishes and the means of safeguarding and realising the vision is particularly important. For this reason the Principles the Framework Masterplan establish are mandatory.

DUNTON HILLS GARDEN VILLAGE
DOCUMENT HIERARCHY:



MANDATORY PRINCIPLES

A series of Mandatory Principles are set out in this document. These will ensure that the vision for the Garden Village is realised, whilst allowing for a future-proof Masterplan Framework and flexibility in the design response.

INTRODUCTION TO MANDATORY PRINCIPLES

This Framework Masterplan Document sets out the vision for Dunton Hills Garden Village which has been established by a range of stakeholders through a comprehensive design review process. In order to ensure the vision for the new Garden Village is realised, a series of Mandatory Principles are established in different chapters throughout the document. The Framework Masterplan in Chapter 05 sets out the Mandatory Spatial Principles, whilst other Mandatory Overarching Principles sit within subsequent chapters (06-09) as set out in the flow diagram (opposite).

MANDATORY SPATIAL PRINCIPLES

The Mandatory Spatial Principles relate to plans within the Framework Masterplan Chapter (05) and inform layout, built form and landscape proposed within the Garden Village. The principles are worded so as to be clear about what is required, but allowing this to be interpreted with as great a degree of flexibility as possible in terms of detailed design.

MANDATORY OVERARCHING PRINCIPLES

This Framework Masterplan Document also sets out Mandatory Overarching Principles which relate to the following chapters:

- Mobility Strategy
- Sustainability Strategy
- Community, Stewardship and Legacy
- Phasing and Delivery

These plans are equally as important as the Spatial Principles in delivering a 21st century Garden Village for at Dunton Hills but do not relate specifically to the masterplan layout.

An example page spread from the Framework Masterplan (Chapter 05) with the Mandatory Spatial Principles on the right hand side of the page and advisory narrative on the left.

Subject of principles

Plan illustrating principles relating to subject

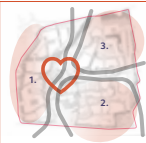
FRAMWORK MASTERPLAN

02

LAND USE AND SPATIAL ORGANISATION

The Framework Masterplan

The Framework Masterplan sets out the land uses and spatial organisation of the Garden Village.



DUNTON HILLS GARDEN VILLAGE: COMPRISING THREE NEIGHBOURHOODS ORGANISED AROUND A VILLAGE CENTRE.

Land Use	Total Hts (Approximate)
Residential	93,670
Mixed Use	1,411
Secondary / All Through School	7,391
Primary School	6,340
Employment Hub	9,150
Traveler Site	6,138
Informal Open Space	124
Formal Open Space	3,111
Sports Facilities	4,158
Artes	10,440

NEW HOMES

Dunton Hills Garden Village will provide up to 4000 new homes across three distinct neighbourhoods. New homes will comprise a range of residential typologies and tenures, delivered over a not developable area of approximately 100 ha.

The average density of the Garden Village will be approximately 30 dwellings per hectare (dph) although the majority of the village will be lower in density (10-20 dph) with a number of strategically located apartment and mixed-use pods with higher densities.

The majority of apartments will be located within the Village Centre, around the Market Square as well as along the mobility corridor connecting Station Road with the Market Square. It is envisaged that apartment buildings will run along the western edge of the village, forming a buffer against the A14. Some apartment buildings will also be provided within the new Neighbourhood Hubs, both in north west and the south. Additional apartment buildings will also be provided at strategic locations within each neighbourhood throughout the Garden Village.

Three new houses or similar units could form part of the village centre or neighbourhood hubs. Provision will also be made for a gypsy and traveller site.

NON-RESIDENTIAL USES

A Village Centre is proposed at the heart of Dunton Hills around a new Market Square. It is envisaged that this square will be framed by both apartments with non-residential uses at ground floor level as well as mixed-use community buildings.

RETAIL / FOOD AND DRINK

As stated above, retail facilities will be located within the Village Centre and new Neighbourhood Hubs. These could comprise a supermarket, convenience store, professional services, pubs, takeaways, restaurants and cafes.

COMMUNITY

Community uses that are envisaged for the Garden Village include a health centre, leisure space and a variety of sports pitches and equipped play areas alongside accessible open space. The range of facilities available will promote healthy lifestyles and ensure that everyday needs can be met within the site.

EDUCATION

There is potential to provide up to three primary schools and a secondary / All through school within the Garden Village. These will be in a central location at the heart of each neighbourhood and close to retail and community facilities providing a variety of uses. Most of the schools will also be adjacent to open green space. As part of the village centre and the other neighbourhood hubs, private nurseries or crèches will be proposed.


EMPLOYMENT

The employment offer will comprise a mixture of office and workshop spaces provided in the Village Centre as well as an employment hub (in the north west along the A14). This will provide sites for an accessible location, creating the space for local businesses to grow in an innovative and supportive business environment.

FRAMWORK MASTERPLAN

03

MANDATORY SPATIAL PRINCIPLES - LAND USE AND SPATIAL ORGANISATION



MANDATORY SPATIAL PRINCIPLES - LAND USE AND SPATIAL ORGANISATION

- 1. **Location and arrangement of the Market Square** - will be provided at the heart of the Village Centre and on the eastern edge of Dunton Pines, facing the proposed Village Green and the Market Square. The Market Square will be designed to a suitable size to support the provision of non-residential uses intended and will be enclosed by taller buildings with employment, retail and community uses activating the public realm (see Appendix A for guidelines).
- 2. **Definition of the Village Green** - will provide a setting for the historic farmstead as well as a key communal open space for residents to which to retreat and relax. The Green will be visible from the Market Square, across the landscape associated with the Eastfield Spring. The existing driveway will be retained and will become an important pedestrian route to Dunton Waters.
- 3. **Location of Dunton Pines Primary School** - will be a central component of the Pines community and will have frontage onto the proposed Mobility Corridor to promote sustainable travel.
- 4. **Secondary School** - will be visible from the westlands along an east-west route connecting Dunton Pines with Dunton Waters. The school building will front onto a lane and frame an aerial 'Schoolyard Square' comprising a not less setting.
- 5. **Location and arrangement of a neighbourhood hub for Dunton Waters** - will be focused around a south facing telefront plane with views of the proposed circular park and Dunton Waters Primary school, framed by buildings up to a storeys and activated by non-residential ground floor uses. The community element of the Secondary School will frame the northern edge of the plans.
- 6. **Location and arrangement of Dunton Waters Primary School** - will be located on the westlands of the westlands, maximizing opportunities for outdoor learning whilst being visible from the neighbourhood plans.
- 7. **Location and arrangement of the so-called Dunton Woods neighbourhood hub and Primary School** - will be the central northern end of a linear park which will form a view corridor Dunton Waters. The plans will be framed by taller buildings and non-residential ground floor uses.
- 8. **Location and arrangement of sports pitches and community clubhouse** - will be provided within the Secondary School parcel allowing both residents and visitors to make use of the facilities. The pitches will support a range of sports, forming a hub for community activity for social and competitive recreation.
- 9. **Location of employment land** - will be in close proximity to the employment site proposed to the west of the A14. Employment land uses will be supported by small-scale convenience retail and an adjoining open space for both workers and residents. Buildings will be provided to an east-west orientation to establish a sense of enclosure against the A14.
- 10. **Location of traveler site** - will be positioned to allow for direct access from the A14 and with an interface with the proposed landscape edge. The site will allow for 1 pitches as per with policy with the final configuration to be determined upon consultation with potential occupiers.

Advisory narrative setting out the vision for the Garden Village

Mandatory Spatial Principles to be adhered to in order to realise the vision for the Garden Village

MANDATORY PRINCIPLES ARE SET OUT WITHIN EACH OF THE FOLLOWING CHAPTERS IN THE FRAMEWORK MASTERPLAN DOCUMENT:

MANDATORY PRINCIPLES		
05 FRAMEWORK MASTERPLAN	MANDATORY SPATIAL PRINCIPLES	
	LAND USE AND SPATIAL ORGANISATION	84
	VISTAS, ACCESS AND MOVEMENT	86
	LANDSCAPE	88
	HERITAGE	94
	DENSITY	96
	HEIGHTS	98
06 MOBILITY STRATEGY	MANDATORY OVERARCHING PRINCIPLES	
	MOBILITY STRATEGY	100
	OFF SITE INITIATIVES	107
07 SUSTAINABILITY STRATEGY	MANDATORY OVERARCHING PRINCIPLES	
	COMMUNITY INTERACTION, HEALTH AND WELLBEING	110
	EDUCATION AND LEARNING	114
	EMPLOYMENT	116
	ENERGY EFFICIENCY AND RENEWABLES	118
	OTHER SUSTAINABLE CONSIDERATIONS	119
08 COMMUNITY, STEWARDSHIP AND LEGACY	MANDATORY OVERARCHING PRINCIPLES	
	MANAGEMENT STRUCTURE STRATEGY	122
09 PHASING AND DELIVERY	MANDATORY OVERARCHING PRINCIPLES	
	PHASING AND DELIVERY STRATEGY	126

SITE INTRODUCTION

The site comprises virtually the entire strategic allocation for the Garden Village and covers an area of 256.24ha. It is located in the south east of Borough of Brentwood, bounded to the north by the A127, the west by the A128 and the south by the C2C railway line. The eastern boundary comprises well defined field boundaries which also mark the administrative border between Brentwood Borough and the adjoining local authority of Basildon.

Today, the site primarily comprises undulating arable farmland, a family golf centre with its associated structures and a historic farmstead - Dunton Hills Farm, located at the heart of the site. Other land uses include a plant nursery and the curtilage of a dwelling. Vehicular access is principally taken from the A128 to the west with a dedicated access from the A127 to the nursery. There is also limited access from the west, north and east via public rights of way.

The entire strategic allocation is in a number of different land ownerships, but the majority is controlled by Commercial Estates Group (CEG). Other landowners or interests include Crest Nicholson, Bellway Homes, the Lowe family and Timmermans Nursery. The entire strategic allocation boundary is shown on the plan (opposite), but the site excludes the curtilages of the dwellings on the A128.



View from A128 looking east up driveway towards Dunton Hills Farm buildings



View looking east from Eastlands Spring towards Dunton Hills Farm buildings



View looking east across Eastlands Spring



View looking north towards the ancient woodland



View from the top of the ridge-line looking west across the golf course



View looking south from the top of the ridge-line across arable fields and the golf course





A127

A128

Lower Duntun Road

Duntun Hills Farm

Railway

01

03

04

06

05

02



CHAPTER 2

CONTEXT ANALYSIS

This section outlines the planning background and provides a synopsis of the comprehensive assessment and technical studies carried out to understand the existing site and how it fits within the wider south Essex area and its immediate surrounding. More detail is included in Appendix A 1.2.

2.

PLANNING POLICY

This section provides a review of the relevant statutory national and local planning policy in respect of the proposal.

NATIONAL POLICY

Relevant national planning policy is contained within the National Planning Policy Framework (NPPF, February 2019). Paragraph 124 states that the creation of high quality buildings and places is fundamental to what the planning and development process should achieve and outlines that good design is a key aspect of sustainable development, creates better places in which to live and work and helps make development acceptable to communities.

The NPPF (para. 127) outlines that Local Authority decisions should ensure that developments:

- a. will function well and add to the overall quality of the area, not just for the short term but over the lifetime of the development;
- b. are visually attractive as a result of good architecture, layout and appropriate and effective landscaping;
- c. are sympathetic to local character and history, including the surrounding built environment and landscape setting, while not preventing or discouraging appropriate innovation or change (such as increased densities);
- d. establish or maintain a strong sense of place, using the arrangement of streets, spaces, building types and materials to create attractive, welcoming and distinctive places to live, work and visit;
- e. optimise the potential of the site to accommodate and sustain an appropriate amount and mix of development (including green and other public space) and support local facilities and transport networks; and
- f. create places that are safe, inclusive and accessible and which promote health and well-being, with a high standard of amenity for existing and future users; and where crime and disorder, and the fear of crime, do not undermine the quality of life or community cohesion and resilience.

The NPPF also encourages early discussion between applicants, the local planning authority and local community about the design and style of emerging schemes outlining that this is important for clarifying expectations and reconciling local and commercial interests.

In addition to the NPPF, the National Planning Practice Guidance (NPPG) will be a material consideration in the determination of any planning application. The NPPG, supplements the NPPF and includes a number of sections which deal specifically with design matters and has informed the continuing design of the scheme.

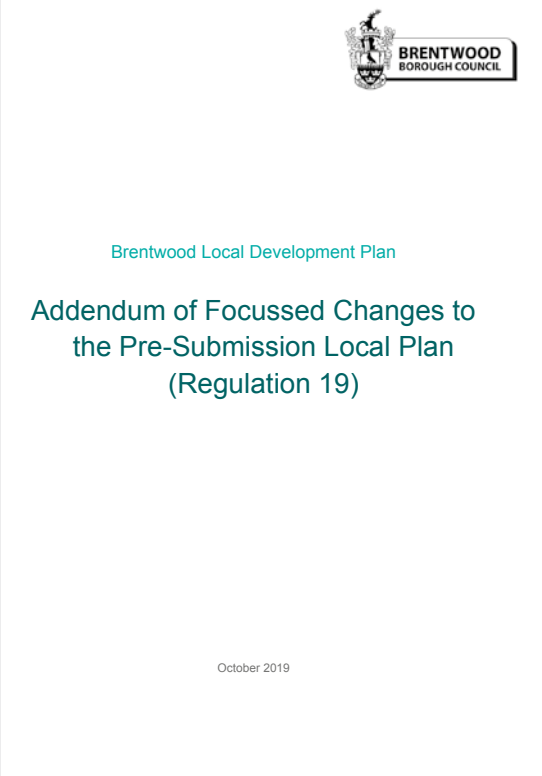
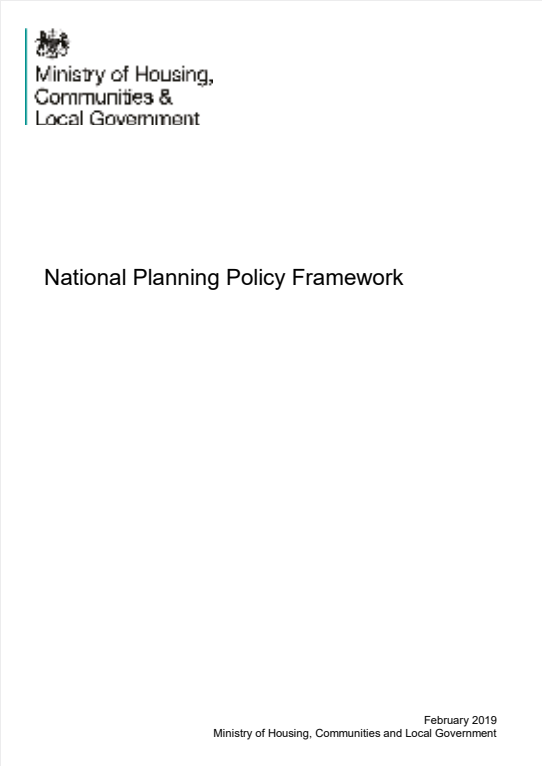
ADOPTED DEVELOPMENT PLAN

The statutory development plan relevant to the site comprises the Saved Policies of the Brentwood Replacement Plan (2005, saved 2008), the Essex Mineral Local Plan (2014), and the Essex and Southend-on-Sea Waste Local Plan (2017).

EMERGING LOCAL PLAN

The emerging Brentwood Local Plan: Pre-submission Document was published for consultation in February 2019. The Submission Local Plan is in the process of being prepared for submission to the Secretary of State for examination. The targeted date for submission is February 2020. The emerging Local Plan therefore carries weight in the decision-making process and will carry increasing weight as it nears adoption.

The design of Dunton Hills Garden Village has been developed in response to the relevant policies of the emerging Local Plan.



BRENTWOOD LOCAL PLAN SUBMISSION DOCUMENT

- **POLICY BE03:** Carbon Reduction, Renewable Energy and Water Efficiency
- **POLICY BE22:** Open Space in New Development
- **POLICY HP01:** Housing Mix
- **POLICY HP03:** Residential Density
- **POLICY HP06:** Standards for New Housing
- **POLICY HP12:** Planning for Inclusive Communities
- **POLICY HP13:** Creating Successful Places
- **POLICY HP14:** Responding to Context
- **POLICY HP15:** Permeable and Legible Layout
- **POLICY HP16:** Buildings Design
- **POLICY HP18:** Designing Landscape and the Public Realm
- **POLICY PC05:** Employment Development Criteria

SITE ALLOCATION

The site benefits from an emerging Strategic Allocation under Policy R01 Dunton Hills Garden Village which outlines that:

“The development will deliver a mix of uses to comprise around 2,700 homes in the plan period (as part of an overall indicative capacity of around 4,000 homes to be delivered beyond 2033) together with the necessary community, employment, utility, transport and green and blue infrastructure (GBI) to support a self-sustaining, thriving and healthy Garden Village.”

Focussed consultation proposes to increase the number of homes to 2,770 within the plan period.

The policy also requires the masterplan to be underpinned by Garden Community principles and qualities; proposals to creatively address the key site constraints and sensitively respond to the unique qualities and opportunities afforded by the historic landscape and environmental setting; and a holistic and comprehensive locally-led masterplan and design guidance to be developed.

With respect to spatial design of the Garden Village, Part (II) of Policy R01 provides a range of guidance under a number of headings:

- Distinctive Character, Harmonic Design, Compact Density

- Ecological Networks, Biodiversity Net Gain, Green Infrastructure and Public Realm
- Sport, Recreational, Leisure and Public Open Space
- Views
- Embedding Heritage Assets
- Sustainable Travel
- Transport Impact Mitigations
- Clean Vehicle Alternatives
- Street Hierarchy
- Village Centre(s) – Retail, Community and Employment Opportunities
- Social Infrastructure

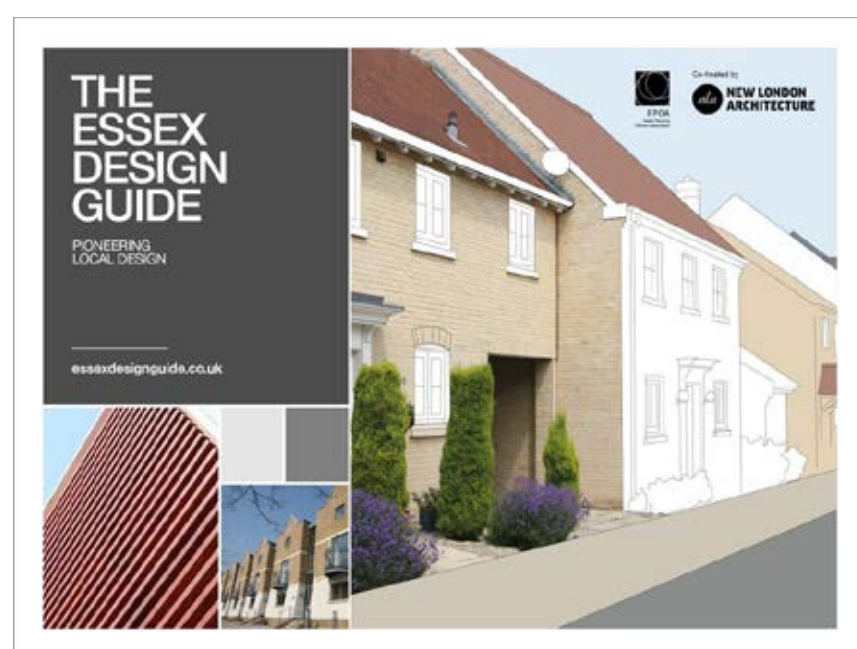
ESSEX DESIGN GUIDE (2018)

The updated Essex Design Guide (2018), in particular the new sections relating to Garden Communities, is relevant to the Garden Village.

The Active Design Principles are also considered later in the document.

OTHER DOCUMENTS:

Account has been taken of other national and local policies and guidelines including Essex County Council's Parking Policy Standards and the Essex County Council Developer's Guide to Infrastructure Contributions (Revised 2016).



STRATEGIC LOCATION AND CONNECTIONS

The site is located in Brentwood Borough and in the County of Essex.

The site sits approximately 32km east of the City of London and approximately 5.5km from the M25 motorway. To the east of the site is the town of Basildon, whilst Brentwood is located to the north west. The village of West Horndon lies just over 1km to the west of the site.

Other major destinations in the wider area comprise the regional shopping centre at Lakeside, Tilbury Docks, the new London Gateway Port and London Southend Airport.

In terms of strategic transport and movement, the site is within close proximity to two major strategic routes comprising the A127 to the north (which connects the area to London and the M25 to the west and Basildon and Southend in the east) and the A128 to the west which links the area to Brentwood in the north and the A13 in the south.

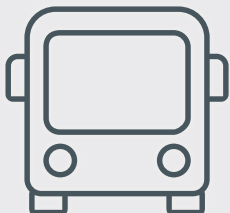
The site is within 15 minutes walking distance /10 minute cycle of West Horndon Railway Station to the west. From here, C2C train services are available to major destinations including London Fenchurch Street, Stratford, Barking, Basildon and Southend-on-Sea.



Wider regional context plan



STRATEGIC SUSTAINABLE MOVEMENT



WALKING AND CYCLING

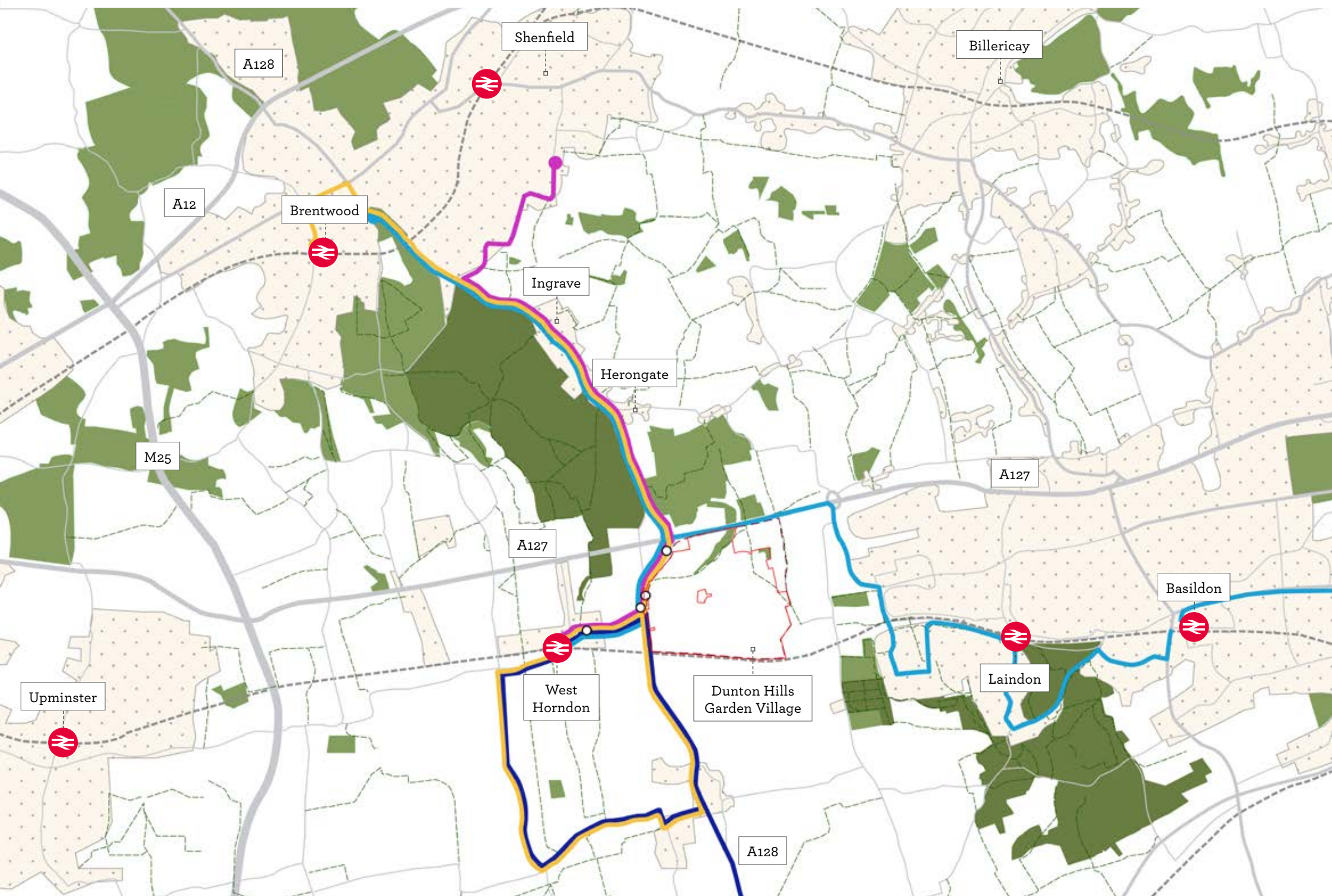
The surrounding area comprises a large network of pedestrian and cycle links, connecting into the surrounding towns and country parks such as Thorndon and Laindon Hills. Public Rights of Way connect into the site and these are explored later in this section

PUBLIC TRANSPORT

Bus stops are located directly adjacent to the west of the site along (A128) Tilbury Road. Bus route 565 links West Horndon with Brentwood, route 49 connects Basildon, West Horndon and Brentwood and route 265 runs from West Horndon to Grays.

The 481 school services also serves the site and runs from West Horndon to high schools within Brentwood.

As stated earlier, the site is bordered to the south by the C2C railway line, with two direct services an hour from West Horndon to London Fenchurch Street (link into the City of London in under 30 mins) and a service to Shoeburyness via Basildon which runs twice an hour and takes around 40 minutes.



Surrounding sustainable movement plan

KEY

- | | |
|--|---|
| — Site Allocation | --- PROW |
| ■ Country Park | Cycle Route |
| ■ Open Space | ○ Bus Stop (in walking distance of site) |
| ■ Settlement | — Bus 49 |
| --- Railway Line | — Bus 565 |
| ⊞ Railway Station | — Bus 265 |
| — Road | — Bus 481 - School Service |



SURROUNDING LAND USE AND FACILITIES



Thorndon Country Park



West Horndon Shops



Horndon Industrial Park

EMPLOYMENT

A number of employment sites are located throughout the local area. The most notable of these include Horndon Industrial Park, comprising predominantly industrial uses, within a collection of low-rise warehouse units. However, this site is proposed to be substantially redeveloped for housing in the emerging Local Plan. The Ford Dunton Technical Centre is a major local employer and sits to the east of the site with further industrial uses found within the adjacent Southfields Business Park. Other employment destinations include central Basildon, central Brentwood and, of course, London. There are emerging employment proposals at East Horndon Hall and the Brentwood Enterprise Park (at the M25/A127 junction) and an expansion of the Childerditch employment site.

EDUCATION

The village of West Horndon contains a primary school (West Horndon Primary School) and a Pre-School (Bright Sparks) which are the closest educational facilities within walking distance of the site. Additional primary schools are situated close by in the Ingrave, Brentwood and Basildon. Six high schools are located a short bus ride from the site in Brentwood and Shenfield.

HEALTH

There is a GP surgery located close to the site in West Horndon. The closest hospitals are located in Brentwood (Nuffield Health, Brentwood Community Hospital and Spire Hartswood Hospital) and Basildon (Basildon University Hospital).

RETAIL/COMMUNITY FACILITIES

High order retail and community uses are found within Basildon and Brentwood town centres. Basildon town centre contains a number of major national retailers including Debenhams, H&M, Primark, and Asda. Brentwood is also home to a number of major retailers including M&S, Next and Halfords.

Further, smaller retail/community hubs are found in the western suburbs of Basildon, such as Laindon serving the surrounding residential communities. Uses here include a number of educational, medical and community facilities alongside retail facilities ranging from corner shops to larger supermarkets.

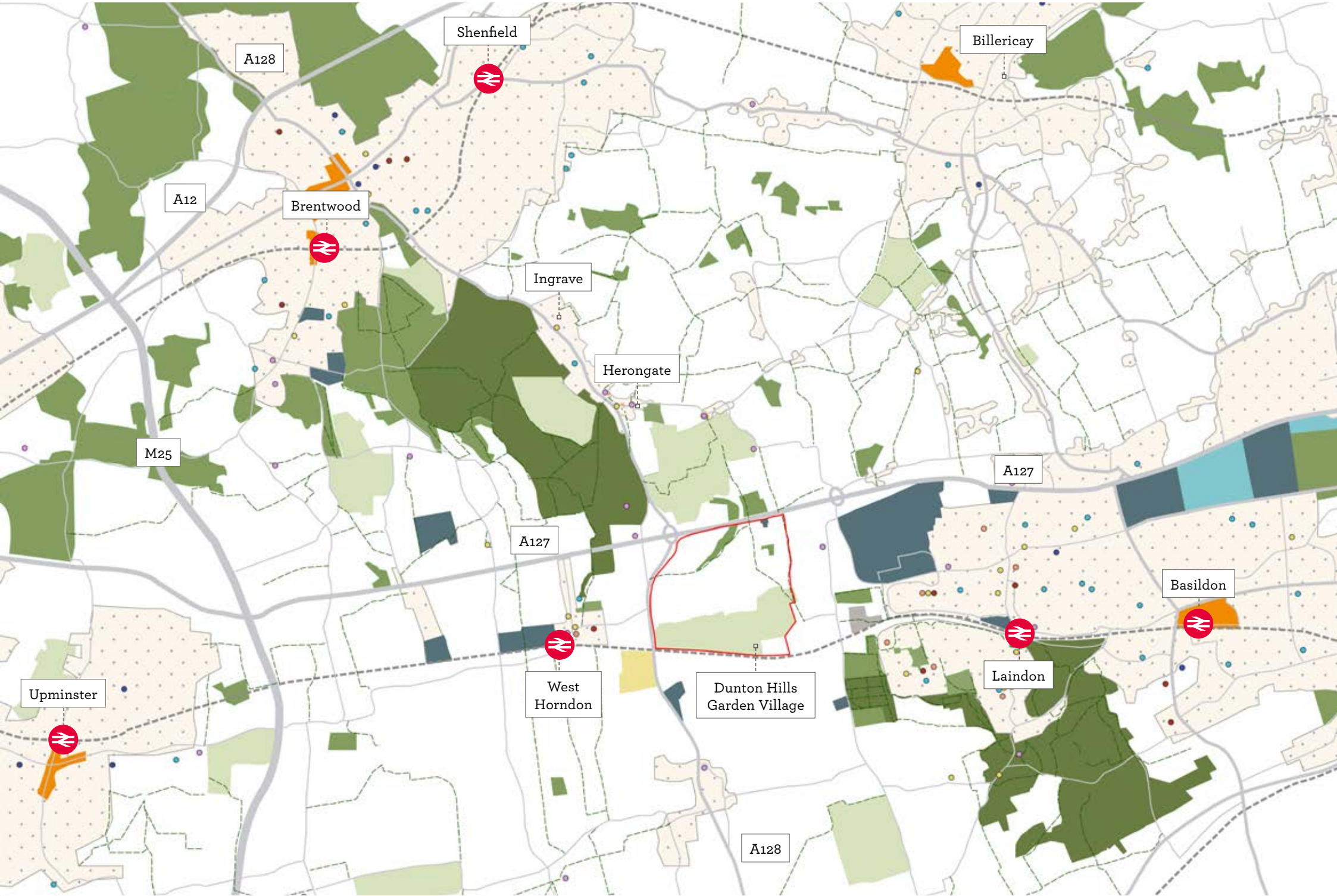
The village of West Horndon, located to the west of the site, is also home to a small number of local shops including convenience stores, a café and a butchers. Other uses within West Horndon include a church and a community centre.

OPEN SPACES

The site is surrounded by open farmland with areas of woodland and parkland found within the wider area. The most notable of these is Thorndon Country Park to the north west of the site and Langdon Hills to the south east. Both are important and popular recreational destinations.

A network of open spaces and parks are found within western Basildon which include a range of recreational facilities such as sports pitches and playgrounds.

There are a number of golf courses in the area. Thorndon Park Golf Club and the South Essex Golf Centre are located to the north of the site.



Surrounding land use and facilities plan

KEY

- Site Allocation
- Road
- Railway Line
- Railway Station
- PROW
- Town Centre
- Residential
- Country Park
- Open Space
- Golf Course
- Light Industrial / Employment
- Retail Park
- Barnard's Farm (visitor attraction)
- Caravan Park
- Pub/Restaurant
- Medical facility
- Community/Religious
- High school
- Primary School
- Shop



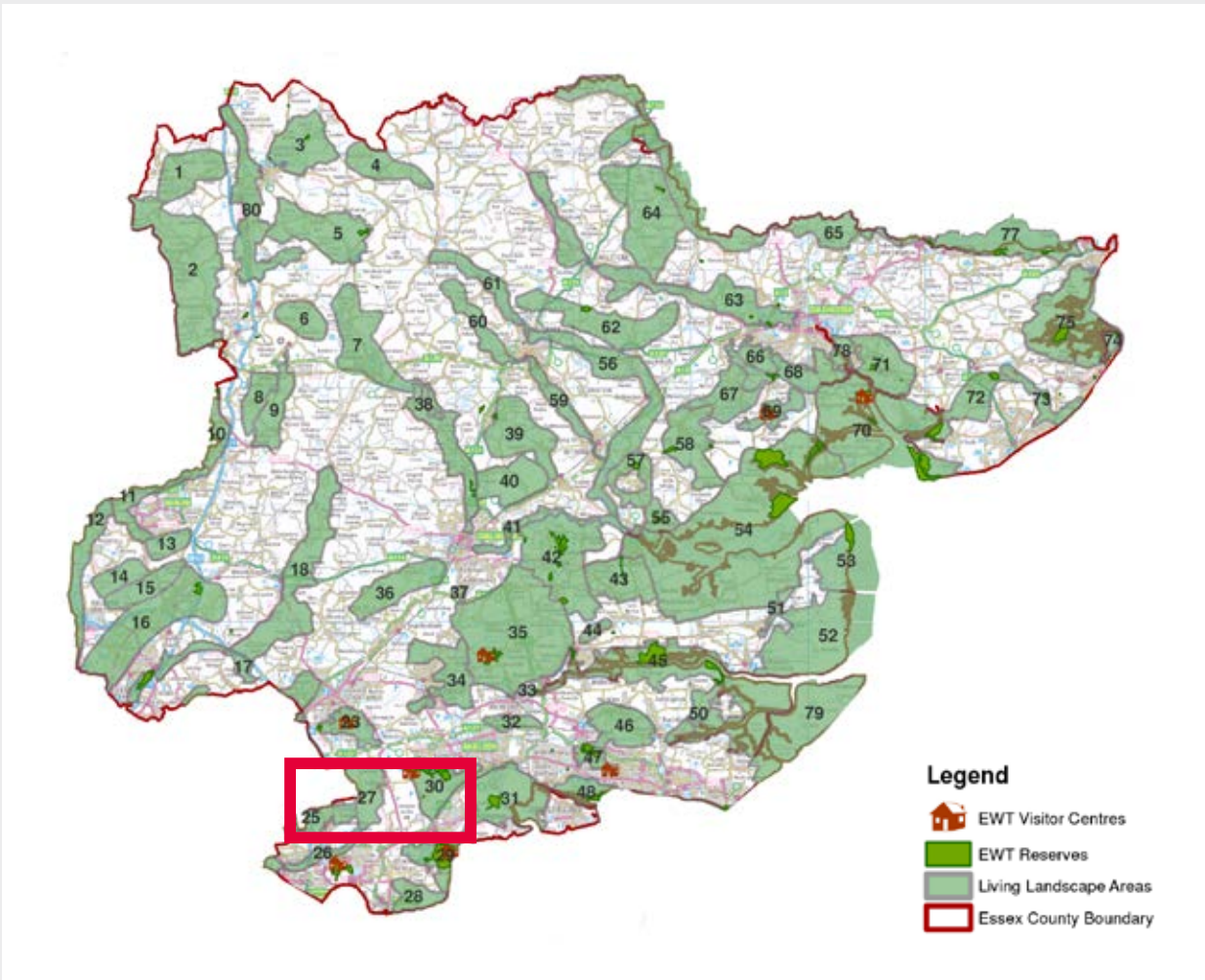
SURROUNDING GREEN INFRASTRUCTURE

There is a network of Country Parks within close proximity to the site. Thorndon and Langdon Hills Country Parks are located to the north-west and south-east respectively.

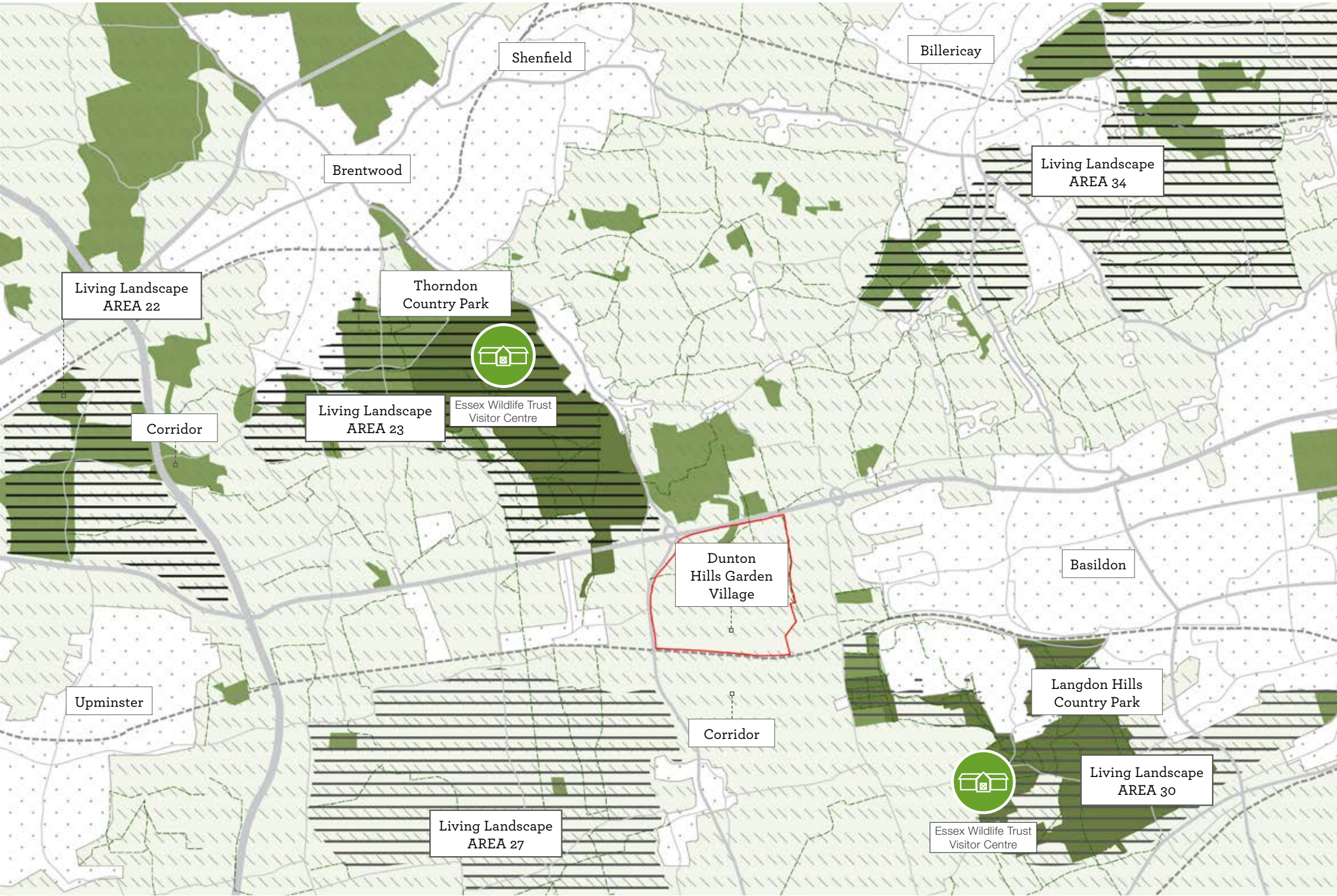
Thorndon Country Park provides 500 acres of walks through ancient woodland and an ancient deer park dating back to the 15th century (which has been designated a Site of Special Scientific Interest) alongside planted woodland and a landscape of small pastures, grassland and three small lakes.

Langdon Hills Country Park is a 400 acre park located on a hilly ridge, benefiting from panoramic views over the Thames Estuary and across to London. The park has ancient woodlands dating back to prehistoric times, with flower-rich grassland meadows and areas of dense scrubland. There are picnic areas and a good network of footpaths and horse and cycle tracks linking the surrounding countryside.

Both country parks are part of the Essex Living Landscapes network. The Living Landscapes vision aims to restore, recreate and reconnect local wildlife habitats so that the species living within them can move through the landscape more easily, and continue to survive and thrive long into the future. Living Landscapes is about wildlife, people and communities and the local economy. The existing Living Landscape areas are shown on the plan opposite which shows both country parks as well as a further Living Landscape area to the south west of the site.



Essex Living Landscapes Plan



Surrounding green infrastructure plan
Showing the key green infrastructure areas, such as Country Parks and Living Landscapes surrounding the site.

KEY

- Site Allocation
- Road
- Railway Line
- Residential
- Country Park
- Open Space
- Green Belt
- Living Landscape



UNDERSTANDING THE LANDSCAPE CHARACTERS

A range of landscape characters are prevalent within the site and connect to the wider landscape context of the Fenland and the Hills. The landscape setting has had a fundamental influence on the vision and design of the masterplan for the Garden Village

The site lies at a transition between the low-lying, open landscape of the Fenlands that extends to the south and west, and the wooded Brentwood Hills at Thorndon to the north and Langdon Hills to the east. The transition between these two contextual landscape characters is encapsulated within the site and creates a diverse range of landscape typologies.

The low ridge-line that transverses the site in a roughly north west-south east alignment creates the topographical transition between the low-lying fenland and the hills. The transitional landscape is further reinforced by the Eastlands Spring, which also bisects the site in a north-south alignment near the eastern boundary.

These linear features are striking in the landscape and create a unique sense of place for the site itself. These landscape features, as well as the wooded hills, ancient woodland, water bodies and hedgerows create varied habitats and micro-climates for local flora and fauna.

Our vision for the Garden Village is landscape driven and the landscape character of the site and the adjacent areas have a key influence on the masterplan. The landscape strategy is outlined in full in Chapter 4 of this document. For a full analysis of the existing landscape context and character refer to the landscape analysis pages in Appendix 1.



LAND USE

1. Dunton Hills Family Golf Course

Dunton Hills Family Golf Course occupies the southern part of the site, extending from the western boundary with the A128 to the eastern boundary adjacent to Dunton Hall. To the west, the golf centre is divided by the access road off the A128 and separated from the remainder of the course by Eastlands Spring and associated line of trees. To the east of the watercourse, the club house, car park and driving range introduce built development on the lower-lying land that sits in a bowl below the ridge and slopes that rise to the north. To the east, the golf centre occupies the rising land and plateau on the higher ground.

2. Arable agricultural land

Aside from the golfing use, the remainder of the site is predominantly managed for agriculture, comprising medium-large rectilinear fields that span the low-lying land to the west of the site, as well as the slopes beyond Eastlands Spring and Nightingale Lane and the ridge and plateau. Beyond the eastern site boundary, the fields pattern comprises smaller rectilinear fields managed for both arable and pasture and including paddocks defined by post and wire fences bounding the site to the north of Dunton Hall.

3. Ridge-line

The slopes and low ridge-line that crosses the site are a distinctive features in the local landscape, forming a backdrop in localised views.

4. Eastlands Spring

Running north-south along the base of the ridge-line, Eastlands Spring divides the site and forms a distinctive feature, with the tree-lined watercourse providing a transition between the low-lying fenland and the base of the slopes that lead to the ridge.

5. Ancient woodland

Running along the line of the Eastlands Spring Watercourse and Nightingale Lane, a line of ancient woodland and tree belts form a strong linear feature that dissects the site at the base of the ridge-line to the east and sloping land to the north.

6. Dunton Hill Farm

Situated on the upper slopes to the centre of the site, Dunton Hill Farm and associated barns and agricultural buildings form a distinctive feature on the slopes of the ridge. To the west of the farmhouse, land either side of the driveway is managed as amenity grassland and provides a domestic, formal character and setting to the farmhouse and barns to the east of Eastlands Spring.

7. Woodland blocks

As is typical of the wider landscape character, there are blocks of woodland on the higher ground to the east of the site. This includes a field-corner copse and plantation woodland.

8. Waterbodies

There are a number of amenity waterbodies within the low-lying land to the south of the site. These include larger lakes with a formal character and smaller ponds including marginal vegetation and self-set trees within the golf centre.

9. Infrastructure

A wind turbine is situated on top of the ridge to the east of the farm buildings. The access track to the turbine crosses the fields east of the A128 and passes to the south of the farm buildings.

Two overhead 132 kW power lines cross the site. The westerly power line enters the site in the south west corner and runs towards the lower reaches of the ridge-line before diverting north and leaving the site across the A127. The easterly power line runs from the south east-corner and diverts (in close proximity to the other power line) towards the north east. The two lines do not cross/ meet.

The turbine and pylons form prominent features in the local landscape, detracting from the views and settings of churches on the high ground to the north - west and east of the site as historic local landmarks.



UNDERSTANDING LOCAL HERITAGE

Land within the Dunton Hills Garden Village site allocation is sensitive in heritage terms because it contains a grade II listed farmhouse and historic farmstead. There is also a setting relationship with All Saints Church, which is grade II listed, and the Church of St Mary, as well as other heritage assets in the surrounding area, including other listed buildings, a Registered Park, conservation areas and non-designated heritage assets. There are also historic landscape features.*

The site comprises lowland areas to the south and west, with a ridge running north-south and a high plateau to the east. The setting of the heritage assets is, extensive, with long views afforded within and across the landscape. This setting is further extended by historic functional relationships between the site and surrounding historic estates, including those formerly controlled by Lord Petre and King’s College Cambridge.

Historic buildings and features of note within the site and surrounding areas include:

Within the site:

- The Dunton Hills farmstead, a cluster of vernacular, former agricultural buildings dating from the late-C17 to mid-C19, located near the ridge. This includes the Grade II listed farmhouse and two historic barns, the southern of which forms a prominent landmark.

Within the surrounding area:

- The Church of All Saints, an attractive red brick church of Tudor origin, which is located on high ground to the north-east of the allocated site. Listed Grade II*, the church is in the care of the Churches Conservation Trust.
- The Church of St Mary’s, rebuilt in the late-Victorian period, and now converted to residential use. This is listed at Grade II. The spire of the former church can be seen across the site to the north-east.
- Dunton Hall, a C18 farmhouse re-fronted in the early-C19 and refurbished in the C20. This is located close to St Mary’s Church to the north-east of the site.
- Thorndon Hall Registered Park and Garden (RPG) (Grade II*) and Thorndon Park CA, which comprise the surviving extent of a landscaped park laid out in the early-C18 and redeveloped by Lancelot ‘Capability’ Brown between 1766-72.

Additionally, a number of buildings of local and cultural significance located close to the site boundary, including the early-C20 Old Mill Cottages to the south-west, and the mid-C19 Old Rectory and Friern Manor to the east.

Other important features within the site include the medieval, east-west Nightingale Lane and its associated ancient woodland, the mid-C19 driveway to the Dunton Hills farmhouse, the underground remnants of Nightingale Hall which lie beneath the woodland block in the north east of the site and historic surviving hedgerows and field boundaries.

The presence of these historic buildings and features within and around the site mean that heritage considerations must be central to the design of the new Garden Village.



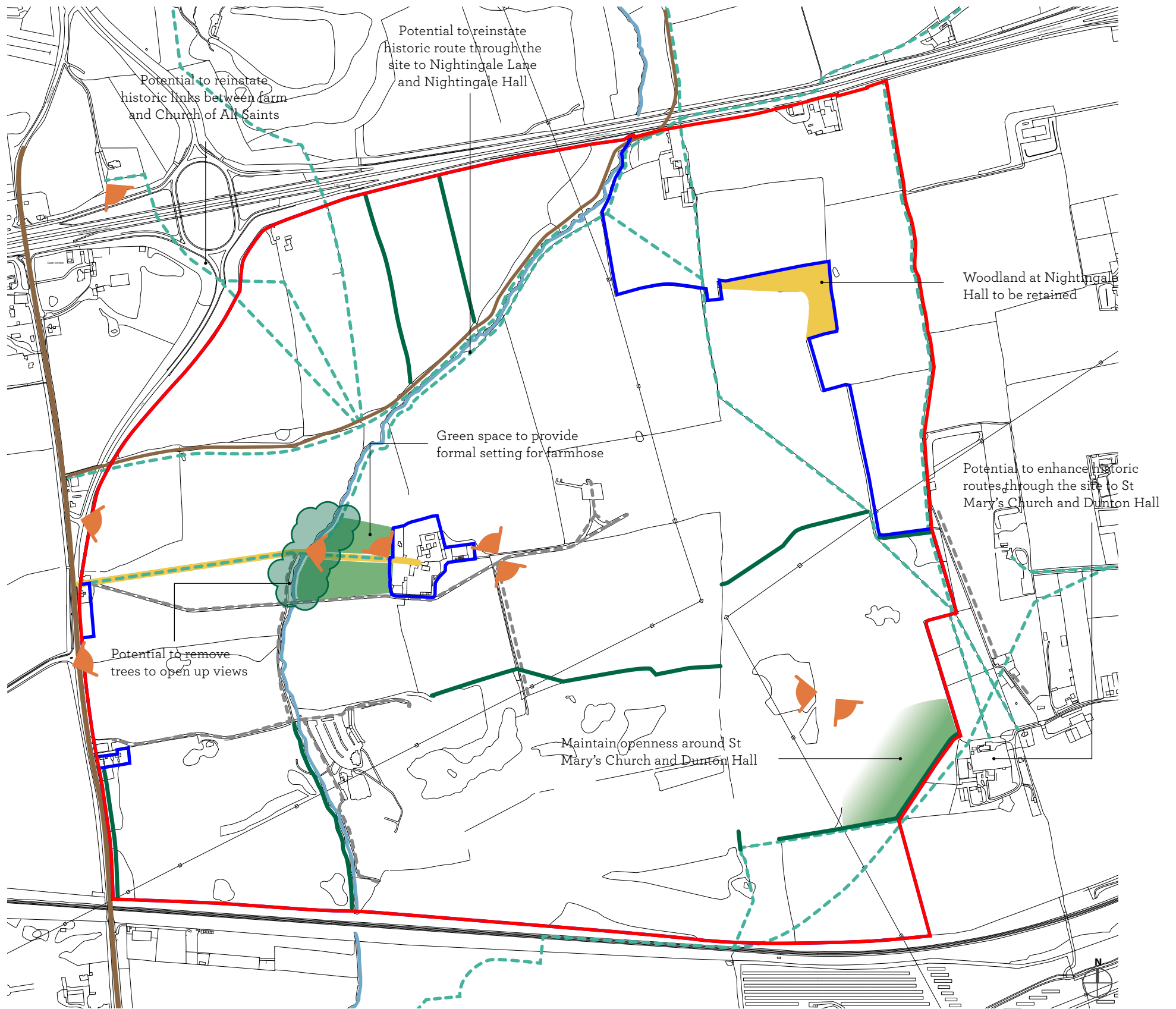
All Saints Church



Frien Manor



Principal south elevation fo the Dunton Hills farmhouse



Key

- Garden Village Allocation
- Dunton Hills Farmstead Boundary
- Eastlands Spring Watercourse
- Roads Dating from 1598 at least
- Farmhouse Drive laid out between 1838 and 1868
- Historic Footpaths
- Other Road or Track (no PROW)
- Historic and Existing PROW
- Historic Surviving Hedgerows
- Ancient woodland
- Location of Nightingale Hall (archaeology)
- ▲ OS Trig Point
- ▲ Viewpoint Location (views on following page)

Listed Buildings†

1. Church of All Saints, Grade II*
5. Church of St Mary, Grade II
6. Dunton Hills Farmhouse, Grade II
10. East Horndon Hall, Grade II
13. Dunton Hills Farm, Grade II
14. Dunton Hall, Grade II

Non-Designated Heritage Assets†

17. South barn at Dunton Hills Farm
18. North barn at Dunton Hills Farm
20. East Horndon Mills

UNDERSTANDING THE SETTING



B. View east from the A128 showing key ecological features that should be protected through design including veteran trees and the Eastlands Spring.



C. The view east along the existing driveway to Dunton Hills farm from Eastlands Spring.



A. The Church of All Saints (Grade II*) is situated to the north west of the site and long distance views from the farmhouse to the church should be preserved through the layout of the Framework Masterplan.



D. View southeast toward The Church of St Mary's. This important local landmark, short and long distance views to this should be celebrated within design proposals.

The selection of images shown below represent key historical features and elements (described in the previous pages) that have been pivotal in establishing the design and vision for Dunton Hills, one which is firmly embedded in its historical, environmental and cultural setting.



E. The distinctive spire of St Mary's church (Grade II) can be seen from higher points within the allocation site. View south-east from the ridgeline.



F. Long distance views west to Canary Wharf from the ridgeline



G. View east across the Fanns landscape toward Dunton Hills Farm from junction of Station Road/the A128

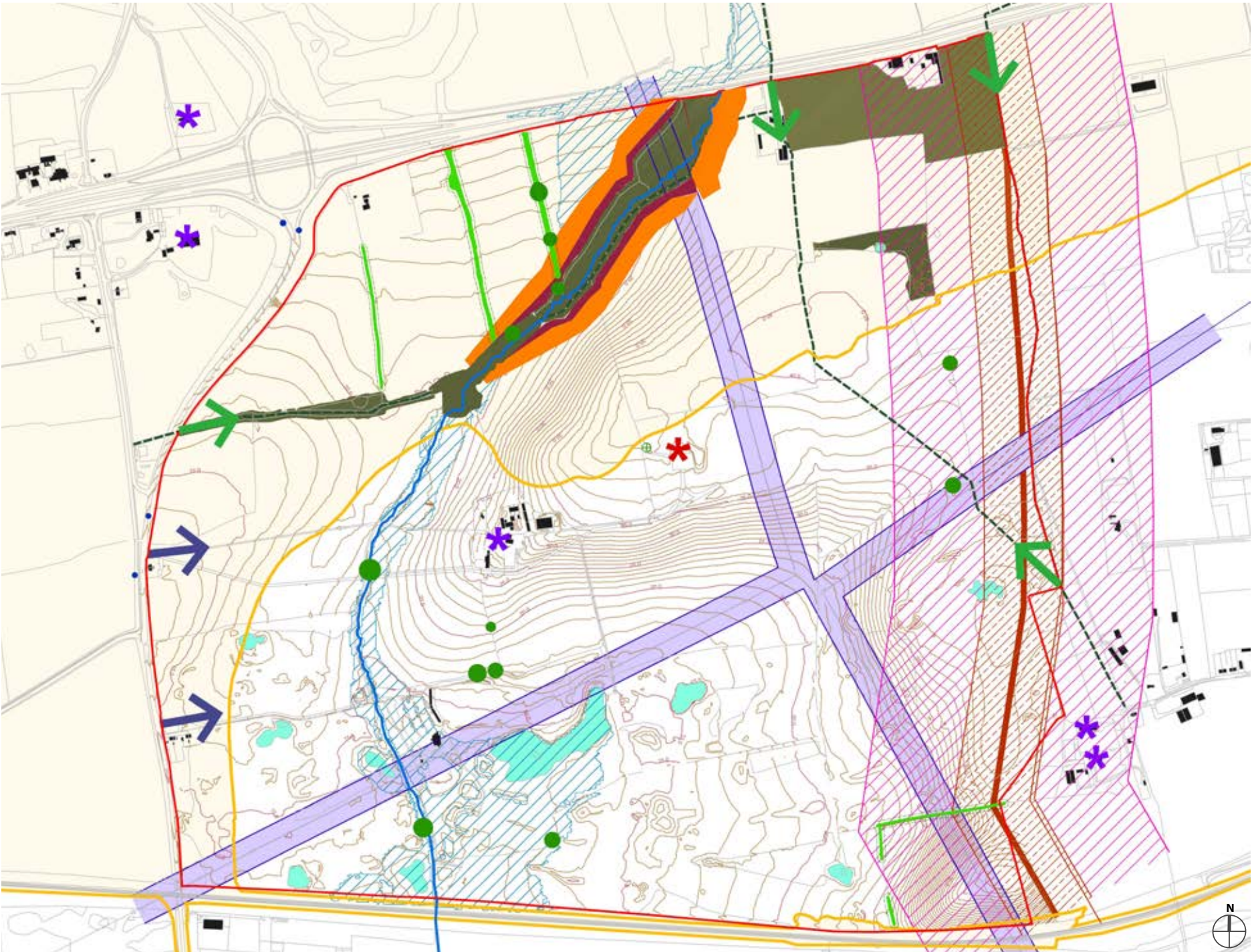


H. Looking south east towards from the Church of All Saints with the existing wind turbine (to be removed) visible to the rear.



I. The rising topography of the site is visible in the background. Looking north-west from Lower Dunton Road.

SUMMARY OF SITE CONSTRAINTS



The plan above provides an overview of the site constraints which are referred to and explained on the opposite page. There are a number of features around which the masterplan for the Garden Village will need to respond to.

A more extensive assessment can be found in Appendix 1.

- KEY

 - Site Allocation
 - Eastlands Spring Watercourse
 - Waterbody
 - Flood Zone 3
 - PROW
 - Pedestrian Access Point
 - Vehicular Access Point
 - Bus Stop
 - Overhead 132 kW Powerline/easement (30m)
 - 500 kW Wind Turbine
 - High Pressure Gas Main (no building easement 5m)
 - HSE Inner Zone (78m)
- HSE Outer Zone (255m)
 - > 55 db Noise Contour
 - Trig point
 - Listed building
 - Existing built form
 - Existing trees to be retained (Cat A/B)
 - Important hedgerow to be retained
 - Ancient/Semi Natural Woodland
 - Ancient woodland 15m Buffer
 - Ancient woodland 50m Buffer
 - Contours

LANDSCAPE FEATURES

Topography

The site has a gently undulating topography with a north south ridge line forming a distinctive feature, creating a plateau on the eastern side of the site. The eastern edge of the site sits at 40m Above Ordnance Datum (AOD) falling to 15m AOD along the south western edge.

Flood and Drainage

The Eastlands Spring runs through the site in a north-south direction dividing the site. It enters the site under the A127 just to the west of Timmermans Nursery before running through an area of dense ancient woodland. It then heads south running to the west of the grounds of Dunton Hills Farm and the golf club house before leaving the site in a culvert under the C2C railway line.

The floodplain (flood zone 3) associated with Eastlands Spring covers a larger expanse of land as the topography changes into more open, flatter land around the golf course in the south.

Other water features on the site include a large lake and smaller ponds constructed as part of the golf course, some of which contain great crested newts.

Woodland

A strip of ancient semi-natural woodland and tree belts, running along the line of the Eastlands Spring Watercourse and Nightingale Lane, form a strong linear feature.

There are additional blocks of woodland on the higher ground to the east of the site. This includes a field-corner copse and plantation woodland.

A number of individual category A and Veteran trees and hedgerows located throughout the site have been identified for retention for their cultural, historical, nature conservation, landscape and ecological value.

HERITAGE FEATURES

A group of farm buildings, including Dunton Hills farmhouse (Grade II) sits at the centre of the site and are the most notable heritage features. In addition to this, former mill cottages sit along the western edge of the site and a historic OS trig point is also present to the north east of the Dunton Hills Farm buildings.

Additional Grade II listed buildings in the immediate vicinity of the site include Dunton Hall and Old Church to the south east of the site and All Saints Church and East Horndon Hall to the north west of the site. The retention and enhancement of views to these features should be considered within any development proposals.

ACCESS

Vehicular Entry Points

The site is currently accessed from the A128 to the west. Existing access points from here comprise:

- the driveway to Dunton Hills Farm
- a track to a dwelling in the north west of the site
- an access road to the golf club house in the south west of the site

There is a also vehicular access to the nursery from the A127. The C2C railway line restricts any access from the south.

Walking and Cycling

A Byway (Nightingale Lane) runs across the north western part of the site, through the ancient woodland and out towards the A127 in the north of the site. A further Public Right of Way runs from the Timmermans Nursery in the north across the site and down towards the small settlement of Dunton to the south east. There is a further footway paralleling the eastern boundary of the site which links the A127 to Dunton.

There are currently only a limited number of pedestrian crossing points across the A128 and these only consist of small central islands. A narrow public footpath exists on the western side of the A128, running between Station Road and Tilbury Road.

A cycle route runs along the south side of the A127.

Public Transport

A bus stop is located within the A128 public footpath serving the northbound route of the 565 bus. A further bus stop serving the south bound 565 bus route is located near the junction of the A128 and the driveway to Dunton Hills Farm. The 565 service runs 6 times a day with a journey time of around 20 minutes to Brentwood.

UTILITIES AND INFRASTRUCTURE

Power Lines

Two overhead 132 kW power lines cross the site. The westerly power line enters the site in the south west corner and runs towards the lower reaches of the ridge-line before diverting north and leaving the site across the A127. The easterly power line runs from the south east-corner and diverts (in close proximity to the other power line) towards the north east. The two lines do not cross/ meet.

If left in their current location these would comprise a major site constraint as shown by the no build buffer on the plan (left). These lines will be removed and placed underground to allow for development and should not be considered a constraint to development. The site will still need to host termination towers.

Gas Main

A high pressure gas main is located along the eastern edge of the site. This main (the Roxwell/Horndon High Pressure Gas Main) enters the site under the C2C railway line before diverting off in a northerly direction. The gas main has an immediate no build buffer extending 6m either side of the main and a further buffer 10m either side of the main where there are planting restrictions.

The HSE provide indicative advice with regards to further zones comprising an Inner and Middle Zone (78m) and an Outer Zone (255m). Within the inner and middle zones no built development can take place. However, roads, open space and parking areas are acceptable. Within the Outer Zone any development can take place, with the exception of vulnerable uses e.g. care homes.

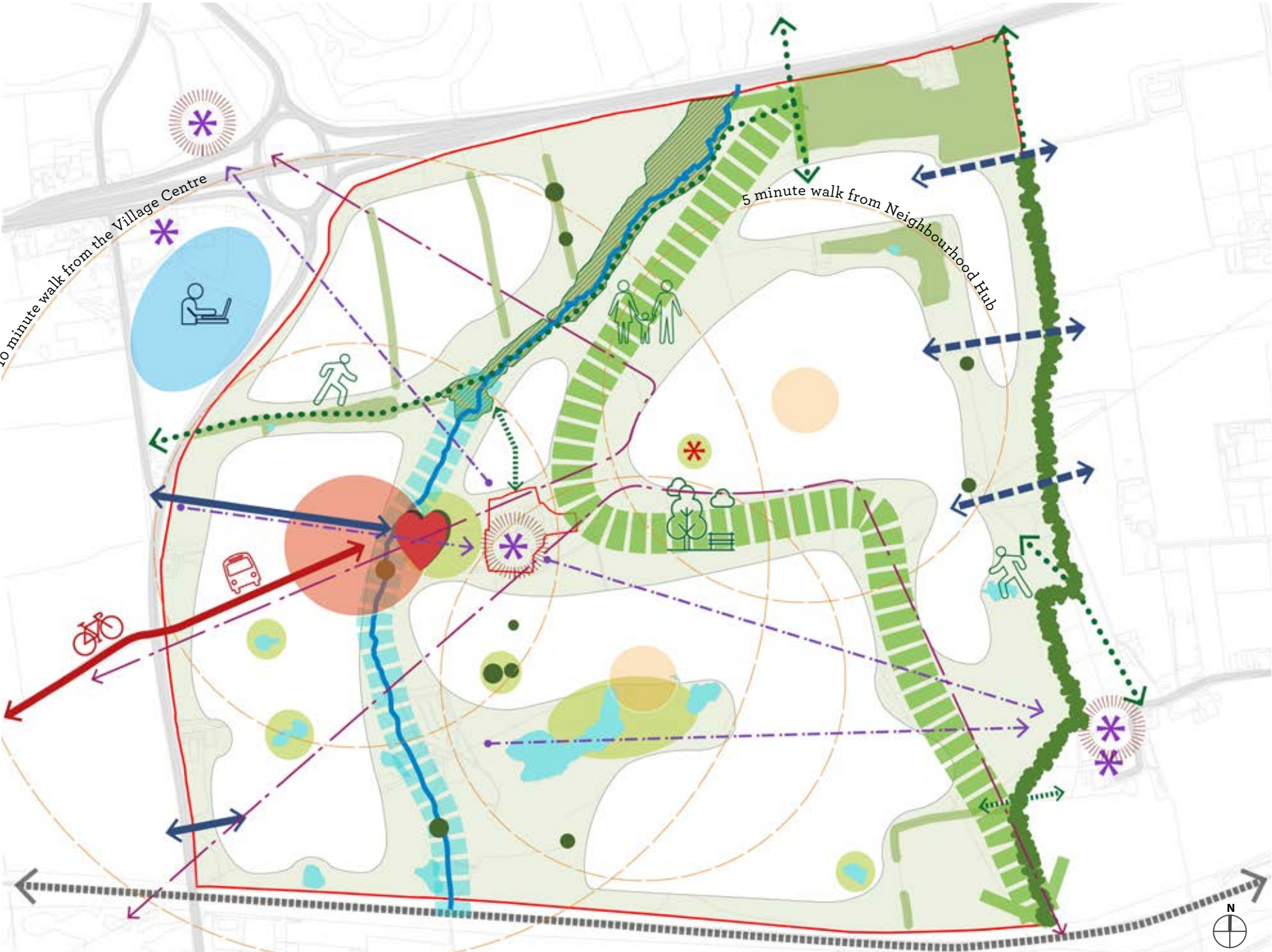
Turbine

A 500kW wind turbine also sits within the site and is located at the top of the plateau to the north east of the Dunton Hills Farm buildings. It is proposed that this would be dismantled in the future to allow for development and should not be considered a constraint to development.

NOISE

The site has been assessed against the criteria contained in BS8233:2014. The highest noise levels were recorded to the north of the site, adjacent to the A127, and also along the western side, abutting the A128. The noise levels exceed the 55dB external threshold identified by BS8233:2014 and would require a combination of fencing, bunding and buildings to create an acceptable external noise environment in this location. For the purposes of master planning the site, the noise and vibration from the C2C railway line is neither as intrusive nor as significant as the traffic noise.

OPPORTUNITIES



The site’s features provide an excellent opportunity to deliver a new and distinctive Garden Village which integrates seamlessly into the existing surrounding character and makes maximum use of its unique features. The plan above highlights these key elements and indicates how it could inform our initial design response.

- KEY

 - Site Allocation
 - Eastlands Spring Watercourse
 - Blue/Green Corridor
 - Waterbody
 - Ridge-line
 - Existing trees to be retained (Cat A/B)
 - Important hedgerow to be retained
 - Ancient woodland
 - Woodland
 - Potential key green space
 - Potential enhanced structural planting
 - Existing PROW
 - Potential Pedestrian Access Point
- Potential Vehicular Access Point
 - Potential Active Transport Corridor
 - Potential Village Centre
 - Potential Neighbourhood Hub
 - Listed Building
 - Key Listed Building
 - Trig point
 - Key local views
 - Long distance views
 - Potential extent of built form
 - Potential adjacent employment
 - Railway

ENHANCED GREEN AND BLUE NETWORK

The existing woodland, hedgerows, spring and ponds provide the basis for an extensive green and blue network. These features can be enhanced and integrated into key spaces which correspond to their setting, offering a variety of spaces for relaxation, active recreation and interaction with nature. These spaces could potentially include a central village green, small pocket parks and a ridge-line park to open up views to the south (North Downs) and west (London skyline).

SuDS could be situated in open spaces to ensure flood mitigation.

Structural planting will be focused along the eastern boundary of the site, creating a soft boundary between the proposed development and adjacent land while also screening views into the development from the east.

CELEBRATING HERITAGE

A focal open space could be located to the west of the farmstead to maintain the rural setting and views toward this historic building.

Local views to key listed buildings both within and adjacent to the site should be retained and enhanced and necessitate further consideration as development proposals progress.

A key historic route providing access between the farmstead and Nightingale Lane could be revealed through the masterplan proposals.

Where possible, historic field boundaries should be maintained through the retention of existing hedgerows ensuring that the masterplan responds to the rich rural and ecclesiastical legacy evident within the area.

BUILT FORM AND STRUCTURE

The topography divides the site into upper and lower portions with Eastlands Spring creating a further natural division. The character of these areas will respond to their immediate landscape context, the details of this will be set out later in this document.

There is opportunity for the Village Centre to be close to the historic farmstead and located at the junction of the primary vehicular and Mobility Corridor. This location could be a positive response to the physical constraints of the site and further celebrate the site’s distinctive heritage features.

A WELL INTEGRATED DEVELOPMENT

Our proposals should seek to integrate into the existing Public Right of Way network and strengthen cycle and pedestrians connections into the wider area.

New and enhanced pedestrian access points could be provided along the eastern boundary of the site. In addition to this, new pedestrian/cycle crossing points should be created which ensure safe and convenient links with Station Road and West Horndon to the west of the site.

There is the opportunity to provide a new bus service to West Horndon Station through a bus/cycle only ‘active transport corridor’ which connects the potential Village Centre with Station Road to the west of the site.

Vehicular access could be provided from two points along the A128 with the potential for additional vehicular access points from the east at a later date.



CHAPTER 3

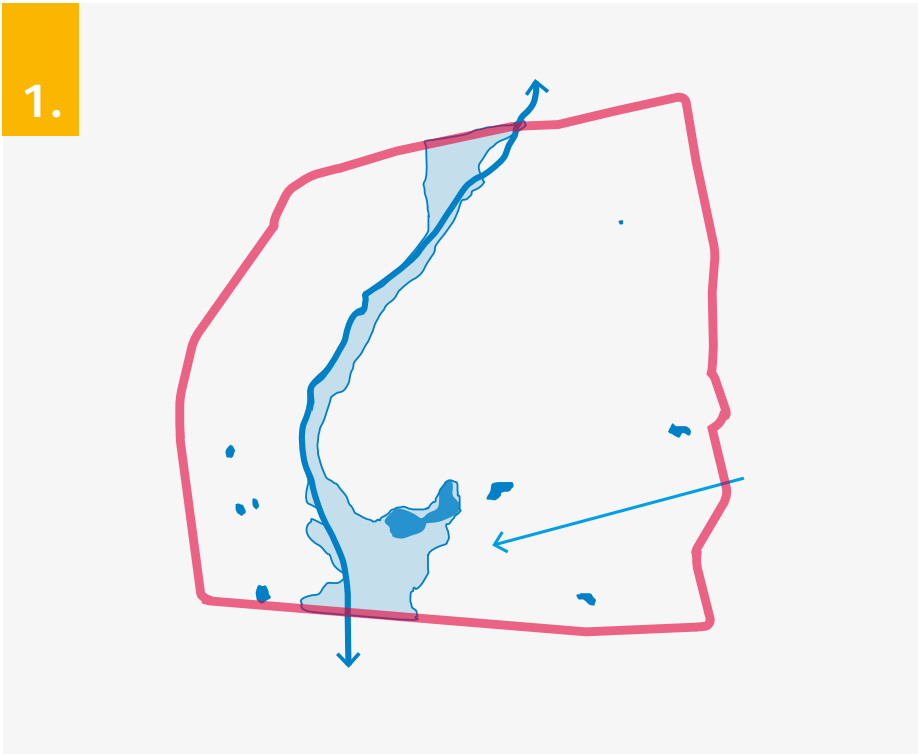
MASTERPLAN DRIVERS AND FUTURE TRENDS

This chapter introduces the key spatial and site characteristics that will influence the masterplan along with broader societal and technological advances which will play an increasingly important role as the Garden Village continues to evolve. It also summarises the extensive design work undertaken by the CEG team in close consultation with a range of stakeholders and the subsequent evolution of the Garden Village proposals.

3.

MASTERPLAN DRIVERS

Following on from the site constraints and opportunities set out in the previous chapter, a number of spatial design drivers have been developed for the site. These drivers reflect the site analysis and discussions and workshops held with key stakeholders.



BLUE - WATER

Several water elements influence the site:

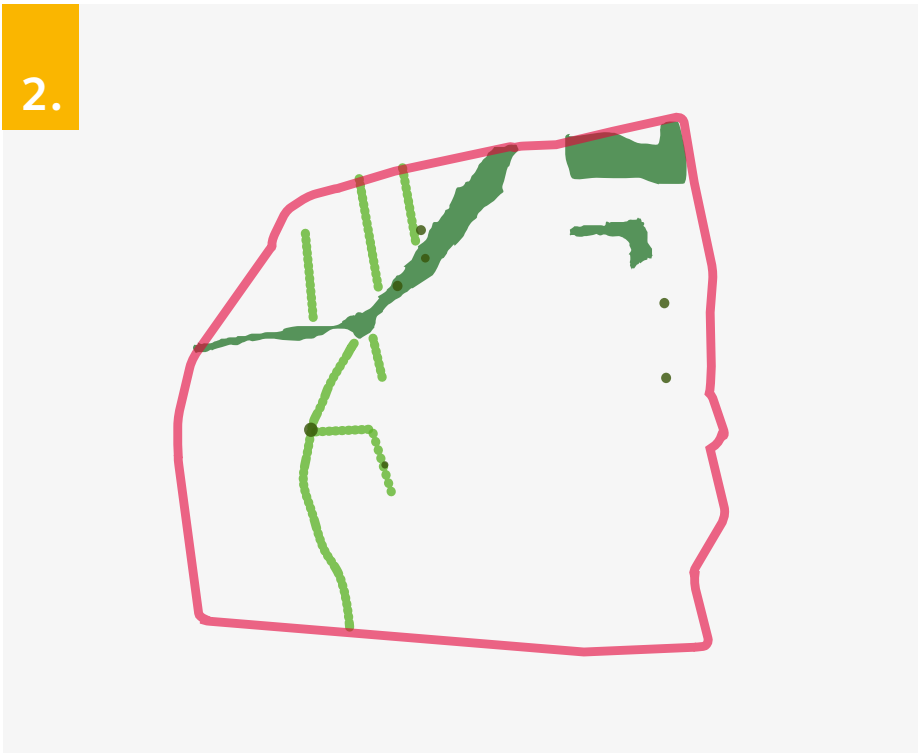
- Eastlands Spring, which runs north to south across the site
- The floodplain in the south of the site as well as the existing ponds. These together create a wetlands area



LANDFORM AND CHARACTER

There is a distinctive landform which the masterplan needs to respond to, comprising:

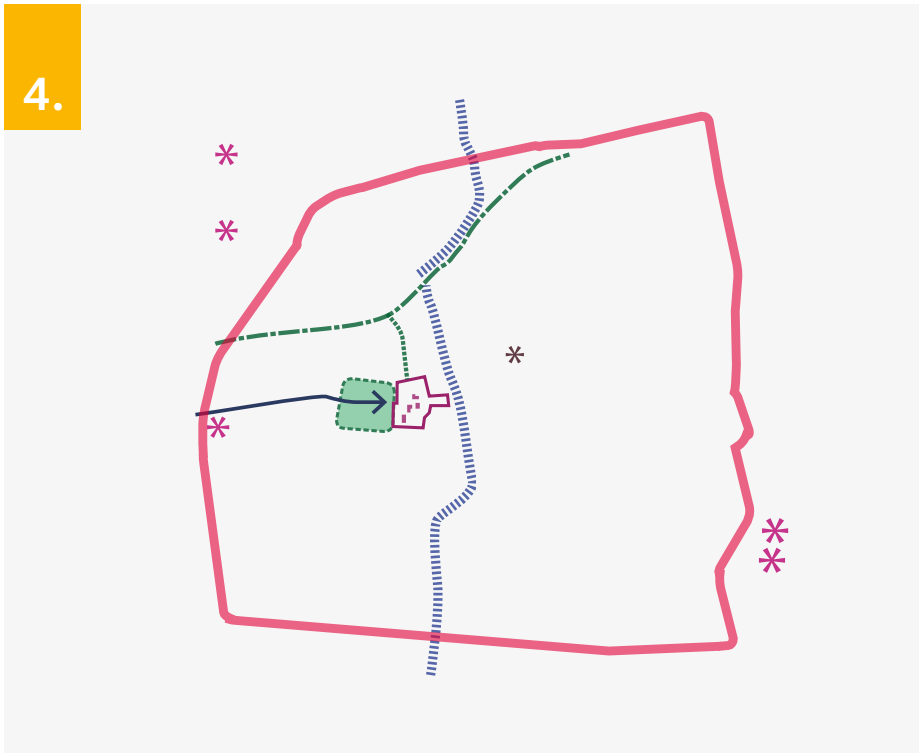
- A key ridge-line that snakes its way north to south
- Higher land to the north-east forming a plateau
- Low lying, reclaimed Fenn land to the west and south of the site



GREEN - TREES AND WOODLAND

There is an established green framework across the site. This will be incorporated into the open space and ecology network and comprise:

- Ancient woodland belt (in the north)
- Further woodland belts and blocks across the site
- Existing key (ecologically important) hedgerows and Cat A trees

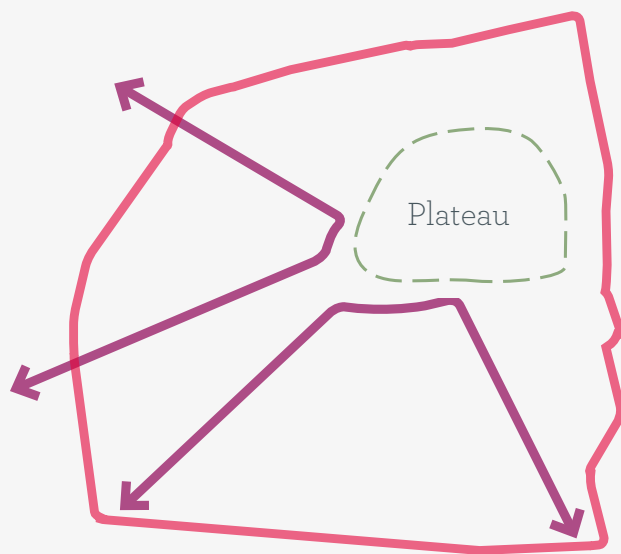


PAST AND HERITAGE

There are a number of historic features both within and outside of the site, the setting of which need to be preserved and respected. These comprise:

- Dunton Hills Farmstead which is a Grade II Listed Building and a prominent feature and orientation point within the agricultural and surrounding “Fanns” landscape
- Key historic features and routes through the site, including Nightingale Lane and the former Farmstead Driveway
- Key historic and gateway buildings surrounding the site

5.

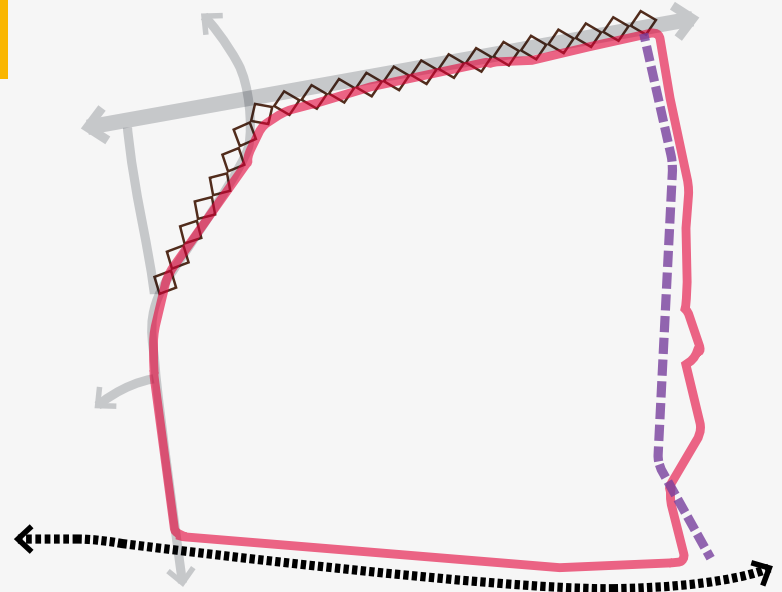


SCENIC VISTAS

The plateau in the north east of the site occupies an elevated position that:

- Affords distant views towards the central London skyline in the west
- Allows distant views across to the North Downs in Kent to the south

7.

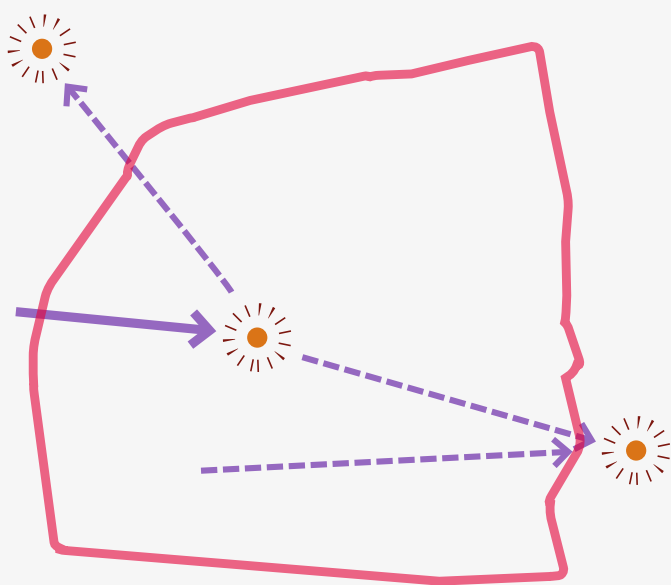


INFRASTRUCTURE

The site is bounded by transport infrastructure on three sides. These are major connectivity drivers but also barriers to movement/noise and pollution generators:

- A127 - busy, strategic road to the north
- A128 - busy, strategic road to the west
- A127/A128 interchange to the north west
- Main railway line to the south
- High pressure gas main line along eastern boundary

6.

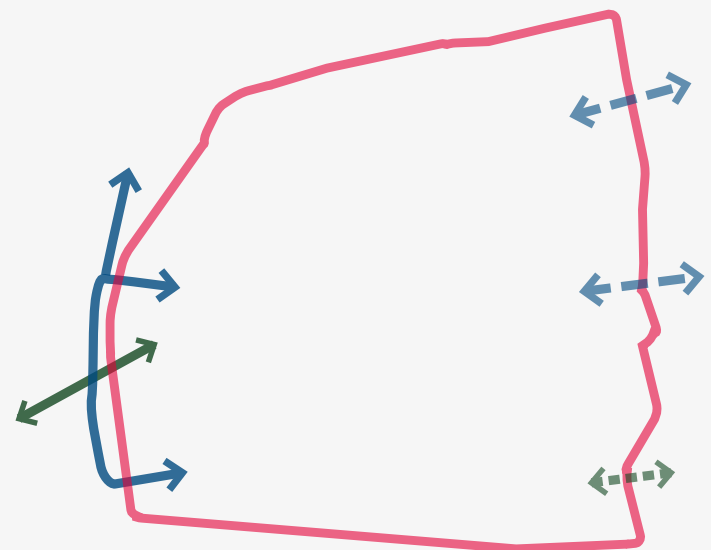


LOCAL VISTAS

The site, its internal features and its immediate surroundings create a number of local vistas, comprising:

- Potential avenue view to Dunton Hills Farm from the A128 to the west (Tilbury Road)
- Views out towards the neighbouring churches in the north west and south east

8.



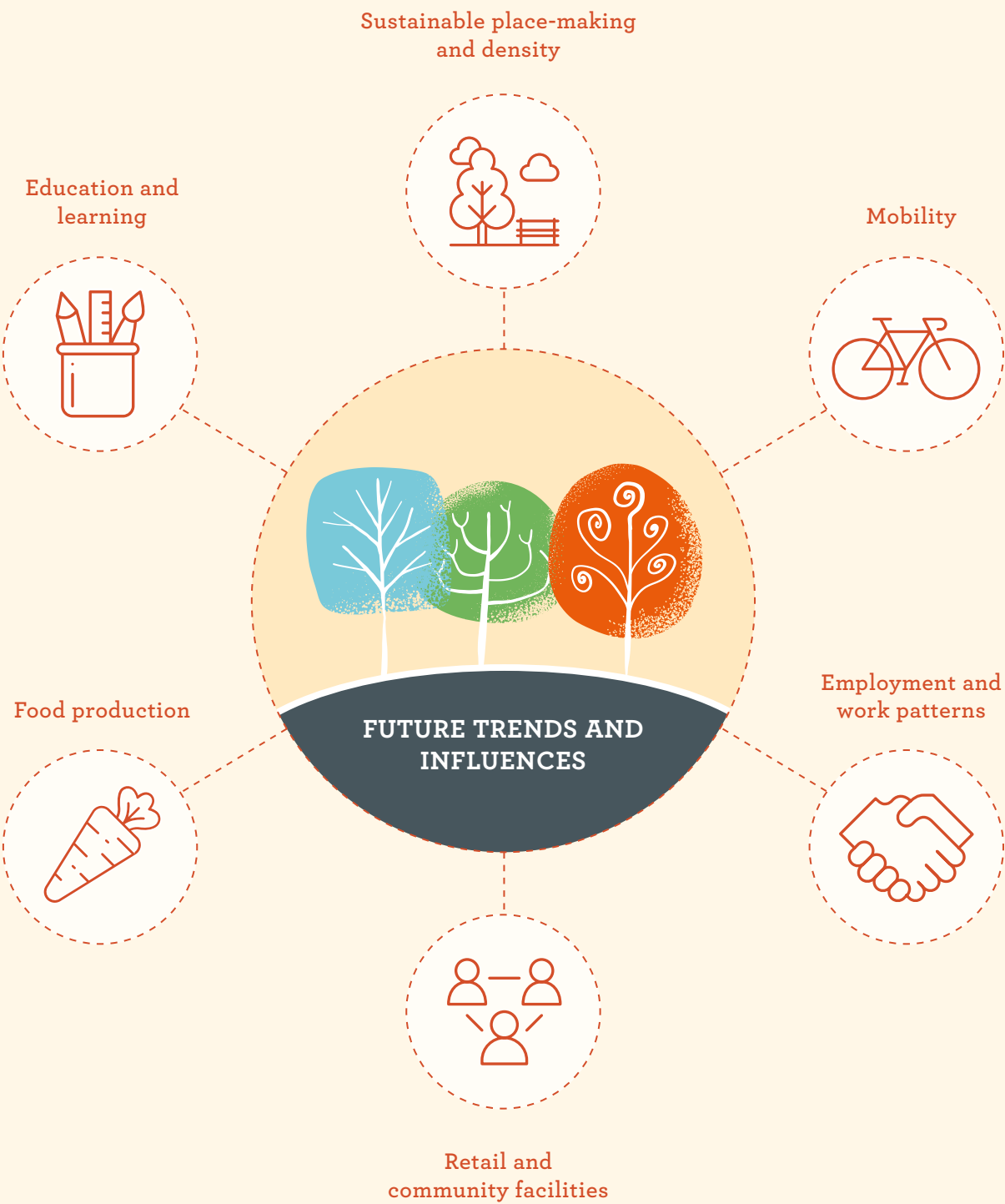
ACCESS AND ARRIVAL

The configuration of the adjacent road network means that:

- The main vehicular access points will be from the A128 to the west
- The Station Road link to West Horndon Station to the west of the site is of key importance for pedestrians and cyclists
- Connections east towards Basildon need to be future proofed

FUTURE TRENDS AND INFLUENCES

Dunton Hills Garden Village must be a place fit for the future. This section briefly outlines some of the key trends, influences and societal changes that we believe need to be understood and embedded into the design to create a futureproofed masterplan which is to be delivered over the next 10-20 years and meet the needs of the new community long into the future.



MOBILITY

We are living in a time of unprecedented change in transportation technology and what this means for mobility. While the car will continue to have its place in the short term future, the new Garden Village must allow flexibility to accommodate alternative modes of transport. The trends most relevant for further consideration, which should be considered during the design process include:

- The role of new technologies such as automation and vehicle electrification (by 2035).
- The sharing economy and the rise of on-demand mobility, hail and ride services.
- Behavioural shifts away from a car oriented existence. People are making fewer car trips, the car driving mileage per adult is reducing and car ownership amongst younger people is decreasing.
- An increasing reliance on public transport and shared mobility within younger generations (17-35).
- The impact that the above trends could have on design (e.g. fewer parked cars and less need for car storage on plot and on the street).

Walking and cycling

A sustainable development should ensure people of all ages have the environment and incentive to walk and cycle within the site (to/from the village/Neighbourhood Hubs, the schools, employment locations or nearby mass transit hubs). This can be achieved through:

- The provision of high quality, safe and direct routes (known as Active Corridors) which should be off road where possible but overlooked. Such routes should be children centric in their design to allow younger people to move safely across the site.



Electric car charging points



Local food production and farmers markets



Work Hub- flexible working spaces for the community

- High quality pedestrian/cycle links to West Horndon Railway Station to ensure a seamless and safe connection.
- Cycle hire schemes (alongside electric bikes and scooters) could help encourage active movement within the site.

Mobility Hub and community concierge

Mobility Hubs and community concierge services are now being planned for in large scale schemes such as this. They offer a focal point for the administration of the Travel Plan within the scheme, a place to pick up deliveries, book transport, charge your bike and provides information and help for those who are mobility impaired. This should be at the heart of the scheme. The services which could be located here include:

- Car club.
- Cycle and electric cycle hire and maintenance.
- Public transport interchange.
- Community Concierge and micro consolidation. Going forward local deliveries within the site could be provided through ground drones – a concept that is being rolled out in Milton Keynes.

EMPLOYMENT AND WORK PATTERNS

The way we work is already changing and will continue to do so. Job agility is increasing and many roles are less tied to a physical location. The new wave of working includes more self-employed people, entrepreneurs and new business start-ups and this trend is likely to continue. Many workers may be home based whilst others will require/prefer affordable and flexible working environments with the possibility to interact with others and share knowledge. The necessary space/buildings need to be provided within the 21st century village to offer wealth of opportunities for the next generation of workers. The Garden Village should include:

- Local co-work spaces which provide the opportunity for people to live and work within the village and reduce the need to travel.
- Flexible and adaptable buildings and workshops with “grow on” floorspace for small start-ups to move to as they expand, helping to retain them within the village
- High speed digital connectivity.

RETAIL AND COMMUNITY FACILITIES

The 21st century village needs to respond to changes in the economy and consumer behaviour. The biggest changes influencing the retail market include:

- Growth of online shopping which is a major factor behind the decline in traditional bricks and mortar retail.
- A shift away from large store retail formats.
- Retail and community facilities traditionally associated with villages have suffered decline (e.g. post offices and public houses). However, community owned shops are a growing trend in rural locations (support local produce/a link to community control) and there is a nationwide boom in farm shops reflecting a societal shift toward eating sustainably, locally and organically.
- Co-location of community/retail facilities. The village High Street or centre of the future is likely to comprise multi-functional buildings with flexible space as these offer the opportunity for viable community and retail services and facilities to be provided
- The importance of “meanwhile” and temporary uses at the outset, in order to establish a sense of community and reduce unsustainable travel patterns from day one.

FOOD PRODUCTION

We are seeing a growing societal preference for organic, local and sustainable food production. A productive landscape strategy should be embedded in proposals for the new Garden Village. This could include provision of allotments, community gardens and vineyards. Provision of these facilities not only promotes healthier lifestyles, it also encourages community involvement, further physical activity, interaction with nature and provides opportunities for outdoor education. Local produce could be sold on site, increasing access to fresh fruit and vegetables.

EDUCATION AND LEARNING

The emerging Local Plan at Dunton Hills requires a secondary school, three primary schools and early years provision. The learning environments of the future are likely to change and learning across different environments is becoming more and more important.

- Active social learning is important. A key output from the stakeholder workshops was to ensure that the schools, should be located

adjacent to green open spaces, creating opportunity for outdoor learning which will have significant health and well-being benefits related to this.

- Prioritising apprenticeships opportunities to pupils leaving the secondary school would also engender ownership.

The schools should be easily accessible to their surrounding neighbourhoods through sustainable means of transport ensuring that children and young people remain active and get regular exercise. A key aim of Dunton Hill Garden Village should be to create car free environments around schools as much as possible and little or no drop off parking provision, reflecting current national trends.

SUSTAINABLE PLACE-MAKING

Whilst the existing character of a local area should be understood, it does not necessarily mean that it should be duplicated in the new Garden Village. We need to plan and design for a village fit for purpose for current and future generations, not a pastiche of the past. The following elements will be critical in creating a Garden Village for the future.

Urban structure

An appropriate design approach needs to respond to the site’s unique context and landscape setting alongside its future function as a highly sustainable place that maximizes the use of public transport.

Density

Density and form should not just seek to replicate our traditional impression of a rural village. The site will need to cater for a range of densities, to support a mixed community with housing catering for families, the young and the old. Densities, particularly in the west of the site (closest to the station) need to be maximized to reflect this. Furthermore, government policy has, over the last 20 years, encouraged an increase in density to support public transport and create more efficiency in the use of land. This will continue to be the case in the future.

Urban fabric

Whilst detailed guidance will come in the form of a Supplementary Planning Document (SPD), the design of buildings is important and must meet contemporary and future housing needs. It should be adaptable over time and support changing life needs, whilst also catering to the needs of those who choose to work from home. It is key that houses be located on active, well designed and attractive streets with access to public open space – not just private back gardens.

SUMMARY

The above is not an exhaustive list of considerations for the future village, but some of the key known changes in society that are happening now and will help shape the masterplan. The masterplan must contain a degree of flexibility to respond to future changes. Indeed, innovations today are likely to be out of date in 20 years time.



Communal spaces provide opportunities for outdoor learning and events



Cycle hire schemes will promote sustainable transport

DESIGN EVOLUTION TIMELINE

This section provides a brief synopsis of the stakeholder engagement process and how it has helped inform the design evolution. Whilst it should be noted that masterplanning and local stakeholder engagement (including CABE workshop reviews) for the site has been on-going since 2014, a collaborative process of work on the current masterplan began in early 2019 with a series of stakeholder workshops and Design South East review panels.

**TECHNICAL
STAKEHOLDER
BRIEFING AND
MASTERPLAN
WORKSHOPS
(FEBRUARY 2019)**

**DESIGN
SOUTH EAST
WORKSHOPS
(APRIL 2019)**

**DESIGN
SOUTH EAST
WORKSHOPS
(MAY 2019)**

**DESIGN
SOUTH EAST
CHECKPOINT
MEETING
(MAY 2019)**

**1ST FORMAL
DESIGN
REVIEW PANEL
(JUNE 2019)**

**PUBLIC
EXHIBITION IN
WEST HORNDON
(JUNE 2019)**

This involved presentations from the Borough Council and CEG followed by group discussions and feedback at the end focussing on:

- Landscape, green infrastructure and biodiversity
- Heritage assets
- Social infrastructure (education, community, health and Village Centre)
- Sustainable infrastructure (energy, travel and other)

Chaired by Design South East (D:SE) these workshops were broken into individual themed sessions covering:

- Vision, concept and narrative workshop
- Green and blue infrastructure workshop
- Heritage and design workshop
- Socio-economic workshop

At each workshop CEG presented the most recent design work before a wider Q+A session and table discussions took place. D:SE provided a summary note after the event.

Two further sessions following the previous format were held in early May covering:

- Smart and sustainable infrastructure workshop
- Sustainable transport workshop

CEG explored the site capacities and densities to provide the Borough Council and D:SE with the assurance that 3,500 – 4,000 homes could be accommodated on the site and the level of social and community infrastructure required.

This was a formal presentation to D:SE, Homes England, landowners and the Borough Council setting out:

- CEG’s vision for the Garden Village;
- Key masterplan drivers and the evolution of three neighbourhoods;
- Initial plans on access and movement.

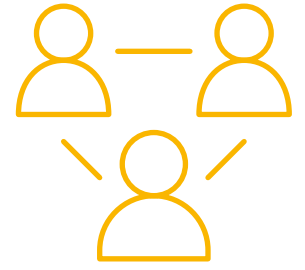
Held at Francis Church Hall in West Horndon, this exhibition focused on the area of the site controlled by CEG. A number of boards with information about the scheme and the masterplan were presented to the public with members of the CEG team on hand to discuss the proposals and listen to concerns.



Stakeholder Consultation Workshop (February 2019)



Stakeholder Consultation Workshop (February 2019)



PRE-APP HERITAGE MEETING (JUNE 2019)

This was a meeting between CEG, Historic England and Borough Council Heritage to explore the key heritage features within the and surrounding area and their sympathetic integration in to the masterplan.

2ND FORMAL DESIGN REVIEW PANEL (JULY 2019)

This was to a similar audience as the previous Design Review Panel with the CEG team presenting:

- Key spatial drivers which had shaped the landscape led design proposals;
- Further detail on each of the three neighbourhoods;
- Changes to the masterplan since the previous session.

INNOVATION AND DESIGN GUIDELINES WORKSHOP (SEP 2019)

This was chaired by D:SE and included key stakeholders with discussions covering:

- Transport and community building;
- The level of detail required for the Framework Masterplan and the subsequent SPD.

EDUCATION WORKSHOPS (SEP 2019)

These were run by the University of Birmingham with the assistance of CEG and the Borough Council. The purpose of these workshops were to:

- Inform the SPD document;
- Actively engage local students with the masterplanning process;
- Educate students about future career opportunities in urban design, architecture and planning.

3RD FORMAL DESIGN REVIEW PANEL (SEP 2019)

This was the final Design Review Panel. D:SE supported the design rationale and updated masterplan presented by CEG and suggested minor amendments to the masterplan and Masterplan Framework document including:

- The need for additional mandatory design principles to be outlined in the MFD to protect the design concept;
- Further exploration into the mobility and sustainability strategy.

MASTERPLAN STAKEHOLDER UPDATE AND DESIGN SOUTH EAST CHAIR REVIEW (JAN 2020)

A further draft of the Masterplan Framework Document was discussed at a meeting with the Chair of the D:SE Design Review Panel and officers from Brentwood Borough Council. The main purpose of this was to present and agree on the approach to the Mandatory Principles. The Chair provided final comments prior to the completion of the document.



Education Workshops Student Presentations (September 2019)



Education Workshops design activities (September 2019)

DESIGN EVOLUTION SUMMARY DIAGRAM

FRAMEWORK MASTERPLAN EVOLUTION



Stakeholder workshops (April 2019)

Through these workshops locations for the key community hubs within the site were identified. This was informed by:

- A need to provide facilities within walking distance of residents;
- The topography of the site;
- Emerging local plan policy requirements for the site.

The main Village Centre was located to the south with a Neighbourhood Hub in the west and a third Neighbourhood Hub was located in the north (on the upper plateau).



Preferred option 1 (May 2019)

Following the workshops this spatial option was drawn up. Further capacity testing took place ensuring that the proposals met local plan requirements and could support the range of social infrastructure set out in the emerging local plan. This detailed assessment informed discussions with D:SE and the Borough Council in mid May. These meetings covered the heritage and the need for the farmstead to be more at the heart of the Garden Village and for a stronger east-west street connection across the south eastern part of the site, as opposed to the longer loop shown.



Design Charettes

Detailed design

Further exploration and internal design reviews

Internal interrogation of the design proposals ran in parallel to the external workshops and presentations. Key matters explored in further detail included the sensitive integration of existing site features with particular focus on the relationship between the Village Centre and the existing farmstead to ensure our proposals respected the setting of this feature and embedded this at the heart of the Garden Village. The need to establish direct (traffic free) connections between the site and West Horndon Station and providing convenient pedestrian and cycle links within the site were also explored.



Parcel testing

The illustrative masterplan proposals for Phase 1 were tested further through design optioneering and detailed sketch layouts for key spaces. This ensured that the design proposals are based on a robust and achievable design rationale. This analysis focussed on elements such as character, density, heights, parking, the location of non-residential land uses, open space provision and phasing.



More detail on the design evolution and review process is contained on the appendix.

Design Review Panel 1 (June 2019)

A refined masterplan was presented to D:SE. Key facilities were located close to the farmstead (to the south) and the site is divided into three distinctive neighbourhoods.

- Western Neighbourhood on the flat land between the A128 and Eastlands Spring
- South Eastern Neighbourhood on gently undulating land to the east of Eastlands Spring.
- North Eastern Neighbourhood - on the plateau at the top of the ridge-line.



Design Review panel 2 (July 2019)

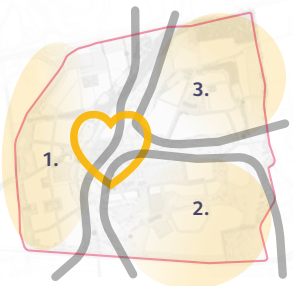
The feedback from the 1st Design Review Panel was positive, but there was still a clear desire for the centre of the village to be more closely linked to the historic farmstead and better linked to the Mobility Corridor connecting to West Horndon Station. The Village Centre was, therefore, relocated to the west of the farmstead and presented at the July Design Review Panel. This was received positively.



Design Review panel 3 (October 2019)

The Framework Masterplan plan below was presented to D:SE and was the culmination of the design moves agreed upon through the design review process and stakeholder discussions. It received support from the group. It addresses previous concerns raised and seeks to embed the Garden Village firmly within its historic and environmental context. These elements are covered in more detail later in the document.

THE SITE IS DIVIDED INTO THREE CHARACTER LED NEIGHBOURHOODS, DUNTON FANNS (1), DUNTON WATERS (2) AND DUNTON WOODS (3)



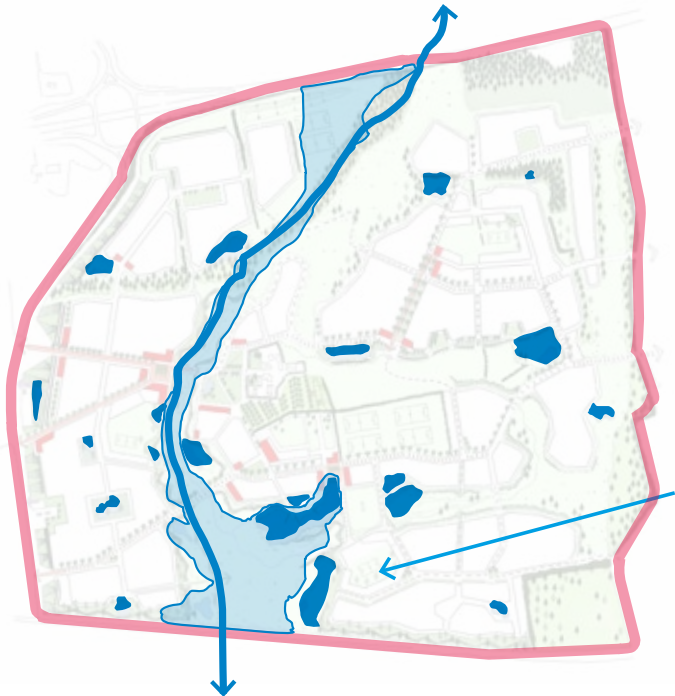
Illustrative vision

On defining the overall design framework and appropriate location of facilities key areas of the masterplan proposals were explored in 3-D bringing the Garden Village to life. These illustrations gave a clearer indication of the interplay between the proposed layout and existing landscape and heritage elements and helped to spatially define key elements of the site such as the Market Square, village green and all through school in further detail.



RESPONDING TO THE DRIVERS

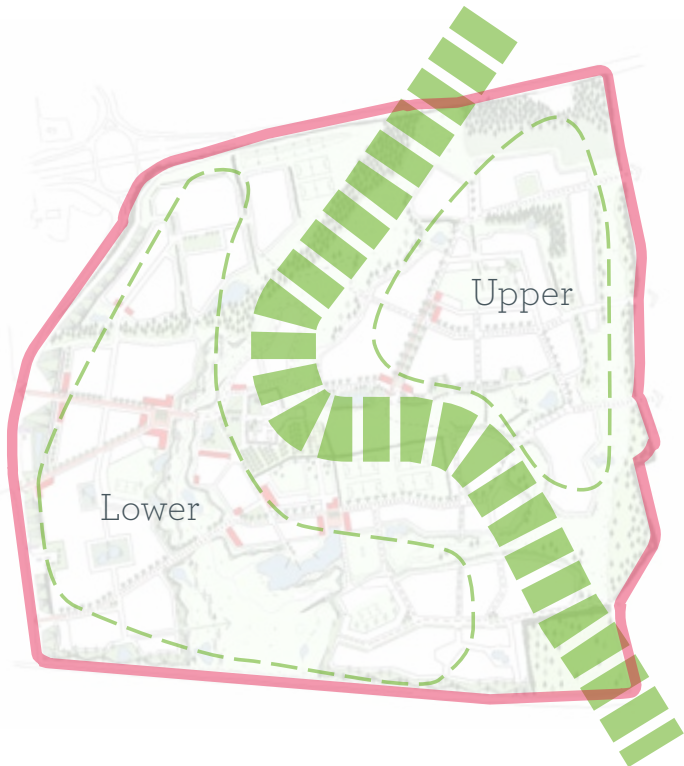
1.



BLUE - WATER

The Framework Masterplan establishes a positive frontage onto the Eastlands Spring which celebrates the wetland setting, respecting the floodplain and associated ecology. A number of existing ponds are retained and additional sustainable drainage areas added.

3.



LANDFORM AND CHARACTER

The ridge-line forms an integral part of the site's green infrastructure and open space network.

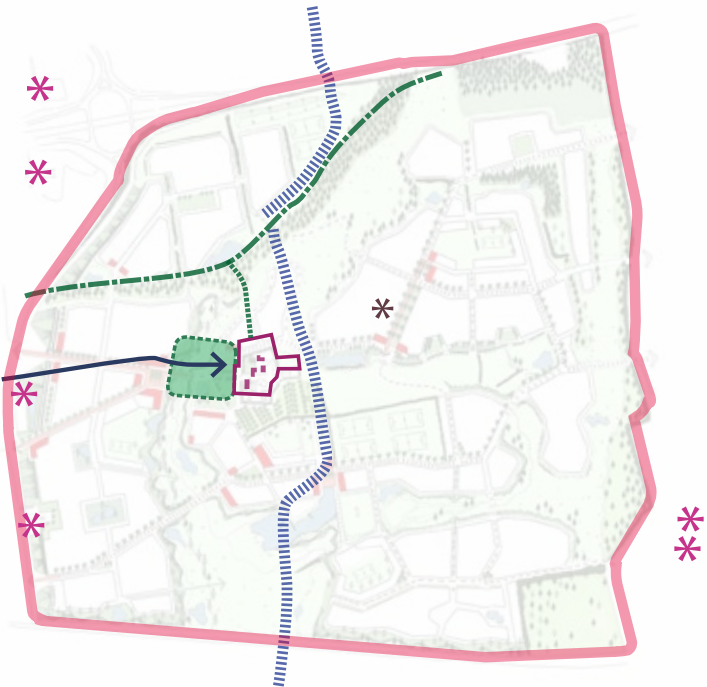
2.



GREEN - TREES AND WOODLAND

The key green element that informs the layout are the woodlands, some of which are ancient. These are strengthened to form a woodland setting for adjacent neighbourhoods. Historic hedgerows also inform the layout, protecting both their heritage and ecological benefits.

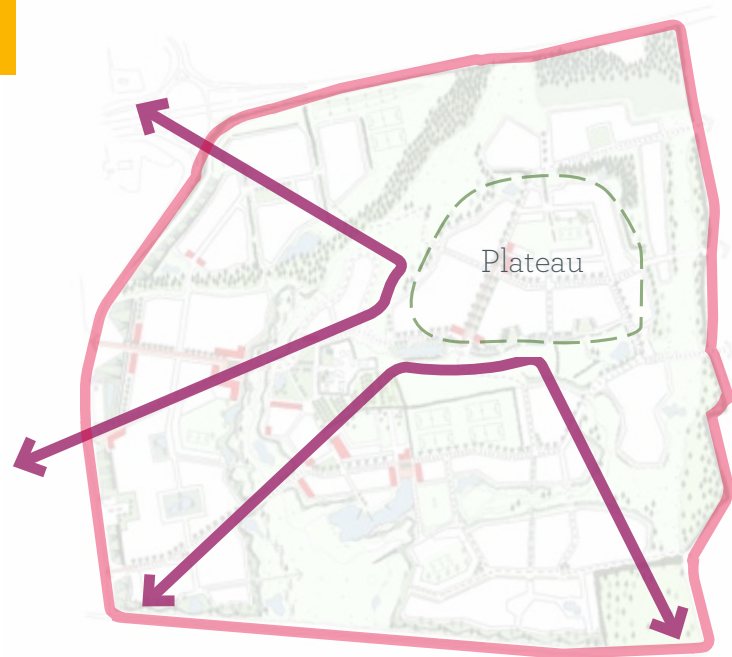
4.



PAST AND HERITAGE

The historic farmstead becomes a key node around which the masterplan is organised. The Village Green is located to the west of the farmstead, respecting its setting whilst ensuring its integration into the centre of the Village. Key views to the surrounding church spires are preserved.

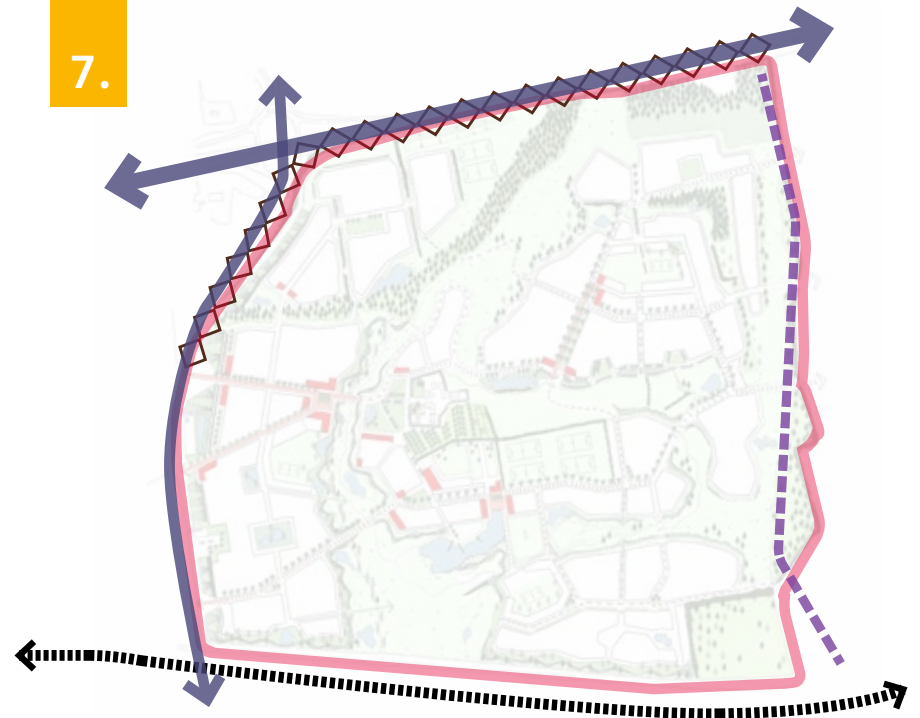
5.



SCENIC VISTAS

The layout responds directly to the elevated areas within the site at the top of the ridge-line, establishing views across to the North Downs to the south and towards the London skyline to the west.

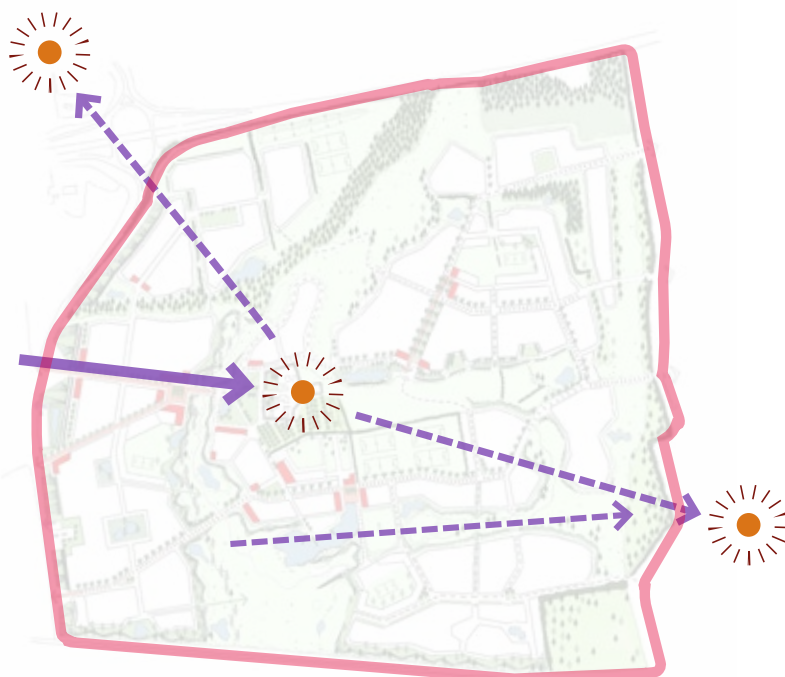
7.



INFRASTRUCTURE

The framework respects the surrounding transport infrastructure to the north, south and west and the gas pipeline to the east. Appropriate buffers are created to ensure set backs, but each buffer forms part of a network of usable green spaces.

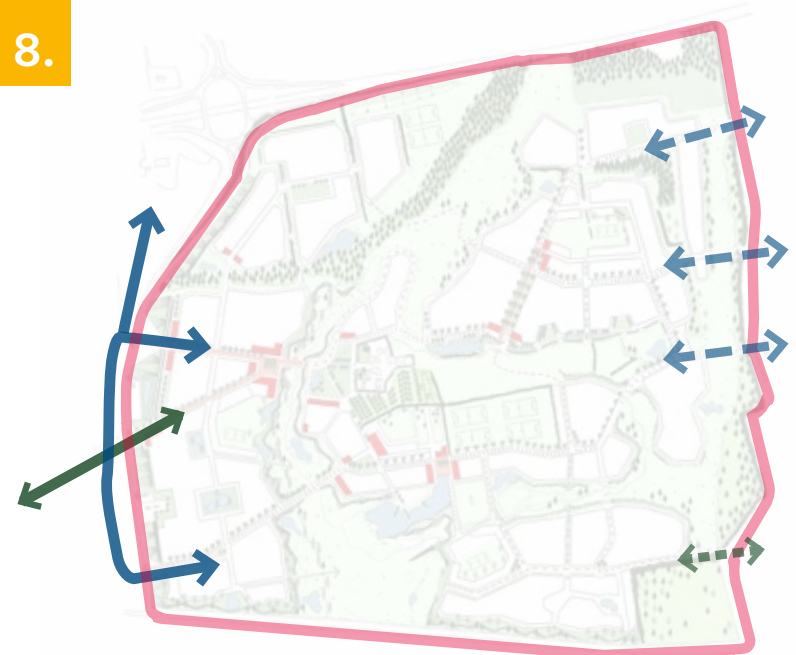
6.



LOCAL VISTAS

Important local vistas which are primarily linked to the heritage assets, are safeguarded and designed into the layout of the Garden Village. Most significantly a Boulevard from the A128 establishes a key view corridor to the Farmstead. The buildings heights and layout also preserve views to the spires of neighbouring churches.

8.



ACCESS AND ARRIVAL

Key vehicular access points are taken from the A128 to the west. A central pedestrian and cycle corridor aligns with Station Road leading to the heart of the Village around the Market Square. Further access opportunities are future proofed into land to the immediate east of the allocation. There is scope for a pedestrian, cycle and emergency access link to the south east of the site, but this is subject to planning permission from the adjoining local authority.

“

THE SITE’S WONDERFUL AND PLENTIFUL LANDSCAPE ASSETS PROVIDE A UNIQUE SETTING WITHIN WHICH TO CREATE THE NEW GARDEN VILLAGE. THE ARRAY OF NATURAL PHYSICAL FEATURES INCLUDING THE SOUTH ESSEX FENLAND, THE WETLANDS, THE EASTLANDS SPRING, THE RIDGE AND THE WOODLAND HELP TO INFORM THE CHARACTER AND THE SENSE OF PLACE OF DUNTON HILLS AND CREATE THE OPPORTUNITY ON WHICH TO CREATE A MULTI-FUNCTIONAL AND VARIED GREEN AND BLUE INFRASTRUCTURE NETWORK.

THIS NETWORK WILL NOT ONLY ENCOURAGE HEALTHY WHOLE LIFE LIVING, ENHANCE ECOLOGICAL BIODIVERSITY, EMBED CLIMATE RESILIENCE AND FACILITATE ENVIRONMENTAL LEARNING, BUT WILL ALSO ACT AS THE THREAD WHICH BRINGS THE THREE NEIGHBOURHOODS TOGETHER AS ONE COMMUNITY. IT ALSO OFFERS THE SEEDS OF OPPORTUNITY IN WHICH TO SET NEW FORMS OF PLAY, SPORT AND RECREATION, POCKET PARKS, ACCESSIBLE VIEW-POINTS, HABITAT CREATION, WALKING AND CYCLING MOVEMENT FOR ALL AGES, COMMUNITY FOOD PRODUCTION AND SUSTAINABLE AND WELL-DESIGNED WATER MANAGEMENT.

DUNTON HILLS WILL BE, WELL AND TRULY, A LANDSCAPE LED GARDEN VILLAGE FOR THE FUTURE.

”

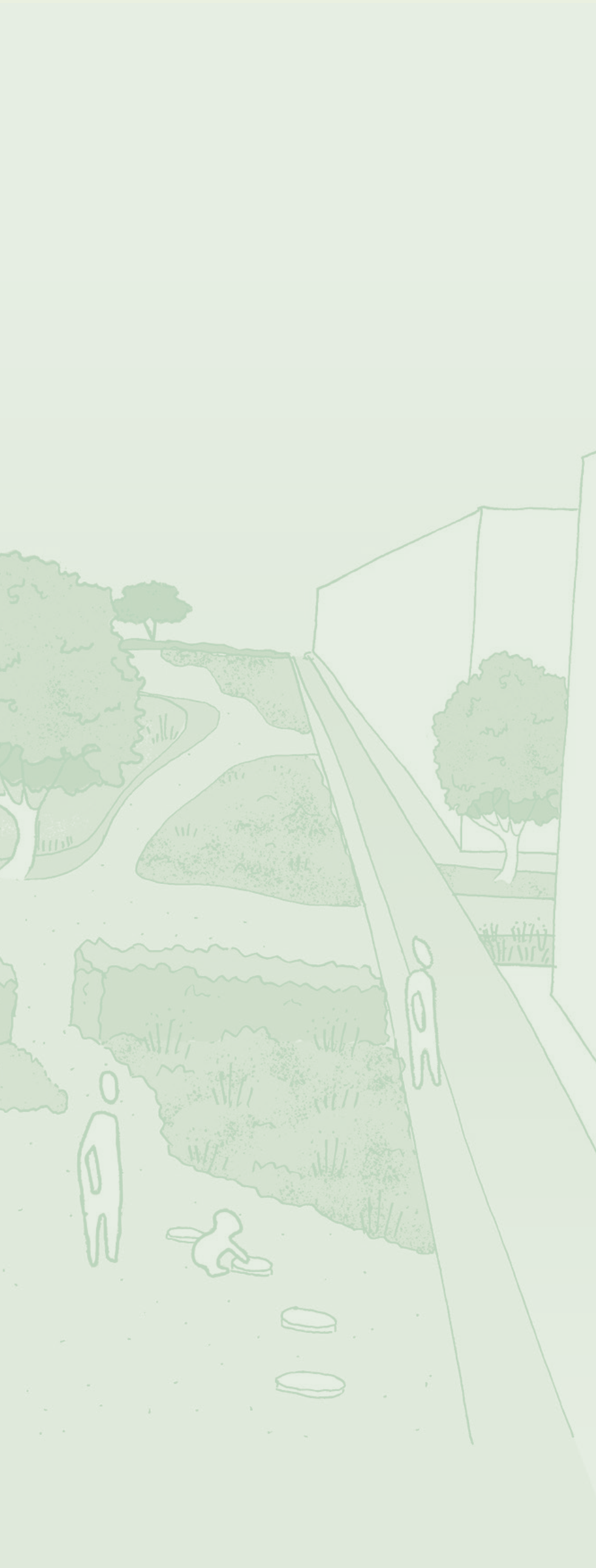
LANDSCAPE VISION

CHAPTER 4

LANDSCAPE: GREEN AND BLUE INFRASTRUCTURE

Dunton Hills Garden Village is a landscape led masterplan. This section illustrates how the existing landscape features and character influence the development of the Framework Masterplan and sets out principles for the integration of an attractive and ecologically sensitive network of green and blue spaces into the Garden Village.

4.



LANDSCAPE ANALYSIS: GREEN AND BLUE INFRASTRUCTURE

OVERARCHING LANDSCAPE STRATEGY

Dunton Hills will be a 21st century Garden Village, embodying the characteristics of modern living in a rural setting. The landscape will seek to celebrate and enhance the existing natural assets of the site, whilst also forming new landscapes that people will enjoy living, working, and playing in.

The landscape will create a base layer for the development of new homes within neighbourhoods. A range of different landscapes will form the spaces between the buildings, and will create a setting for moments of enjoyment, recreation, exercise and learning.

The landscape strategy for Dunton Hills Garden Village will be developed with the following design principles in mind:

- 1. **Green Infrastructure** - respecting the existing distinctive landscape features and enhancing existing ecological habitats.
- 2. **Blue Infrastructure** - Welcoming blue infrastructure into every aspect of the landscape strategy to create a symbiotic green and blue platform for the development of landscape spaces.
- 3. **Site Wide Landscape Characters** - building on the inherent landscape character and natural assets of the site to develop the site wide landscape character areas.

These objectives will help to deliver a true landscape-led masterplan for Dunton Hills (explained over the following pages).

GREEN INFRASTRUCTURE

The natural landscape of Dunton Hills is varied and majestic, with a number of robust landscape features which will create a unique sense of place. The key physical elements of the landscape infrastructure which will contribute to this are as follows:

- Ancient woodland
- Eastlands Spring
- Wetland meadows
- Ridge
- Linear hedgerow elements

A description of these elements and how they could be incorporated into the masterplan are set out below:

Ancient woodland

The ancient woodland follows the line of the Eastlands Spring southwards, creating a strong linear feature in the landscape. The ancient woodland is protected by national planning policy and is conserved, protected and enhanced within the masterplan. A Public Right of Way provides access through the ancient woodland, allowing for future communities to learn about and enjoy the woodland.

Eastlands Spring

The Eastlands Spring marks the low point of the topography and provides a vital ecological function, it is an important natural asset to celebrate within the masterplan.

Wetland Meadows

A floodplain lies to the south-east of the Eastlands Spring, forming wetlands. The integration of existing blue infrastructure networks with Sustainable Drainage Systems (SuDS) will be critical to the success and future sustainability of the new Garden Village. A series of natural and man made water bodies exist within the site which create a mosaic of habitats and recreational environments. These can be incorporated into the landscape, enhancing biodiversity and creating an attractive setting for residents

Ridge

The sloping topography of the ridge forms a striking feature within the site and reinforces the transition from the fenland to the hills. This elevation affords long distance views to the east and south from the ridge which allows a celebration of the drama created by the expansive landscape. As the ridge snakes through the site it forms a series of slopes with different aspects, micro-climates, and view opportunities. The open character of the ridge should be preserved in the masterplan to retain views both out and in.

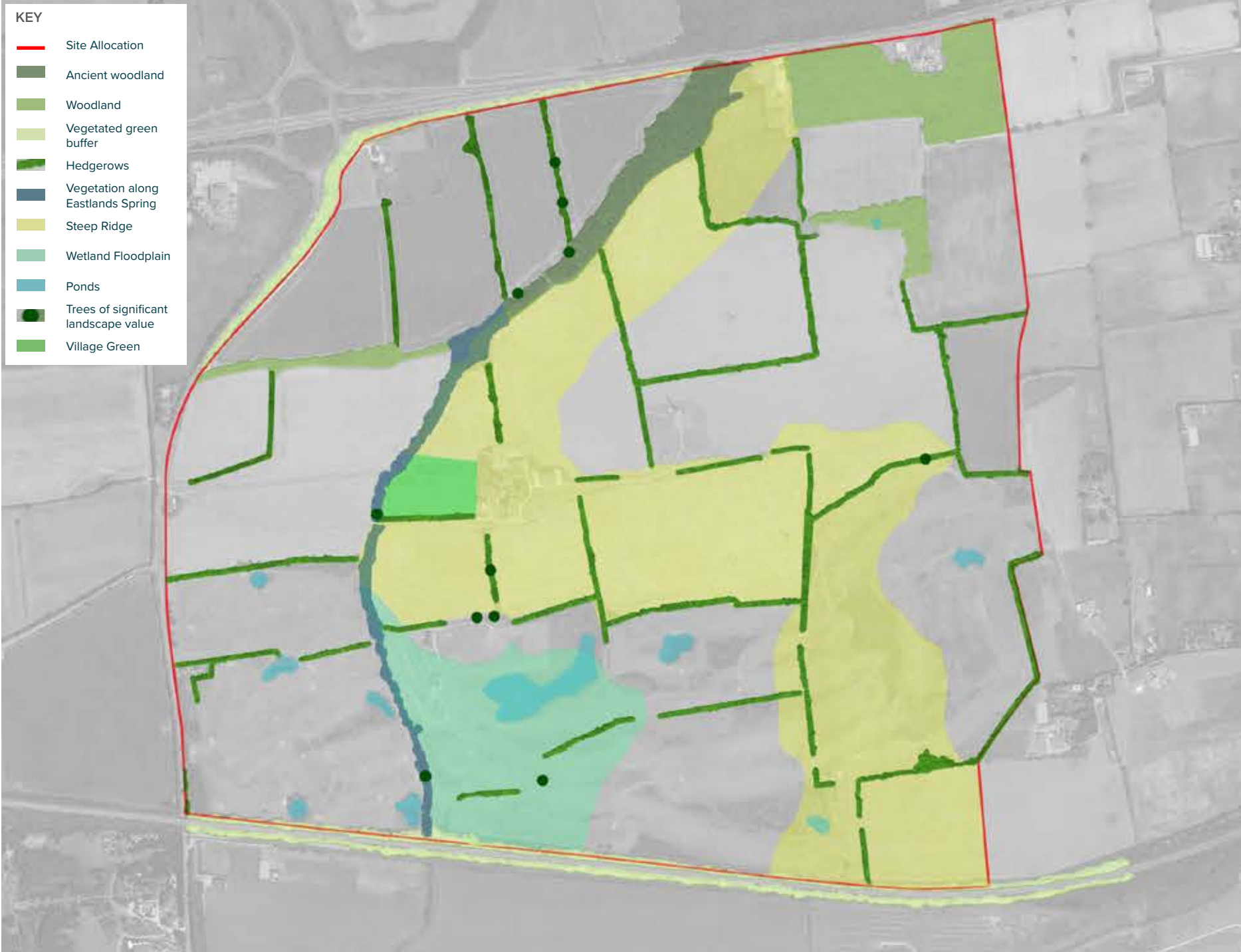
Linear hedgerow elements

The historic land use over the last few hundred years has been farmland and elements of the Dunton Hills Farmstead have been present in the landscape from the early 17th century. The patchwork of fields around the farmstead were demarcated with hedgerows, some of which still remain today. The masterplan should retain the historic hedgerows in the north-west part of the site and should seek to retain any other linear landscape features within the site. Any existing hedges that are retained can be enhanced by creating green infrastructure connections to and from them, as well as hedgerow infill.

A robust landscape framework

These landscape elements will make up a robust framework and will inform the development of a masterplan; which will sensitively integrate with the setting and celebrate the inherent nature found at Dunton Hills for generations to come.

The masterplan will provide a net gain in environmental and social benefits with increased access to open space, and promote habitat creation and biodiversity across the site. The principles of protecting, conserving and enhancing the landscape infrastructure of Dunton Hills are set out in in Section 5.



Existing green and blue infrastructure



BLUE INFRASTRUCTURE

Dunton Hills Garden Village should focus on celebrating water and sensitively integrate blue elements with green elements.

SuDS are required in order to ensure the development parcels are suitably managed in terms of surface run off and stormwater management. A series of interventions for SuDS will be implemented in the Garden Village including dry attenuation basins, new ponds and basins for attenuation, swales, rain gardens, culverts and traditional stormwater pipes to facilitate moving water along slopes.

In order to fully integrate the blue infrastructure network into the landscape and green infrastructure for the Garden Village, the following principles will be adopted:

- The water management will celebrate visibly ‘on the surface’ through the use of permeable paving, swales and rain gardens within the development parcels. Swales will be favoured over traditional culverts and pipes in order to manage the water at the surface, which can also include planting elements.
- Focal points for play and social interaction will be located adjacent to elements of blue infrastructure such as the existing ponds, detention basins and swales. These areas can provide a tangible connection to nature and also allow for learning and education of water management.
- The water management and catchment systems will be designed to sensitively integrate into the wider landscape. New basins will be aligned with existing green infrastructure elements such as existing hedgerows to create a green and blue infrastructure link for the promotion of biodiversity.
- The manicured golf course will be replaced by fenland meadow within the floodplain of the Eastlands Spring, with existing ponds being retained and enhanced through planting to promote biodiversity. Within this meadow a series of new ponds will allow for the translocation of Great Crested Newts and promote a wetland habitat for migrating birds.

CASE STUDY:
WATERCOLOUR, REDHILL

This scheme for over 520 homes on a former sand washing plant has seen the restoration of existing water attenuation features, including; an industrial outwash lagoon and a settlement lagoon.

The Gatton Brook, which had been culverted under the plant, was re-established, which along with a Blue Spine is a key component of the site’s multifunctional environmental infrastructure. ‘Water at every turn’ was the team’s slogan for the scheme.

The Blue Spine takes on 3 characters – a brook, a canal, and reed beds. It issues into the lagoons which are now linked together, and then to the Redhill Brook. Awareness of water is central to the vision – as an attractive setting for homes, filtering and attenuation of surface water, and as a wildlife resource. The restored lagoons buffer between town and countryside.



The Blue Spine runs through the centre of the scheme, the restored brook runs around the edge.





CASE STUDY: THE MISSING LINK - VAUXHALL WALK RAIN GARDENS, LONDON

The 'Missing Link' scheme completed in Vauxhall in 2015 is a series of pocket parks and promenades created to promote walking and cycling connections. Part of the design included a series of new rain gardens to help combat surface run off and excess stormwater. The scheme was the product of an RIBA design competition and included elements from winning gardens from the Chelsea Flower Show.

The rain gardens were planted by a not-for profit organisation who train unemployed young people back into full time employment. Free-draining urban meadows form the raingarden network which run alongside paths, streets and within the public realm. The planting uses the surface run-off water from the adjacent hard-standing areas as irrigation.



SITE WIDE LANDSCAPE CHARACTER AREAS

Whilst the whole of the green and blue infrastructure network provides the framework and setting for the Garden Village and should be seen as a whole, its varied character means it can be divided into five main landscape character areas, these are;

- Flat Fanns Edge
- Eastlands Spring
- The Wetlands
- The Woodlands
- The Ridge.

These character areas are particularly important in defining the character of different neighbourhoods within the Garden Village and are explained over the next few pages.



Site wide landscape character areas

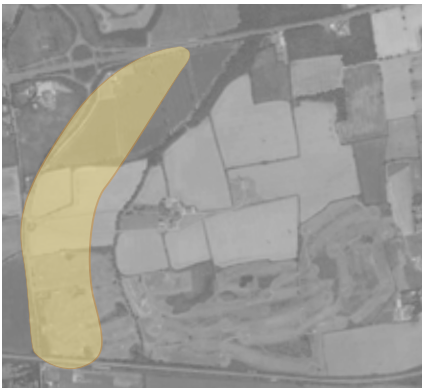
SITE WIDE LANDSCAPE TYPOLOGIES

The character areas are also explored in more detail and are further categorised into landscape typologies which celebrate the variety and uniqueness of the site's natural elements. These landscape typologies will help shape how detail design comes forward. Further definition is provided for each of the spaces and what they will bring to the Garden Village in terms of recreation, biodiversity and natural landscapes.



Site wide landscape typologies

FLAT FANNS EDGE



EXISTING CHARACTER

The western boundary of the site is characterised by the wider landscape character of the fenland to the west and south. The Flat Fanns Edge is characterised by wide, open, level landscapes and this typology sweeps up and into the site to meet the development edge. Key features of the Fanns include:

- Open views
- Large feature trees visible from long distances
- Strong rectilinear patterns in field boundaries and drainage elements

These characteristics and features will be embodied within the Flat Fanns Edge landscape both at the edges of development and within the neighbourhoods themselves.



View looking east across the Flat Fanns Edge

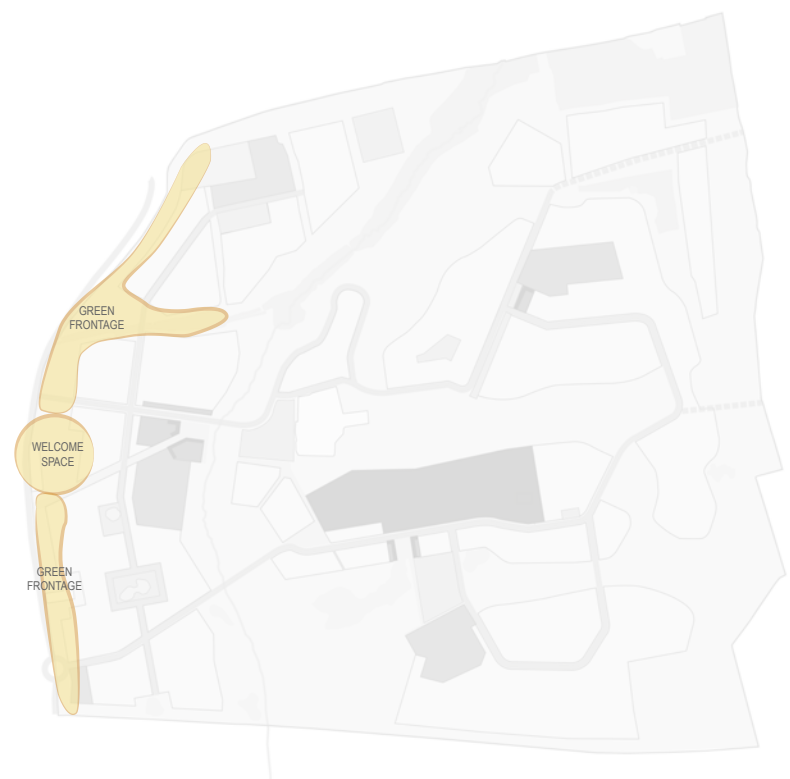
CASE STUDY: NEWHALL, ESSEX

Newhall is a new urban community based outside of Harlow in Essex. The founding principles of nature, colour, distinctiveness, flexibility and public realm are established within the many open spaces throughout the development.

Landscape ‘at the doorstep’ is a key feature of the base development at Newhall where you are never more than 60m away from a green space. A network of cycle paths open spaces to provide a convivial active landscape for the community. These green spaces form frontages to the development which celebrate the life and activities of the residents.

The green frontage at Newhall successfully created a vegetated buffer at the fringes of the development, which then opens out onto a recreational landscape for all residents to enjoy.





LANDSCAPE TYPOLOGIES - RESPONDING TO EXISTING CHARACTER

Green Frontage

The landscape that abuts the A128 forms the link between the Flat Fanns landscape to the west and the development within the site. These spaces have three vital functions:

- To sensitively integrate the development into the wider context,
- Providing a sense of arrival into the development from the A128; and,
- Providing an attractive frontage to the edge of the development.

The areas of Green Frontage should be landscaped to create a conscious link to the Fanns in the west, through tree planting selection sensitive to the character of the reclaimed Fenland. These areas should provide space for recreational and leisure pursuits, as well as a landscaped doorstep for the development.

Welcome Space

The Welcome Space provides the masterplan with a formal arrival landscape from the A128, between the confluence of the existing road and proposed roads into the scheme. This space should also embody the characteristics of the reclaimed Fenland, with space for play, recreation, leisure and feature gateway trees.

The Welcome Space should create a sense of arrival from the A128, and provide a landscaped setting for new pedestrian and cycle crossings over the A128. This area can also incorporate SuDS features in a formal layout or arrangement to celebrate water management at the entrance to the development.

KEY LANDSCAPE OBJECTIVES

- To create a formal welcome space at the confluence of the A128 and main Mobility Corridor into the site.
- To retain the 'open' character of the Fanns within the development, with views from built form westwards towards the Fenland.
- Landscape layout and design should be rectilinear in arrangement to embody the Fanns character. This in turn should lead to a more formal urban structure within this part of the site.



An impression of the Flat Fanns landscape character area

EASTLANDS SPRING



EXISTING CHARACTER

The gentle Eastlands Spring provides a riparian corridor that runs north-south in the western part of the site. It forms the lowest levels of the site topography and links the wetlands to the woodlands character areas.

The spring forms the eastern edge to the Flat Fanns character area and provides biodiversity benefits and an aquatic environment on the doorstep of the neighbourhood.



Eastlands Spring

CASE STUDY: HAM VILLAGE GREEN

The Ham Village Green is nestled within the London Borough of Richmond and provides accessible green space under the ‘Friendly Parks for All’ initiative.

The green itself provides open space for recreation, play equipment, space for fitness classes, a wildflower meadow and waymarked trails for walking and exercise.

The Ham Village Green is supported by a community group who value the green and have adopted stewardship of the space, called the Friends of Ham. They have worked with the council to implement new tree planting, wildlife zones and improved play equipment. It is envisaged that this type of community ownership and dedication to their green space will provide longevity for the Village Green at Dunton Hills Garden Village.



LANDSCAPE TYPOLOGIES - RESPONDING TO EXISTING CHARACTER

Eastlands Spring Corridor

The riparian corridor of the Eastlands Spring will be conserved and enhanced for both biodiversity and public benefits. Where necessary, existing vegetation will be thinned back to allow local communities to interact with the spring. Access will be provided right up to the banks in places to allow a tangible connection with the water.

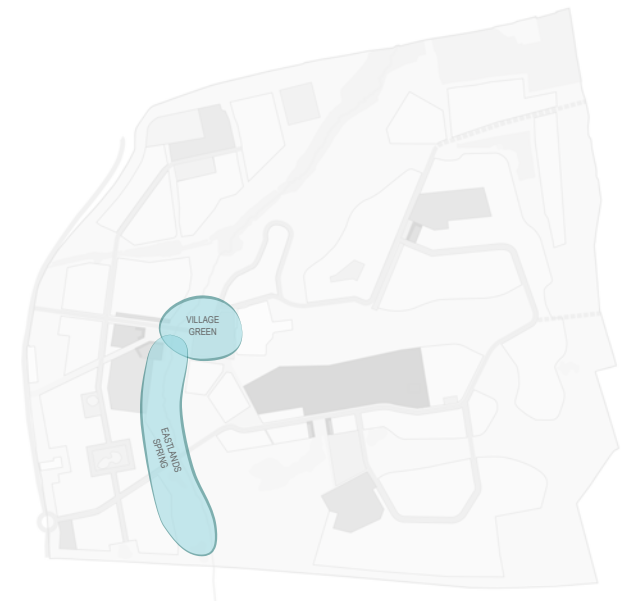
Village Green

The Village Green will form a social space for residents to enjoy and become a space for celebration, village fêtes, leisure, social activity and social congregation.

The Village Green will form a connective space between the Village Centre and the farmstead and will celebrate the retention of long vistas to the farmstead as well as the protection of veteran trees.

The landscaping will be formal to echo the traditional appearance of a village green, with a softer wetland edge to the west.

The riparian corridor of the Eastlands Spring will form the eastern boundary of the Village Green, forming a wetland habitat for both the promotion of biodiversity and education. SuDS elements such as dry basins will also form part of the Village Green, providing a mosaic of habitat types within the heart of the Garden Village.



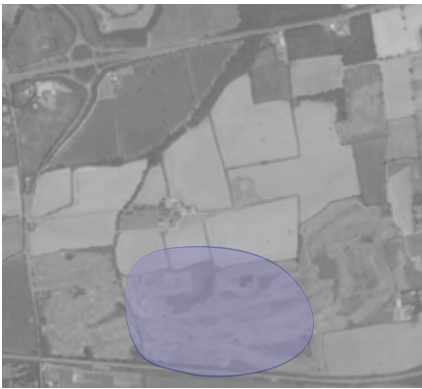
KEY LANDSCAPE OBJECTIVES

- Veteran trees and trees of landscape value along the spring corridor should be retained and protected.
- Some clearing of vegetation should occur along the spring corridor to allow access to the banks of the watercourse.
- Complementary habitats should be integrated adjacent to the Eastlands Spring to promote biodiversity.



An impression of the Eastland Spring character area

THE WETLANDS



EXISTING CHARACTER

The Wetlands character area is located within the central southern part of the site, on the lowest part of the land and adjacent to the Eastlands Spring. It currently comprises a manicured golf course.

The floodplain from the Eastlands Spring covers much of this area, lending the space naturally to be developed as biodiverse and recreational wetland habitat.

There are attractive views across the pond to the farmhouse to the north and the Church of St Mary’s to the east which should be maintained where possible. The natural hydrology, drainage and existing bodies of water found in this area of the landscape form the aquatic assets from which this character area is derived and these features should be enhanced and celebrated through the landscape strategy and masterplanning process.

New ponds for SuDS and biodiversity enhancement will be created, with reed bed and wetland meadow habitat creation forming green infrastructure links for both flora and fauna between the bodies of water.



View looking east across the existing pond toward the ridge line

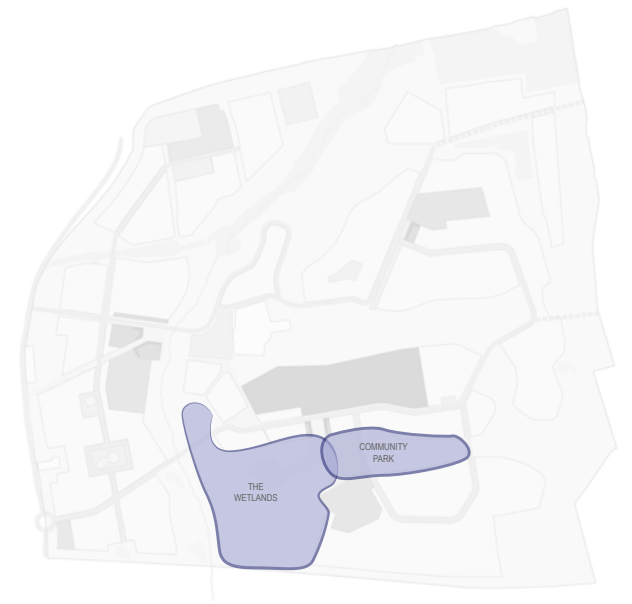
CASE STUDY: WOOD MILLS NATURE RESERVE

Wood Mills Nature Reserve is operated by the Sussex Wildlife Trust. It provides excellent opportunities for outdoor learning and interaction with nature alongside a variety of habitats including streams, ponds and unimproved meadows which attract a range of birds, mammals, insects and amphibians.

The Sussex Wildlife Trust work closely with local volunteers to maintain the reserve and run educational events throughout the year for all age groups.

Through the wetlands character area, a multi-functional green space and key habitat area that strengthens local biodiversity can be created.





The Wetlands

The Wetlands will celebrate water management and riparian habitats, and promote use and access to nature by adopting a 'doorstep' approach between residential uses and open green space. Enhancing the existing ponds and integrating new habitats within the Wetlands will ensure easy access to a range of ecological and conservation environments, promoting understanding, education and enjoyment within the community.

Within the wetlands a variety of SuDS features should be implemented including swales, dry basins and wet ponds. These features should be celebrated and integrated sensitively into the landscape.

New habitats can be formed by enhancing existing ponds and the creation of new ponds, reedbeds, ephemeral water ditches and fen meadows with wet grassland mixes to support the translocation of Great Crested Newts and migrating bird populations.

The Wetlands should be designed with equal regard to biodiversity protection and recreational access for the community, with boardwalks, play spaces, open walkable landscapes, new walking routes and recreation spaces located in suitable areas in order to protect the emerging habitat diversity.

Community Park

An improved and accessible green corridor that runs east-west through the wetlands links the Eastlands Spring corridor to the Ridgeline, and could form a new community park. This space creates a transitional landscape between the low lying land and the higher topography of the ridge, and should incorporate sustainable water management at the surface to promote understanding and interaction with the local hydrology.

KEY LANDSCAPE OBJECTIVES

- Existing ponds should be retained and enhanced.
- Access to certain areas should be limited (through planting strategies) to ensure flora and fauna are protected.
- A variety of new, complimentary habitats should be integrated into the Wetland habitat to promote biodiversity.
- The wetlands should preserve views across the existing pond through to the ridgeline.



An impression of the Wetlands character area

RIDGE



EXISTING CHARACTER

The natural topography that runs through the site forms the Ridge character area. The sloped land forms the boundary between the Fanns Character Areas to the west and the Langdon Hills and Farmland to the east.

The Ridge is characterised by wide open sweeping views across the landscape, that extends westwards towards London in the distance.



The ridgeline

CASE STUDY: DUNSTABLE DOWNS, BEDFORDSHIRE

Dunstable Downs is within the Chilterns Area of Outstanding Natural Beauty and comprises several SSSI's, extensive chalk grasslands and several historic features including Scheduled Ancient Monuments. The walk along the top of the ridge is one of the most popular routes taken by visitors today. Expansive views over the landscape below are celebrated on the ridge walk.

The site is managed by the National Trust and a programme of activities has raised the level of exercise and well-being including a new Health Walk, a kite festival and a weekly fitness group.



CASE STUDY: ORCHARDS EAST

Orchards East is an environmental initiative that takes place across six counties, including Essex. It is funded by the Heritage Lottery with the aim to understand the past, present and future of orchards.

The Leigh-on-Sea Allotments Orchard is a project based on conservation and celebration of Essex varieties of pears and apples. The orchard is surrounded by a native species hedge and as well as the fruit trees, the orchard contains a wildlife pond, composting areas, and allotment space. Today, thanks to the volunteers the orchard now contains all 35 Essex varieties of apple.



Initiatives such as Orchard East can be employed at Dunton Hills Garden Village to engender a sense of ownership for the productive space, and to keep the communities connected with nature of local provenance.

LANDSCAPE TYPOLOGIES - RESPONDING TO EXISTING CHARACTER

The Ridge-line

The Ridge-line will encapsulate the natural undulating topography between the higher Langdon Hills to the east and the lower Fenland to the west. The Ridge-line is an intrinsic part of the site's landscape and will be protected and celebrated.

Key views to the west over the historic farmstead, long vistas west towards London, and views south-east towards heritage features outside of the site boundary, will be maintained and used as resting points that encapsulate these views.

The slopes of the Ridge-line will be managed for biodiversity improvements including scrub and tussocky grassland for invertebrates.

Higher levels of the Ridge-line will form a linear walking route, with landscaped spaces that flow into the neighbourhoods.

Hillside Common

Forming part of the Ridge landscape character area will be a large open common space that links the Ridge-line walk to the eastern boundary. From here views open up to the west towards London, as well as south-east towards Dunton Hall and the Church of St Mary.

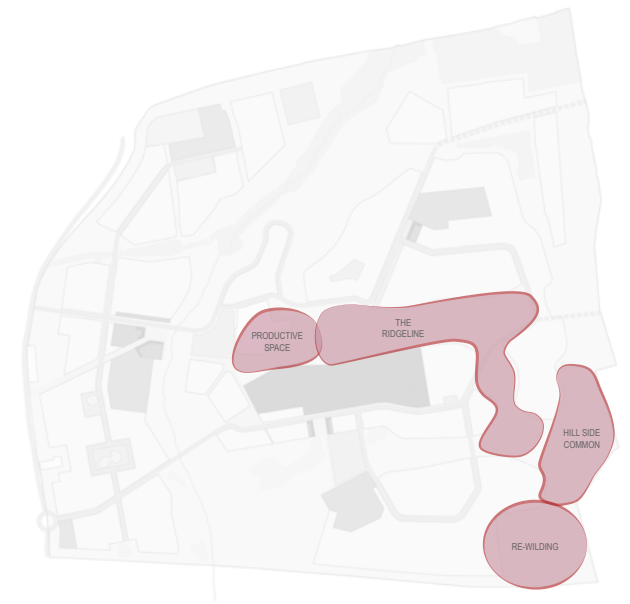
This area will be managed for both recreational benefits and habitat enhancement. This common space will be accessible to all with walking routes, social spaces and play spaces all nestled within pockets of scrub grassland created for invertebrate promotion.

Productive Space

A productive landscape will sit at heart of the Garden Village, associated with the farmstead's history of arable farming. Orchards, beehives, self growing and community growing spaces will be provided, with a focus on species of local provenance such as the Essex Heritage variety apples. The Productive Space will also provide educational and learning benefits, with opportunities for school involvement and educational programmes for the residents to learn about food production.

Re-wilding

Other than a potential link to Church Lane to the east, the south-east corner of the site will provide an area of landscape specifically for habitat creation, only accessible by those charged with its management for biodiversity enhancement. Once established it will be used as an area for education and learning, with school groups having organised visits to the area. Woodlands with glades and rides should be created to form receptor sites for local reptiles.



KEY LANDSCAPE OBJECTIVES

- Landscaped spaces should be created along the Ridge-line walk to connect development parcels with the Ridge.
- The productive landscape should include orchards, bee hives, self-grow and community facilities.
- Open views to heritage features and long vistas should be retained and celebrated.
- The Ridge itself should be managed for both recreation and biodiversity benefits.



An impression of the Ridge character area

WOODLAND



EXISTING CHARACTER

The northern and north-eastern parts of the site are characterised by areas of broadleaved woodland. The ancient woodland follows the historic Nightingale Lane, which leads to the original farmstead, and also connects to Eastlands Spring, whilst an area of new plantation woodland to the east of the Ancient woodland creates a connection both north and south of the A127.



Nightingale Lane running through Ancient Woodland

CASE STUDY: HEARTWOOD FOREST, HERTFORDSHIRE

The Heartwood Forest is managed by the Woodland Trust and comprise 347 hectares of new native woodland and protected ancient woodland on formerly agricultural land.

The Heartwood provides a network of recreational walking routes through the woods, meadows, adjacent to water bodies and grasslands which are clearly marked with artistic route markers.

Volunteering groups from the Woodland Trust and the Hertford Natural History Society are involved with monitoring plant and wildlife populations throughout the Heartwood.



LANDSCAPE TYPOLOGIES - RESPONDING TO EXISTING CHARACTER

Nightingale Woods

The Ancient woodland which runs along the historic Nightingale Lane will be protected by a minimum 15m offset from built development to allow for regeneration, and new planting of an eco-tone buffer on each side. The new broadleaved tree planting will be provided in a variety of stock sizes to create a varied canopy. Enhancements such as a demarcated path edge through the woodland will help prevent damage to the under-storey within the woods, and the installation of a gate at each end will prevent vehicular access.

The Hedges

In the north-western part of the site a number of heritage hedgerows form a pattern of historic field boundaries. These hedgerows will be retained and protected within the Garden Village. The hedges area will help towards providing an open landscape between the development and the boundary of the A127.

The Meadows

The Meadows will be established on the sloping land between the Ancient woodland and the development edge, providing an area of open landscape for recreation, leisure, exercise and biodiversity enhancement.

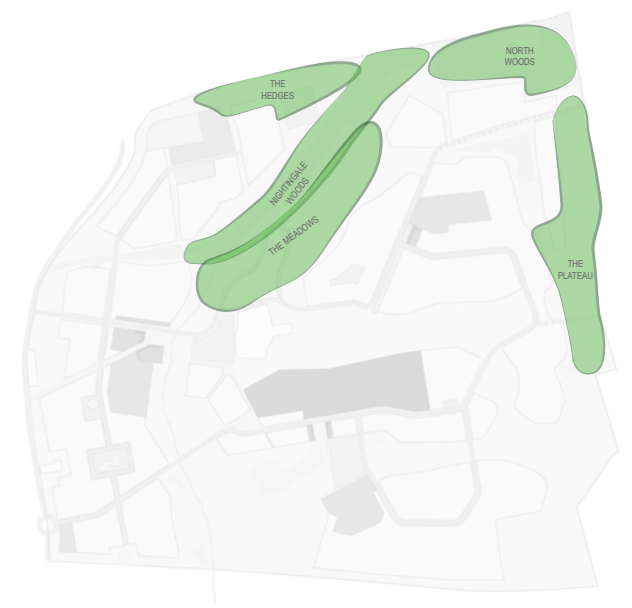
The Meadows will be managed for habitat improvement, as a transitional green space between the existing mature woodland, through scrubby grassland and into meadows. This mosaic of habitats will echo the Langdon Ridge SSSI to the south east of the site.

North Woods and The Plateau

The woods will provide a strong green corner-piece for the Garden Village, connecting to Nightingale Woods. Increasing tree canopy coverage will strengthen the woodland character along the eastern boundary. North Woods will be managed for recreational purposes, such as enhanced walking routes, birdwatching, and social interaction whilst maintaining habitats for the inherent flora and fauna of the area. By focusing recreational activities within the North Woods and Plateau, the Ancient woodland will be further protected from these activities.

The Plateau landscape creates a buffer between the development edge and the greenbelt to the east. Reinforcing the green edge of the Green Belt is vital to establish a strong vegetated buffer of native trees and hedgerows along this edge.

Recreational activities, play, and exercise should be encouraged within the Plateau, through the provision of meandering walking routes, natural play spaces, exercise trails, landscaped social spaces and new pockets of woodland.



KEY LANDSCAPE OBJECTIVES

- Eco-tone buffer to be provided along the edges of the ancient woodland, 15m minimum.
- Recreational landscape to be provided throughout the Woodlands area to include walking and jogging routes, informal play space, landscape restful spaces, exercise routes and open space.
- New trees to be planted extensively to increase canopy cover and embody the woodland character.
- The Green Belt boundary should be clearly and robustly defined with new hedges, hedgerow trees and woodland.



An impression of the Woodland character area

BIODIVERSITY

BIODIVERSITY STRATEGY

Dunton Hills Garden Village is located to the west of the Langdon Ridge Site of Special Scientific Interest (SSSI) and to the south east of Thondon Park SSSI; their designated features provide the rationale for the development of habitats within Dunton Hills.

Proposed Habitats

The habitats within Dunton Hills Garden Village should either be restored or created and should seek to create a similar mosaic as that found at Langdon Ridge SSSI. It should comprise:

- 1. Ancient and long-established woodlands
- 2. Scrub/grasslands
- 3. Lowland meadows
- 4. Open water
- 5. Running water
- 6. Fen meadows
- 7. Traditional orchard

Ancient and long-established woodlands

Broadleaved woodlands within the site must be retained. Eastlands Spring Local Wildlife Site, which is an Ancient woodland, is a woodland of damp soils and dominated by mature ash, whilst smaller areas of woodland on higher ground are drier types and dominated by mature and veteran oaks.

Woodlands should be connected by retained and enhanced and new species-rich hedges, new woodlands and scrub. These should be improved over time by woodland management plans. Other improvements should include increasing the deadwood component within woodlands and the translocation of the rare Deptford pink flower to dry woodland and scrub margins. Deptford pink is a key feature of the nearby Langdon Ridge SSSI.

Scrub/grasslands

Retained and new mosaics of mixed species scrub and meadow grasslands will provide a range of habitats for barn owls, bats, reptiles and great crested newts. Transitional habitats should grade from scrub, to brambles, rose, and tall herbs to grassland meadow. Scrub should be managed to maintain a ‘youthful’ early successional structure and managed by rotational cutting (1-3 years).

The aim of management will be to produce a diverse habitat of varied age and structure to attract a rich variety of species.

Lowland meadows

The opportunity to create species rich neutral grasslands managed as hay meadows will attract key target species including notable species recorded at Langdon Ridge SSSI such as green-winged orchid. These areas include grassland along the southern boundary (rail bank) which is an open herb rich sward (including red clover, knapweed, red bartsia).

Wildflower rich grassland ‘strips’ with areas of bare ground, including scattered scrub will target the Grizzled Skipper butterfly. These areas should be located in sunny, sheltered conditions and contain an abundance of early spring nectar plants. These ‘strips’ should be cut in rotation.

Open water with reeds

The masterplan will retain many existing bodies of water. These retained ponds and their marginal vegetation must have all non-native species removed and the extent of marginal reed-beds maximised.

SuDS basins will be naturalistic and designed with irregular shapes and shelves that allow ‘draw down’ conditions.

Running water

The Eastlands Spring will be retained along with its boundary woodlands. The stream will be buffered with complementary habitats such as grasslands, ponds and scrub and some sections of trees will be pollarded to allow light to penetrate the stream.

Debris will be allowed to gather in the stream to create a variety of conditions such as slow moving, deepwater pools and faster moving ‘runs’ and riffles.

Fen meadows

The southern part of the masterplan establishes a fen meadow and rush pastures as part of the wetlands character area. Areas that are naturally drier will be oversown with a wildflower mix. This should include areas of scrub, longer grass, and shorter grass mosaics. Management of water levels and landform creation will be crucial to the wetness and thus the habitat composition.

Some cutting of rush pastures may be required and drier areas should be managed by rotational cutting. This habitat type will target invertebrates and reptiles such as grass snake. Ponds within the habitat mosaic will provide the environment for the translocation of great crested newts. Log piles and turfed log piles will enhance this habitat area for reptiles and amphibians.

Hedgerows

Species rich native species hedges should be retained and new ones created to provide linear green corridors across the site.

Some retained hedges should be maintained by regular hedge laying, with infill and new planting using a palette of native species. These hedgerows will be of particular attraction to farmland birds such as the Yellowhammer.

Essex orchard

Within the productive landscape there is an opportunity to establish a traditional orchard with species of local provenance to Essex; this will create a destination for recreation as well as a rich wildlife habitat.

For orchard biodiversity to flourish a variety of trees of varying age will be required. Some veteran trees should be encouraged through management with features such as hollow trunks, rot holes, split bark, tears, and sap runs relatively quickly. Because of the wide tree spacing in orchards compared to woodland, the dead and decaying wood should be located within open, sunny locations; these conditions create a good habitat for rare and notable insects and other invertebrate species which depend on deadwood. The orchard grasslands should also be flower rich and hence important for a different range of invertebrates.



Scrub grassland



Deptford Pink in the woodland



Fen meadows



KEY BIODIVERSITY OBJECTIVES

- Application of the mitigation hierarchy to deliver landscape- ecological networks by creating, enhancing, complementing and interconnecting the site's habitats. The Village will provide an invaluable building block of integrated habitats which are both coherent and resilient.
- The Village's ecological network will provide a similar mosaic of habitats to that found at Thorndon Park and in particular Langdon Ridge SSSI. Designated features will provide an important rationale to the development of habitats within the Village along with targeted mitigation and enhancement for a number of protected and notable species.
- Aspirational target of 20% Biodiversity Net Gain (BNG) through the provision and recovery of Habitats of Principle Importance to UK Biodiversity (priority habitats). Creation of a BNG 'legacy' through provision of mechanisms to enable management and maintenance of habitats.
- Provision of ecosystem services through the creation of a wildlife-rich landscape both within the built realm and semi-natural landscape. The Village will provide different levels of interactions between the public and wildlife to enable biodiversity to flourish whilst also reconnecting people to the natural world.

PLAY

PLAY AND RECREATION

A range of sport and recreational opportunities will be provided for, including the provision of playing fields and sports pitches, play areas in the form of LEAPs (Locally Equipped Areas of Play) and NEAPs (Neighbourhood Equipped Areas of Play), and amenity grassland for non-prescriptive play.

The creation of a suite of complimentary play spaces will ensure there is close access for all residents living at Dunton Hills Garden Village, and that these create multifunctional spaces for a variety of ages and abilities.

Children’s play spaces will incorporate a range of natural and imaginative provision, aligned with more traditional prescriptive play preparations. Provision of play and social spaces for youth should be aligned with both sports activities and community cultural facilities with the potential to create sporting events throughout the year, both indoor and outdoor activities, as well as connecting play space with community buildings and areas of public open space.

All areas of play will be sensitively integrated into the landscape using planting and vegetated buffers to create enclosures coordinated with the character areas in which they sit.

Locally Equipped Areas of Play (LEAP)

The function of a LEAP is to provide stimulating and challenging play experiences for children with a minimum of six individual play elements. The LEAPS should be sited within a five minute walking distance of dwellings and distributed across the masterplan to ensure the catchment area covers the development parcels.

Play features will include equipment and space should be provided for physical activity and informal games. The recommended space provision for a LEAP is 400m² with a 10m buffer between the play space and the nearest residence.

LEAPS will be themed to the landscape character areas that they sit within, for example the play spaces within the Fanns landscape character may retain a flat landscape, whilst the play spaces within the Ridge character area could include landscaped mounding to provide height.

Neighbourhood Equipped Areas of Play (NEAP) and Multi Use Games Area (MUGA)

The function of a NEAP is to provide play space primarily for older children with some provision for younger play too. NEAPs should be sited within a fifteen minute walking distance of dwellings; two spaces for the provision of NEAPs will be located within the masterplan.

Play opportunities within a NEAP should include sport and informal balls games, and an area of hard-standing will be provided. NEAPs can be located adjacent to MUGAs to provide a range of play and sports facilities. The recommended space provision for a NEAP is 1000m² with a hard-surfaced area of a 465m² minimum. A buffer zone of 30m from the nearest dwelling will be provided.

NEAPs will be themed to the character area they sit within. For example, aquatic play could be explored within the wetlands character area.

Sports

A range of sports facilities will be provided within the Garden Village. A sports hub with pitches, a sports hall and a multi-use games area is centrally located, and within the secondary school. Pitches should support both rugby and football and potentially accommodated by a summer athletics track.

In the north of the development a series of football pitches will provide further sports facilities, whilst in the south, a cricket pitch will be located close to the southern neighbourhood centre.

Healthy Living

Supporting the formal play areas and sports facilities will be a variety of exercise elements and features to promote a healthy lifestyle. Parks and open spaces will house activity trails, trim trails and cycle routes which will flow through the landscape connecting the neighbourhoods. Informal kick about spaces should also be provided adjacent to play areas.

A proposed wellness trail is illustrated on page 112.

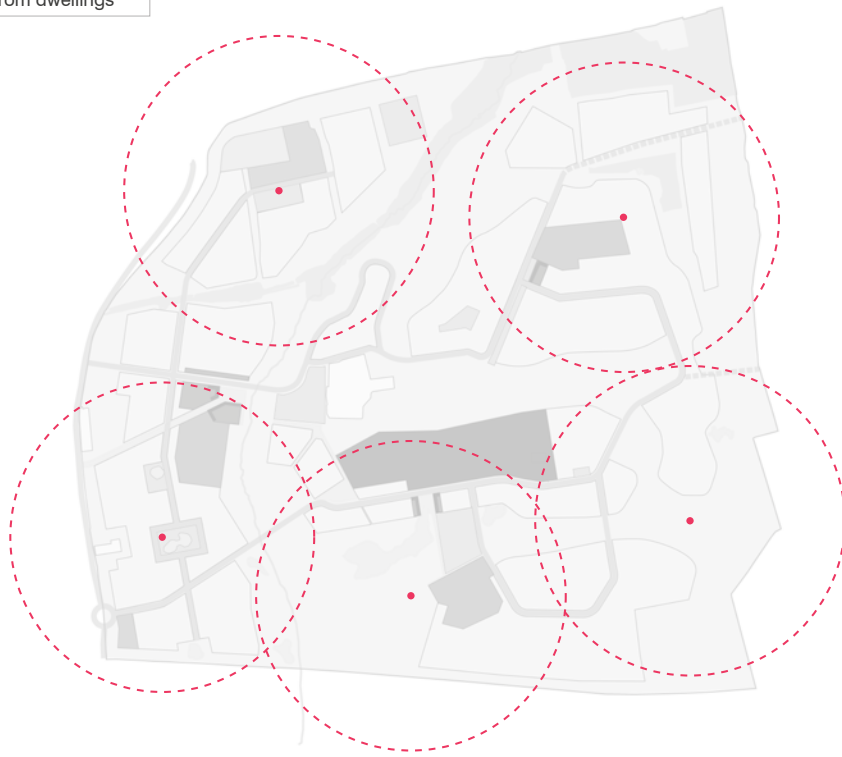
NEAP CASE STUDY: ONSLOW PLAY AREA, GUILDFORD

Designed to include nature, Onslow has more natural elements than most playgrounds, with boulders, soft surfaces, sand, tree stumps and hornbeam hedges. It reflects its location adjacent to the Onslow arboretum, with brown paths where the roots would be, and a grass maze where the canopy would be. The signage is made from hardwood timber and engraved with tree leaves from native trees. These natural features help children learn about the nature around them. Designed to enhance its setting, there is no fencing around the play area. Timber posts and sections of hornbeam hedges form entrances, but the majority of the play area is open to the playing fields and tree and hedgerows that surround it. By spreading into the surrounding areas, the play area provides further space for exploration and opportunities for imaginative play.



KEY

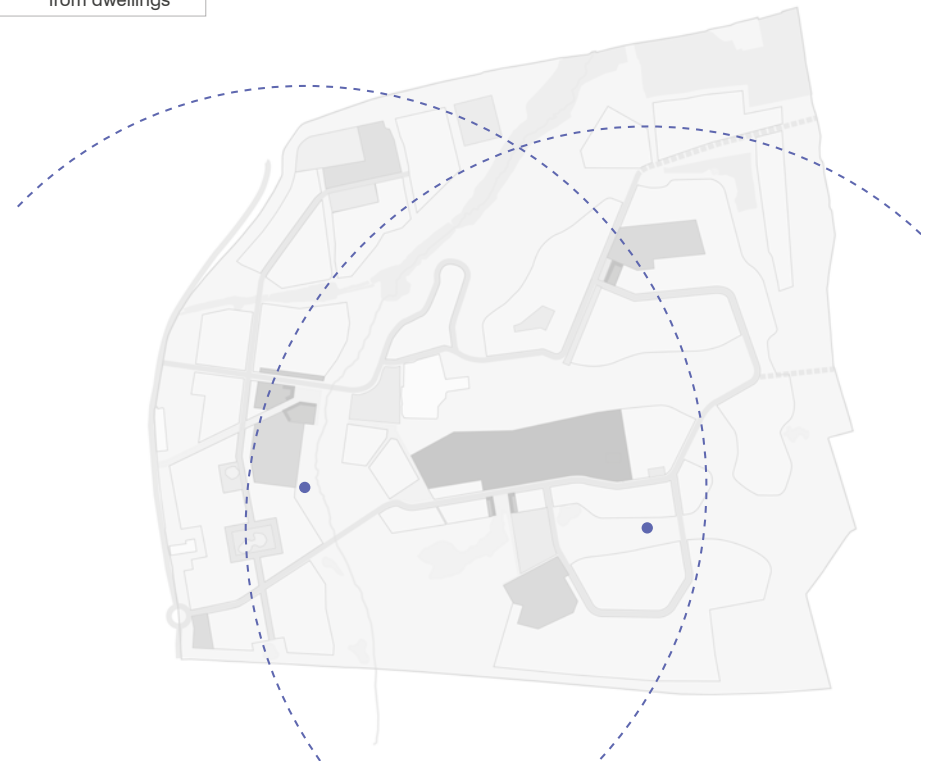
LEAPs - 400m
from dwellings



LEAPs

KEY

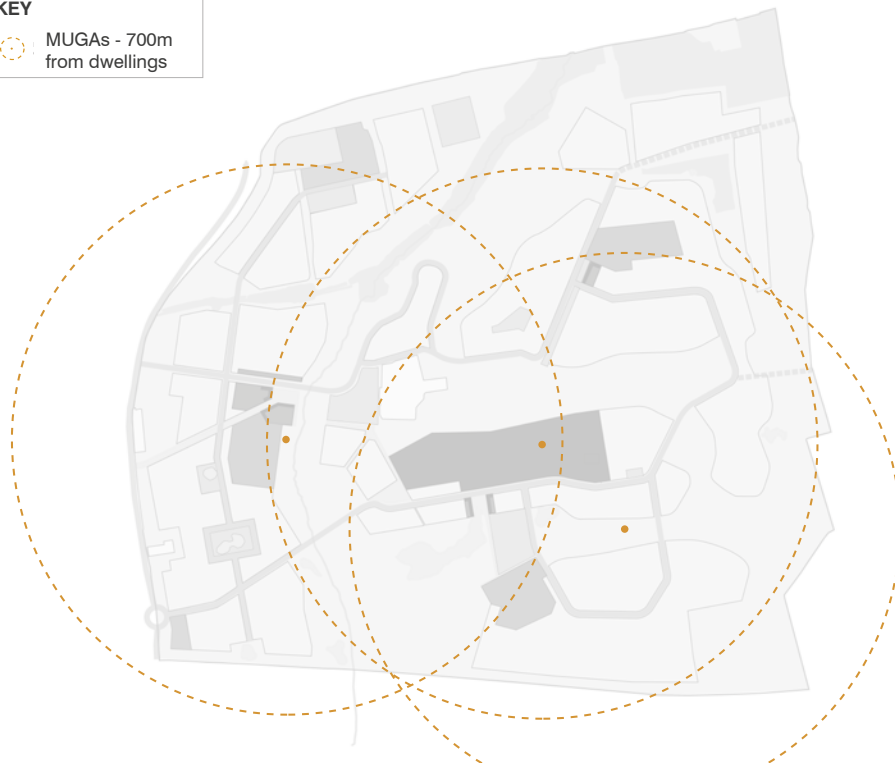
NEAPs - 1000m
from dwellings



NEAPs

KEY

MUGAs - 700m
from dwellings



MUGAs

KEY

Community
sports facilities
School sports
facilities (no
public access)
Cricket pitch
Football pitches



SPORTS

LEAP CASE STUDY: BRICKHILL, BEDFORD

Brickhill in Bedford, a large scale residential scheme, included the creation of a variety of play spaces ranging from doorstep play for toddlers to LEAPs and NEAPs.

Natural elements and undulating landscape levels were combined to create imaginative play spaces, and equipped areas of adventure play space were also provided.

All play spaces included seating areas for supervision and were located adjacent to pathways. The LEAP was sensitively designed to include timber play elements that were sympathetic to the local vernacular.



“

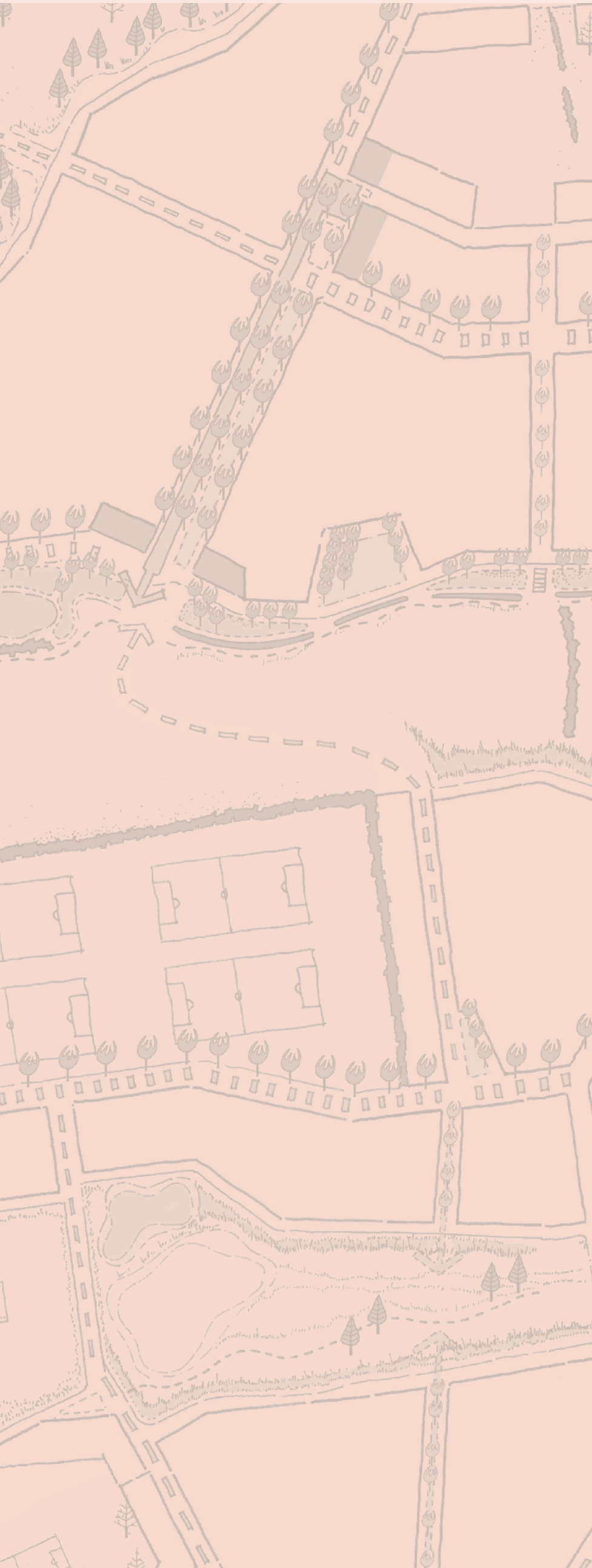
SET WITHIN THE WONDERFUL GREEN AND BLUE LANDSCAPE FRAMEWORK, THE GARDEN VILLAGE WILL BE A VIBRANT, SELF-SUSTAINING AND CHARACTERFUL PLACE WITH A STRONG SENSE OF IDENTITY.

THREE UNIQUE AND INTEGRATED LANDSCAPE LED NEIGHBOURHOODS WILL BE CREATED, EACH ANCHORED BY A PRIMARY SCHOOL, SMALL SCALE LOCAL FACILITIES AND EMPLOYMENT OPPORTUNITIES, ALL WITHIN A SHORT WALK. THE HEARTBEAT OF THE GARDEN VILLAGE WILL BE THE VILLAGE CENTRE, LOCATED TO MAXIMISE ITS: ACCESSIBILITY TO THE WHOLE VILLAGE; DIRECT CONNECTIONS VIA A MOBILITY CORRIDOR TO WEST HORNDON STATION; AND ITS RELATIONSHIP TO DUNTON HILLS FARMSTEAD, THUS CELEBRATING THE SITE'S PAST. THE VILLAGE CENTRE WILL BE FOCUSED AROUND A MARKET SQUARE AND A VILLAGE GREEN, CREATING WONDERFUL SPACES FOR COMMUNITY EVENTS AND INTERACTION. AN EMPLOYMENT AREA IN THE NORTH OF THE VILLAGE WILL OFFER GROWTH OPPORTUNITIES FOR LOCAL BUSINESSES WITHIN THE VILLAGE AND BEYOND.

THE MASTERPLAN WILL BE DESIGNED AROUND KEY ROUTES, VISTAS AND SPACES, ENSURING A LEGIBLE STRUCTURE, STRONG IDENTITY AND THE PROTECTION OF IMPORTANT VIEWS. THE GARDEN VILLAGE WILL BE VARIED IN ITS BUILT FORM WITH DENSITIES AND HEIGHTS GRADUATING FROM A DENSER WESTERN EDGE AND VILLAGE CENTRE TO THE MORE RURAL EDGES IN THE EAST. THE THREE NEIGHBOURHOODS OFFER THE CHANCE TO CREATE VARYING ARCHITECTURAL CHARACTER WITHIN THE OVERALL LANDSCAPE CHARACTER THEMES ESTABLISHED.

”

MASTERPLAN VISION



CHAPTER 5

FRAMEWORK MASTERPLAN

This chapter shows the indicative masterplan proposals and provides Mandatory Spatial Principles for the development of the site and the key strategies that underpin this design approach. The key objective is to meet the needs of all its users by creating a vibrant community that celebrates its unique heritage and landscape setting.



MANDATORY SPATIAL PRINCIPLES AND ADVISORY GUIDELINES

This document establishes two levels of the masterplan: a Framework Masterplan that sets out mandatory spatial principles and an Illustrative Masterplan that provides further neighbourhood guidance.

UNDERSTANDING THE HIERARCHY

A clear vision has been established for Dunton Hills Garden Village by the design team and Brentwood Borough Council with support from stakeholders and Design South East through a formal review process.

To ensure this vision is realised a series of Mandatory Spatial Principles have been established, and is the focus of this chapter. A further set of Advisory Neighbourhood Guidelines can then set out in Appendix 2 of this document.

MANDATORY SPATIAL PRINCIPLES

The Mandatory Spatial Principles relate to landscape and heritage as well as spatial layout and built form. The Mandatory Spatial Principles reflect critical outcomes from the Design Review process undertaken with Design South East and establish a robust Framework Masterplan whilst allowing sufficient flexibility for future detailed designs to emerge. The Mandatory Spatial Principles will ensure that a series of unique and high quality new neighbourhoods are developed, which are reflective of their setting within the overall Garden Village.

ADVISORY SPATIAL GUIDELINES

The Advisory Guidelines are intended to give further understanding and validity to the Mandatory Spatial Principles and are located within Appendix A2 of this document. The Advisory Guidelines set out broad illustrative sub-character areas within each neighbourhood for future design teams to consider. The Advisory Guidelines consider urban form and landscape as well as focal spaces and some illustrative test fits. It is hoped that the Advisory Guidelines will assists in stimulating a well considered and appropriate design response.

A STARTING POINT FOR BRENTWOOD BOROUGH COUNCIL’S SUPPLEMENTARY PLANNING DOCUMENT

The intention of the principles is to provide a framework for the evolution of Brentwood Borough Council’s Supplementary Planning Document (SPD) as well as detailed design as proposals emerge. The guidelines ensure that a coherent masterplan comes forward which is firmly grounded in the wide range of matters which have been explored in this document.

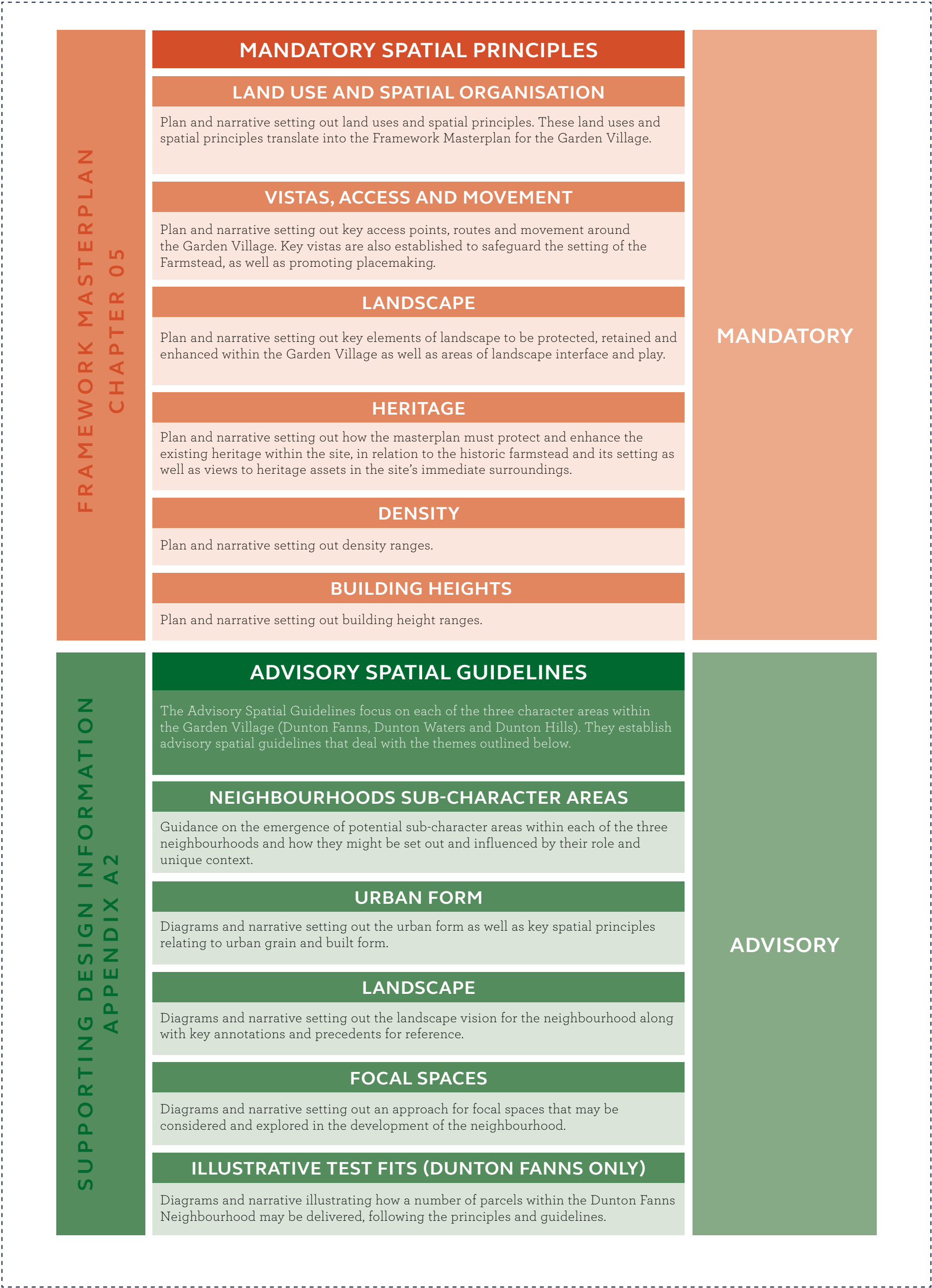
MANDATORY SPATIAL PRINCIPLES (CHAPTER 5)



ADVISORY SPATIAL GUIDELINES (APPENDIX A2)



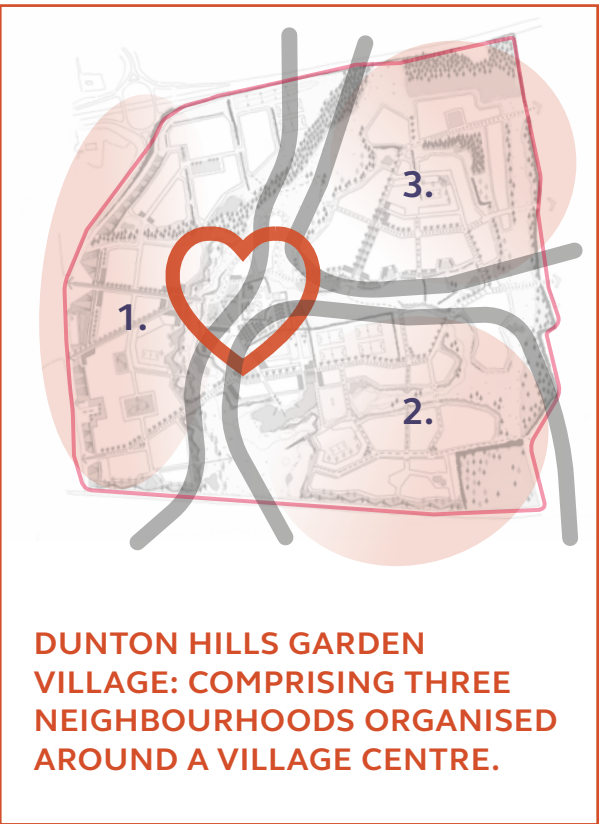
STRUCTURE AND RELATIONSHIP BETWEEN THE OVERARCHING PRINCIPLES
IN THIS CHAPTER AND THE MANDATORY GUIDELINES WITHIN THE APPENDIX:



LAND USE AND SPATIAL ORGANISATION

The Framework Masterplan

The Framework Masterplan sets out the land uses and spatial organisation of the Garden Village.



Land Use	Total Ha (approximate)
Residential	93.60
Mixed Use	1.41
Secondary/All Through School	7.91
Primary School	6.36
Employment Hub	3.19
Gypsy and traveller Site	0.38
Informal Open Space	124
Formal Open Space	3.11
Sports Pitches	2.58
Access	12.40

NEW HOMES

Dunton Hills Garden Village will provide up to 4,000 new homes across three neighbourhoods that will have their own character but will be integrated into a coherent village. New homes will comprise a range of residential typologies and tenures, delivered over a net developable area of approximately 126 ha.

The average density of the Garden Village will be approximately 40 dwellings per hectare (dph) although the majority of the village will be lower at approximately 37 dph, with a number of strategically located apartment and mixed-use parcels with higher densities.

The majority of apartments will be located within the Village Centre, around the Market Square as well as along the Mobility Corridor connecting Station Road with the Market Square. It is envisaged that some apartment buildings will be sited along the western edge of the village, forming a formal frontage to the A128. Some apartment buildings will also be provided within the two Neighbourhood Hubs, both in north east and the southern neighbourhoods. Additional apartment buildings will also be positioned at strategic locations within each neighbourhood throughout the Garden Village to assist legibility.

Three care homes or similar uses could form part of the Village Centre or Neighbourhood Hubs. Provision will also be made for a gypsy and travellers site.

NON-RESIDENTIAL USES

A Village Centre is proposed at the heart of Dunton Hills around a new Market Square. It is envisaged that this square will be framed by both apartments with non-residential uses (such as retail) at ground floor level as well as stand alone community buildings.

RETAIL/FOOD AND DRINK

As stated above, retail facilities will be located within the Village Centre. The two Neighbourhood Hubs will also contain retail. The retail offer could comprise a supermarket, convenience stores, professional services, pubs, takeaways, restaurants and cafés.

COMMUNITY

Community uses that are envisaged for the Garden Village include, a health centre, dentist, gym and a variety of sport pitches and equipped play areas for children alongside accessible open space. The range of facilities available will promote healthy lifestyles and ensure that everyday needs can be met within the site.

EDUCATION

There is potential to provide up to three primary schools and a secondary/all through school within the Garden Village. These will be in walkable locations at the heart of each neighbourhood and close to retail and community facilities promoting a synergy of uses. Most of the schools will also lie adjacent to open green space. As part of the Village Centre and the other Neighbourhood Hubs, private nurseries or crèches will be proposed.

EMPLOYMENT

The employment offer will comprise a mixture of office and workshop spaces provided in the Village Centre as well as an Employment Hub (in the north-east along the A127). This will provide jobs in an accessible location, creating the space for local businesses to grow in an innovative and supportive business environment. The Neighbourhood Hubs should also support employment.

MOBILITY

A Mobility Corridor links the Village Centre to Station Road creating a high quality pedestrian, cycling and public transport corridor toward West Horndon Station. A further key route is established between the A128 and the Villager Centre. At the heart of the Village Centre is the Mobility Hub (see later in this report). The neighbourhoods are also connected by a strong network of walking and cycle routes.

LAND USE AND SPATIAL ORGANISATION



KEY

	Routes - mandatory alignment		Residential		Education		Gypsy and traveller site		Informal Open Space
	Routes - flexible alignment		Mixed-use		Employment		Formal Open Space		

MANDATORY SPATIAL PRINCIPLES - LAND USE AND SPATIAL ORGANISATION

- 01 Location and arrangement of the Market Square** - will be positioned at the heart of the Garden Village and on the eastern edge of Dunton Fanns, facing the proposed Village Green and the historic farmstead. The Market Square will be designed to a suitable size to support the quantum of non-residential uses intended and will be enclosed by taller buildings with employment, retail and community uses activating the public realm.
- 02 Definition of the Village Green** - will provide a setting for the historic farmstead as well as a key communal open space for residents in which to interact and relax. The Village Green will be visible from the Market Square, across the landscape associated with the Eastlands Spring. The existing farmstead driveway will be retained and will become an important pedestrian route to Dunton Waters.
- 03 Location of Dunton Fanns Primary School** - will be a central component of the Dunton Fann's community and will have frontage onto the proposed Mobility Corridor to promote sustainable travel.
- 04 Secondary School** - will be visible from the wetlands along an east-west route connecting Dunton Fanns with Dunton Waters. The school building will front onto a lane and frame an arrival 'Schoolyard Square', comprising a car free setting.
- 05 Location and arrangement of a Neighbourhood Hub for Dunton Waters** - will be focused around a south facing lakefront plaza with views of the proposed cricket pitch and Dunton Waters Primary School, framed by buildings and activated by non-residential ground floor uses. The community element of the Secondary School will frame the northern edge of the plaza.
- 06 Location and arrangement of Dunton Waters Primary School** - will be focused on the threshold of the wetlands landscape, maximising opportunities for outdoor learning whilst being visible from the lakefront plaza.
- 07 Location and arrangement of the co-located Dunton Woods Neighbourhood Hub and Primary School** - will be the central component of Dunton Woods, centred around a plaza at the northern end of a linear park which will form a view corridor to Dunton Waters. The plaza will be framed by taller buildings with non-residential ground floor uses.
- 08 Location and arrangement of sports pitches and community Sports Hub** - will be provided within the Secondary School parcel allowing both students and residents to make use of the facilities. The pitches will support a range of sports, forming a hub for community activity and for social and competitive recreation. Other sports facilities include the cricket pitch and football pitches.
- 09 Location of employment land** - will be in close proximity to the employment site proposed to the west of the A128. Employment land uses will be supported by a nursery and will adjoin open space, accessible for both workers and residents. Buildings will be positioned in an east-west orientation to establish a noise barrier against the A127.
- 10 Location of Gypsy traveller site** - will be positioned to allow for direct access from the A128 and with an interface with the proposed landscape edge. The site will allow for 5 pitches in line with policy, with the final configuration to be determined upon consultation with potential occupants.

VISTAS, ACCESS AND MOVEMENT

Sustainable travel is prioritised throughout the Garden Village with dedicated pedestrian and cycle routes as well as a Mobility Corridor providing an efficient link to West Horndon.



OVERALL MOBILITY STRATEGY

A further explanation of the Mobility Strategy is set out in Chapter 6. Their chapter(s) cover the spatial implications of the movement strategy within the Garden Village.

ACCESS

A new Mobility Corridor will be provided linking the Village Centre to the A128 and onwards to Station Road. This will accommodate pedestrian, cyclists and buses only.

In the early phases, all mode connections will be provided from the A128 to the north and south of the Mobility Corridor. It is envisaged that additional eastern connections towards Basildon will be provided in later phases, albeit subject to approval of others.

MOVEMENT

Internal movement is aligned to a clear hierarchy of streets, providing efficient links within the Garden Village and ensuring permeability. Pedestrian and cycle movement will be prioritised to encourage active transport, with new routes linking with the existing PROW network and providing connections into the surrounding countryside.

BUS ROUTE

The proposed bus route will connect key community facilities within the Garden Village and provide connections between the site, West Horndon Railway Station and places such as Brentwood. Bus stops will be situated to provide maximum accessibility to residents. In addition to the 'loop' bus route, a second route could potentially connect into the north east portion of the Garden Village and through into Basildon.

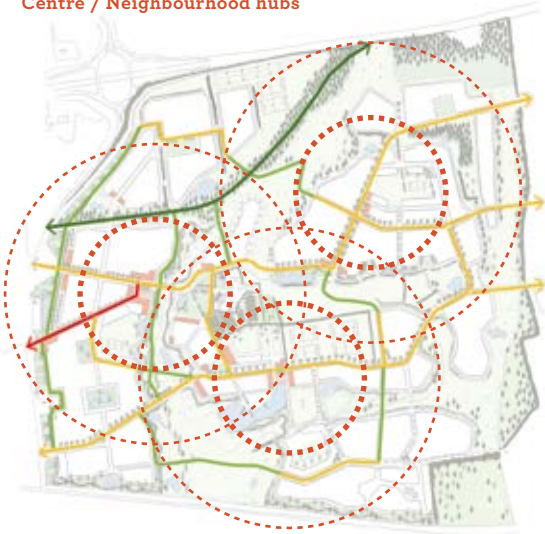
PROMOTING HEALTH AND RELAXATION

The wellness trail will link a number of key destinations within the Garden Village along direct and safe, pedestrian and cycle friendly routes designed for all residents including children. Key nodes along this route include the Village Centre, the northern Employment Hub, the two Neighbourhood Hubs and the schools.

Large parts of this route will be through the landscape including the ancient woodland, the ridge-line, and the linear corridor along the Eastlands Spring.

As well as providing sustainable and high quality connections, this route will include trim trails for outdoor exercise and interpretation boards.

Walking times to/from Village Centre / Neighbourhood hubs



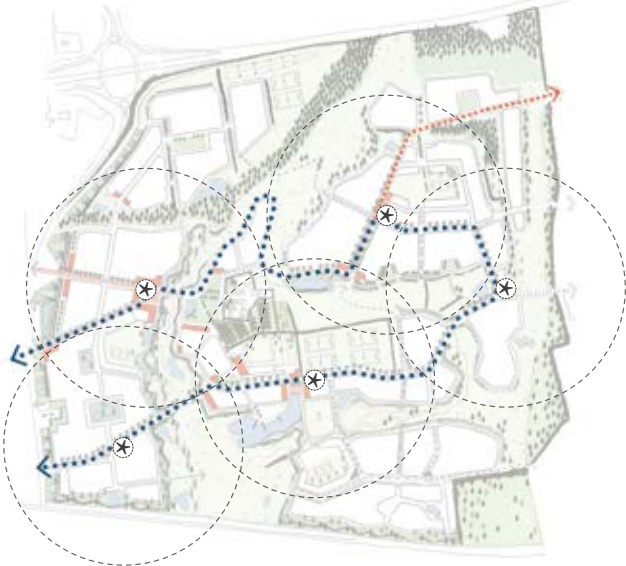
- KEY
- 500m or 6 minute walking catchment
 - 1,000m or 12 minute walking catchment

Sustainable transport routes



- KEY
- Pedestrian and cycle car free route
 - Pedestrian and cycle route along street
 - Bus, pedestrian and cycle route (dedicated)
 - Existing PROW

Proposed bus routes







- KEY
- Bus route
 - Potential future bus route
 - Bus stop and 400m catchment

VISTAS, ACCESS AND MOVEMENT



KEY

- | | | | |
|---|------------------------------|---|---|
|  | Routes - mandatory alignment |  | Routes - flexible landscape connections |
|  | Routes - flexible alignment |  | Indicative marker buildings |

MANDATORY SPATIAL PRINCIPLES - VISTAS, ACCESS AND MOVEMENT

- 01 Farmstead Avenue and View Corridor** - will preserve a direct visual relationship between the A128 and the Grade II listed farmhouse. This is one of many masterplanning approaches that ensures the historic farmstead becomes a focal point within the Garden Village.
- 02 Mobility Corridor (Station Road extension)** - will be the main access point to the village, accommodating pedestrians, cyclists and public transport. The Mobility Corridor will extend into the village along the alignment of Station Road, with a direct pedestrian and cycle crossing over the A128. This will facilitate and promote sustainable travel to the Market Square at the Village Centre which will include the Mobility Hub.
- 03 Mobility route along the western edge** - will be incorporated into the landscape, facilitating safe and sustainable travel (for cyclists and pedestrians) north-south along the A128, but respecting the setting of the retained dwellings.
- 04 Secondary School approach and landmark** - a direct route and view corridor will be established from the Secondary School building to the wetlands, ensuring its prominence as a landmark within the wider Garden Village, as well as promoting wayfinding.
- 05 Schoolyard Square** - will be established in front of the Secondary School building, at the end of the proposed School Lane. The square will form a car free and landscaped gathering space for children and parents before and after school, as well as allowing for the retention of existing historic trees.
- 06 School Lane** - a key pedestrian and cycling priority route will be established, connecting the Village Green and Secondary School with the wetland. The lane will run past the community orchard on one side and be fronted and activated by new homes on the other.
- 07 Potential future connections east towards Basildon** - will be safeguarded into the layout of the masterplan to allow for future expansion and connectivity.
- 08 Dunton Woods viewing corridor** - will establish a visual relationship between the Neighbourhood Hubs of Dunton Woods and Dunton Waters, promoting a sense of community cohesion within the overall Garden Village.
- 09 Wellness trail** - a pedestrian and cycling only trail will be provided within the landscape, promoting a healthy lifestyle within the Garden Village. The trail will connect the facilities provided within the Market Square and Village Green within Dunton Fanns to the other Neighbourhood Hubs and Schools.
- 10 Nodes at intersections** - the point at where two or more routes intersect will inform the location of Neighbourhood Hubs and associated non-residential uses.
- 11 Marker buildings (throughout masterplan)** - will be used to define key routes, vistas and places, promote placemaking and wayfinding within the neighbourhoods or landscape setting. Marker buildings shall be distinguished from other buildings through either architectural treatment, height or positioning within a prospective layout.
- 12 Inter-neighbourhood connectivity (throughout masterplan)** - in conjunction with the wellness trail, pedestrian and cycle connections will be established to ensure a high degree of connectivity between the three neighbourhoods, further promoting safe and sustainable travel.

LANDSCAPE

The green and blue infrastructure creates a robust platform for the creation of habitats, social interaction, exercise and recreation, and biodiversity gain.

GREEN AND BLUE FRAMEWORK

The core vision for Dunton Hills Garden Village is to have three neighbourhoods all with community facilities at their heart, within a short walking/cycling distance of their residents.

These neighbourhoods will be connected through the multi-functional green and blue infrastructure which weaves its way through the site and maximises the site’s wonderful assets including the ridge, Eastlands Spring and the woodland watercourse corridor. The site has a varied and dynamic existing green and blue infrastructure network, and the landscape vision seeks to enhance and celebrate these assets.

The Mandatory Spatial Principles in this section are broken down into landscape areas and landscape interfaces.



Eco-tone tree planting to protect the Ancient woodland edge



Recreation routes through wetlands

MANDATORY SPATIAL PRINCIPLES - LANDSCAPE AREAS

- 01

Productive landscape - will be located south of the farmstead in the site of a former orchard. The productive landscape has the potential to include orchard tree species and varieties of local provenance and will become a focal point of the community.
- 02

Ancient woodland - will be protected and conserved with a 15m eco-tone buffer of native woodland along its boundary to provide a structured edge and enhance the wooded character.
- 03

Eastlands Spring - will be preserved as a distinctive feature, defining the transition from the Fanns neighbourhood to the wetlands. Accessible in parts for play and learning whilst also providing for biodiversity.
- 04

The Ridge - will remain open in character and retained as a key feature of the site as set out by the masterplan drivers, separating Dunton Woods from Dunton Waters. The ridge will be managed to provide for both biodiversity as well as recreation.
- 05

Ridge-line route - will be provided along the top of the ridge, with restful landscaped spaces where views across to the North Downs and towards London can be enjoyed. Tree planting will ensure a wooded skyline balances new homes along the ridge-line.
- 06

Dunton Waters water management - rain gardens and swales will be used within Dunton Waters to celebrate water management within the public realm, managing the transition of surface water from higher ground to the east, to the lower wetlands areas in the west.
- 07

Existing landscape features to be retained - historic hedges, trees and waterbodies will be retained where possible, ensuring that the Garden Village responds to its setting and is delivered within the landscape and not imposed on it.
- 08

Woodland - will be retained for recreational benefits as well as enhancing the woodland character existing in this part of the site, wrapping around the homes within Dunton Woods.
- 09

Wetland landscape - will provide for biodiversity gain and recreation. Wetland area to provide habitat for aquatic and migratory birds and great crested newts translocation. Recreational routes through wetland to be defined to allow access without disturbing wildlife.
- 10

Play spaces (throughout masterplan) - will be sensitively incorporated and distributed within the wider landscape as well as within the neighbourhoods. Play spaces will be safe and both formal and informal, and provide for a range of ages and abilities.
- 11

Noise barrier - will be established against the A127 and A128 within the north east corner of the site. This barrier will be sensitively integrated into the landscape with tree and shrub planting.
- 12

SuDS (throughout masterplan) - will be sensitively integrated into the landscape, working with existing hydrology and topography.
- 13

Habitat creation and management - for the promotion of biodiversity should be explored at every opportunity. Refer to pages 76-77 for the biodiversity strategy for Dunton Hills Garden Village.

LANDSCAPE AREAS AND INTERFACE

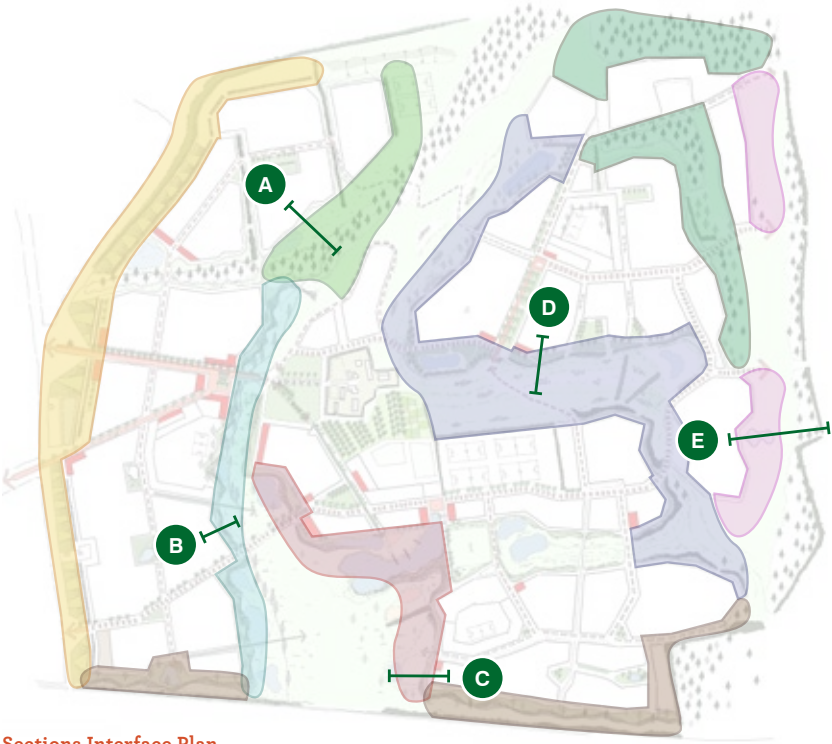


KEY

A Dunton Fanns interface	C Eastlands Spring interface	E Ridge interface	G Eastern boundary/green belt interface
B Ancient woodland interface	D Wetlands interface	F Woodlands interface	H Wildlife corridor interface

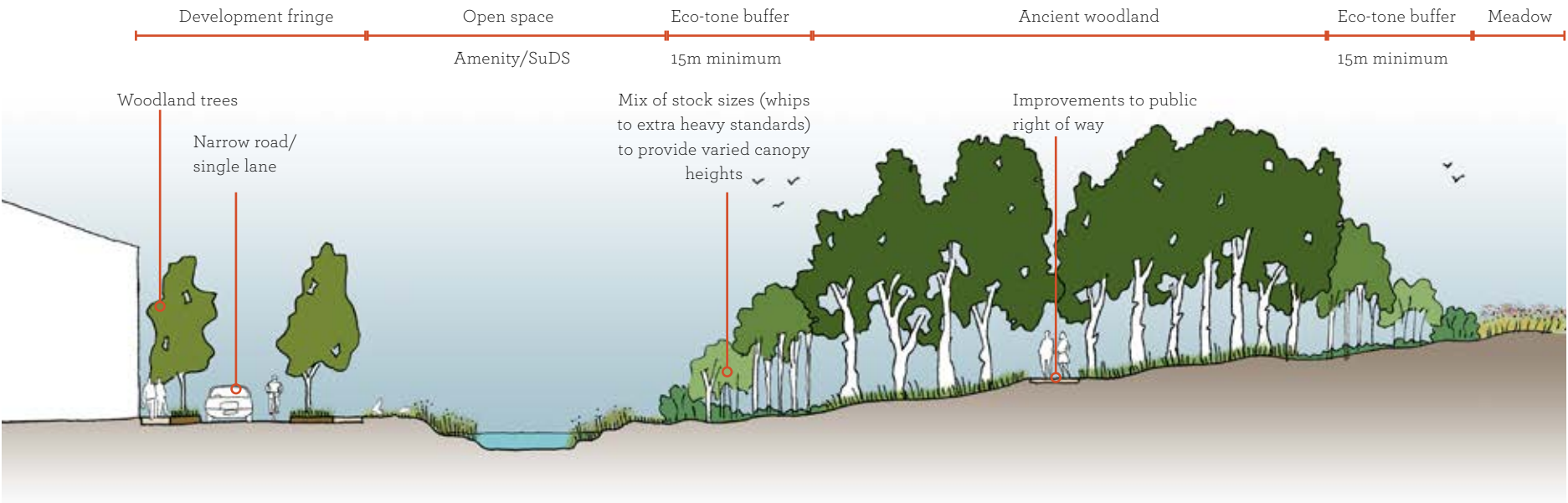
MANDATORY SPATIAL PRINCIPLES - LANDSCAPE INTERFACES

- A Dunton Fanns interface** - will be formal in character, and with the proposed built form, will announce the address of the Garden Village along the Tilbury Road (A128). The landscape will incorporate recreational open space embodying the Fanns character within an approximate 30m set back from the A128.
- B Ancient woodland interface** - will have a wooded character with native deciduous street trees. New homes will be offset approximately 50m from ancient woodland. Within this offset, an eco-tone buffer of native woodland will be implemented, providing a structured edge enhancing the woodland character. The development fringes will consider sensitive lighting designs to preserve dark corridors.
- C Eastlands Spring interface** - the edge of the neighbourhood will be lined with trees native to the Fanns landscape, alongside a narrow lane. Formal areas of recreational space will be provided along the western edge of the spring, amongst retained and enhanced vegetation, providing both a visual and physical transition to spring edge. The eastern side of the spring will have an informal wetland character.
- D Wetlands interface** - will be characterised by a robust and substantive vegetated boundary along development fringe with a narrow lane lined by rain gardens and hydrophilic trees. SuDS basins and surrounds will include recreational space.
- E Ridge interface** - will be characterised by a tree lined avenue running along the ridge-line, embodying the woodland character and including informal play opportunities for all residents within the neighbourhood. Woodland trees will be grouped informally within the landscaped amenity spaces to frame views out of the development edge, and views to the development
- F Woodlands interface** - will ensure short distances from building façade to woodland edges to achieve 'woodland on doorstep' character, with recreational routes leading directly from the neighbourhoods to existing woodland pockets.
- G Eastern boundary interface** - will be established through robust vegetation of native hedges, hedgerow trees and woodland, reinforcing and defining the Green Belt edge. A rural frontage character will be achieved through narrow lanes fronting the meadow.
- H Wildlife corridor and re-wilding area** - will become a target habitat for reptiles, managed as a wildlife corridor. Recreational route through the wildlife corridor to be provided which defines publicly accessible space. A wide vegetated bank to railway edge will include native trees and form a wildlife corridor.

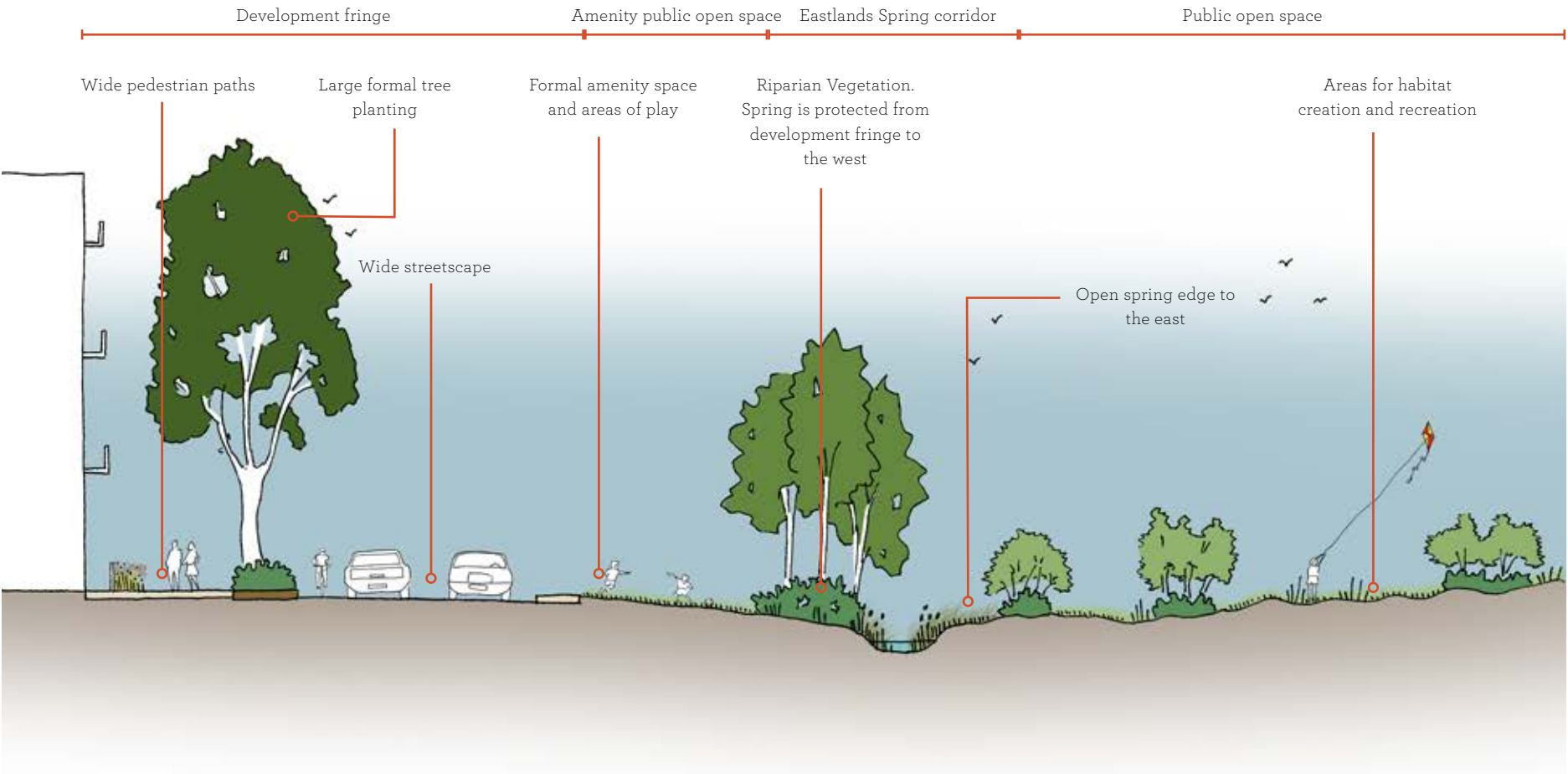


Sections Interface Plan

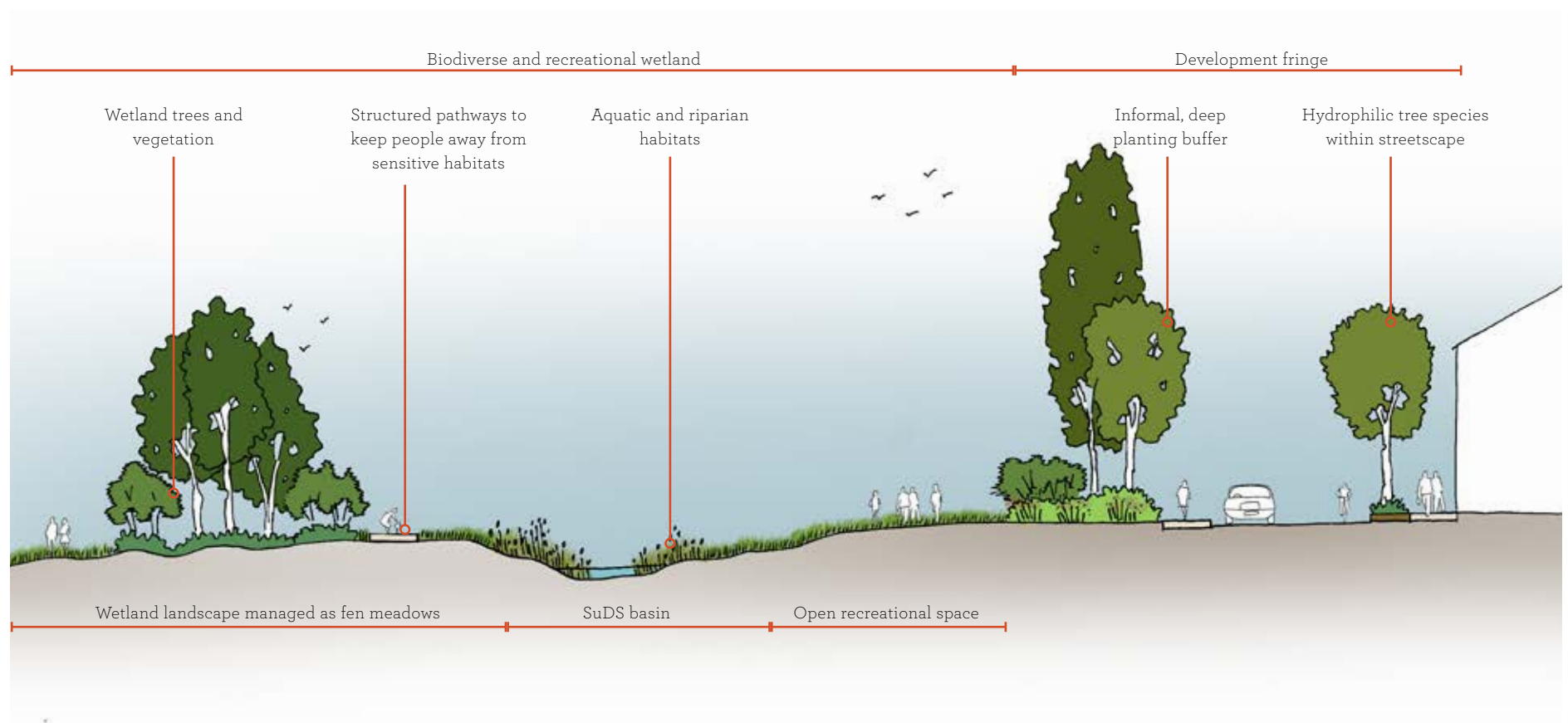
SECTION A: INTERFACE WITH Ancient woodland



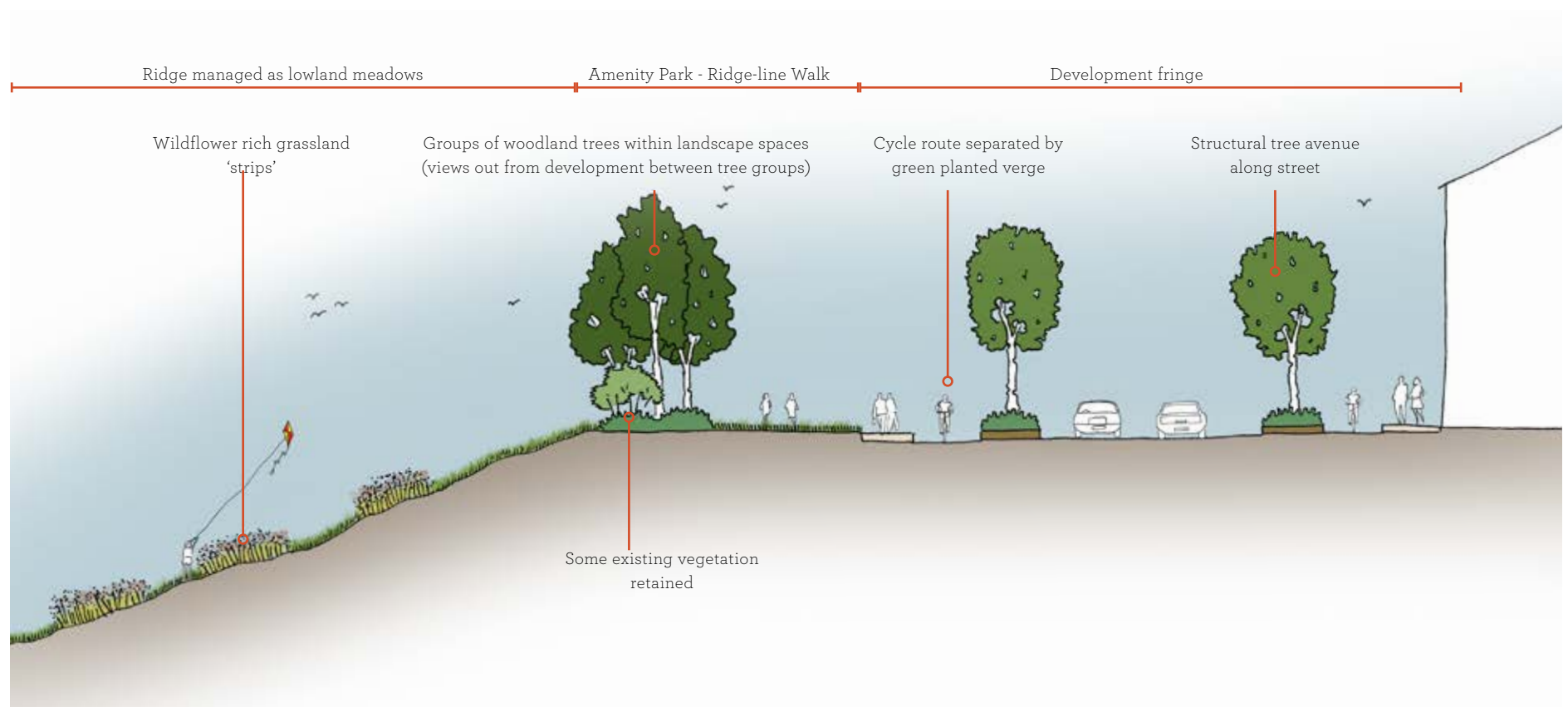
SECTION B: INTERFACE WITH EASTLANDS SPRING



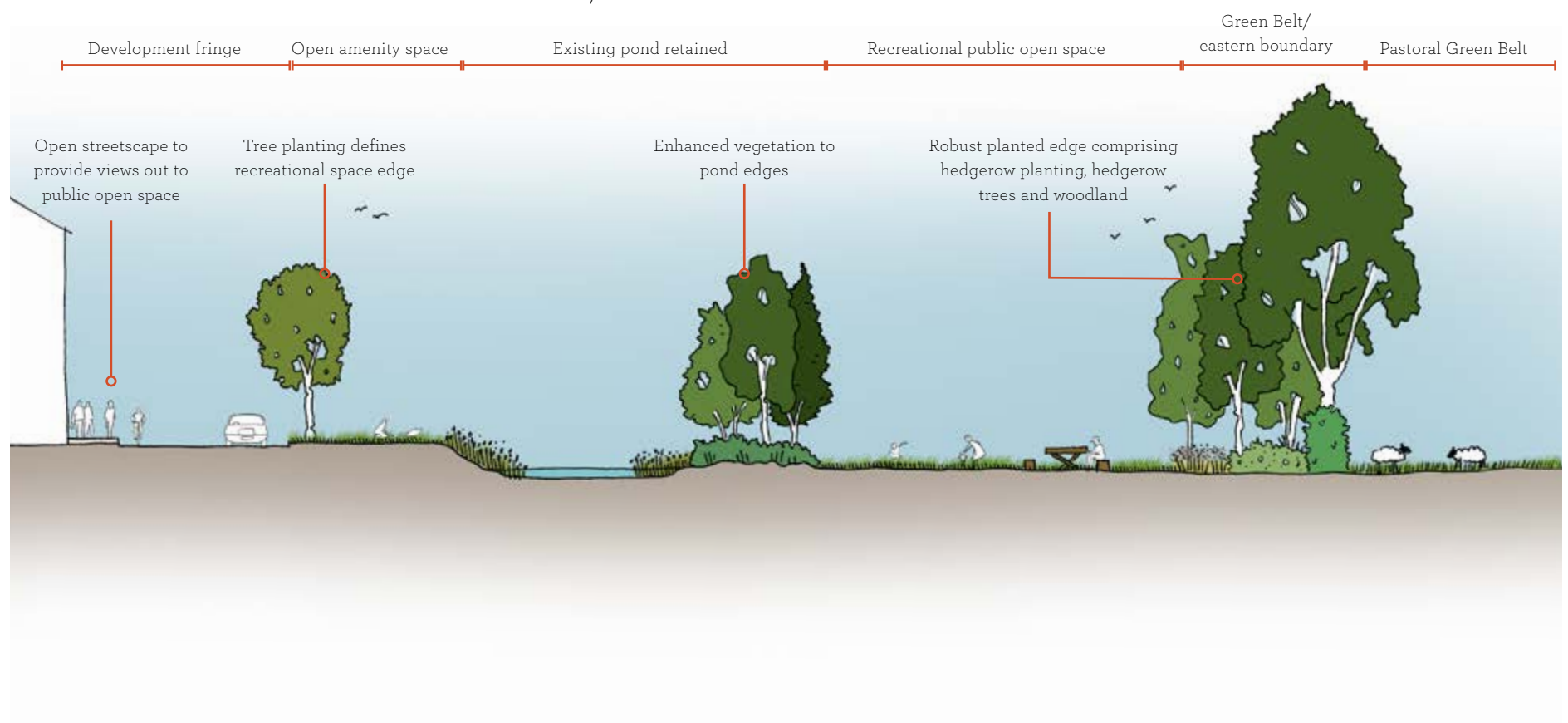
SECTION C: INTERFACE WITH WETLANDS



SECTION D: INTERFACE WITH RIDGE



SECTION E: INTERFACE WITH EASTERN BOUNDARY/GREEN BELT EDGE



Playing is not just for children; play can address fundamental human needs for interaction, movement, social interaction and activity.

PLAY

Dunton Hills Garden Village will embrace all aspects of play for all ages and abilities, and provide a social, convivial and truly playful environment within the landscape.

Dedicated play areas will be provided for young children as well as formal and informal pitches. As identified, the wider landscape contains woodland areas and the sloping ridge, as well as wetlands with the associated spring and water bodies. Together these form a unique series of areas to be explored by residents and visitors of all ages.

Adult play and recreation provision can be provided through the wellness trail (see page 112), wellbeing and cycling routes and outdoor gyms.



Multi-purpose pitches



Interactive play equipment within areas of open space



Eastlands Spring will be accessible and open to exploring



Formal pitches within the Primary Schools



KEY

- | | | | |
|----------|-----------------|-------------------------------|----------------------------|
| 01 LEAPs | 03 MUGAs | 05 Cricket pitch | 07 School sports provision |
| 02 NEAPs | 04 Football Hub | 06 Community sports provision | |

MANDATORY SPATIAL PRINCIPLES - PLAY

- 01 Locally Equipped Areas of Play (LEAPs)** - will be at least 400m² in area and at least 10m away from the closest residence. LEAPs will be distributed throughout the Garden Village to ensure catchments cover all development parcels. The maximum walking distance to each LEAP will be 400m. Each LEAP will provide a minimum of six individual play elements.

02 Neighbourhood Equipped Areas of Play (NEAPs) - will be at least 1000m² in area, with a minimum of 465m² hard surfaced. A 30m buffer will be established between each NEAP and closest residence. Play provision will be for both older and younger children, including space for sport and informal ball games. Play elements should be stimulating and challenging, with a minimum of nine individual play elements. A minimum of two NEAPs will be provided within the Garden Village, with walking distances less than 1000m.

03 Multi Use Games Areas (MUGAs) - will include provision for tennis, netball, basketball and 5-a-side football with a minimum space requirement of 665m². A minimum of two MUGAs will be provided within the Garden Village, with walking distances limited to 700m.

04 Football Pitches - two full-size football pitches will be provided within the masterplan and will include buildings for changing and gathering at fixtures.
- 05 Cricket Pitch** - will be provided on flat land in Dunton Waters, overlooked by homes to the north and south. A Cricket Pavilion accommodating changing and social facilities will also be provided adjacent to the cricket pitch.

06 Community Sports Provision (as part of the Secondary School) - will include the provision for four pitches (two of which are artificial), sports hall (to include four badminton courts) and a MUGA. Pitches will be designed to have interchangeable uses - football and rugby. A summer athletics track will also be provided. The needs of the school and the community will be balanced in sharing the facilities at different times of the day and year.

07 Primary School Sports Provision - will serve the school but not be accessible to the wider neighbourhood.

08 'Doorstep Play' opportunities (throughout masterplan) - will be provided throughout the Garden Village, maximising and integrating play into the landscape. Existing landscape elements such as the Eastlands Spring, the larger waterbodies and the woodland will all be made accessible for play and exploration. Informal kick-about spaces in addition to formal provision will be accommodated within the landscape. Activity and trim trails will connect development parcels and recreational landscape spaces.

HERITAGE

The Masterplan for the Garden Village sensitively integrates the site’s rich agricultural heritage, whilst respecting the setting and character of the local environment.



The masterplan respects key heritage assets both within the site and the immediate surroundings including Dunton Hills Farm and All Saints Church, East Horndon.

The presence of a number of historic buildings and features within and around the site mean that heritage considerations have been central to the development of the Framework Masterplan. This has resulted in a scheme which not only seeks to sensitively preserve the historic landscape and nearby heritage assets, but enhance them where possible.

Key heritage design features incorporated into the Framework Masterplan are:

- 1. A comprehensive green infrastructure scheme, which seeks to improve the existing historic landscape features (such as the ancient woodland along Nightingale Lane, planting along Eastlands Spring and important hedgerows) and mitigate potential harm, (e.g. structural planting), to protect views of All Saints Church from Thorndon Park and the church itself.
- 2. The provision of generous ‘buffer zones’ around historic buildings, which provide new publicly-accessible green spaces from which to appreciate historic buildings but also respect their setting. This includes the provision of a new village green to the west of Dunton Hills farmhouse and grassland meadows in the vicinity of St Mary’s Church and Dunton Hall.
- 3. The retention of key views across the site, including those towards and between the Dunton Hills farmhouse, Church of All Saints and Church of St Mary.
- 4. The proposals also seek to retain and reinstate historic routes through the site (e.g. the farmstead driveway).

Furthermore, the sensitive layout of new built form, the building heights, density and detailed design will be sympathetic and appropriate to its location and the surrounding areas.






Additional design benefits include the removal or mitigation of existing features which detract from an appreciation of the historic landscape and buildings, for example: the removal of the 78m high wind turbine; the removal of electricity pylons and overhead wires through burial; and the screening and noise mitigation of vehicle activity along the heavily-trafficked A127 and the A128 interchange.

The proposals have been developed in consultation with Brentwood Borough Council and Historic England, with advice and constructive criticism carefully considered and incorporated into the emerging design proposals.

HERITAGE



KEY

- | | | | | | |
|---|------------------------------|---|---|---|----------------|
|  | Routes - mandatory alignment |  | Routes - flexible landscape connections |  | View corridors |
|  | Routes - flexible alignment |  | Indicative marker buildings | | |

MANDATORY SPATIAL PRINCIPLES - HERITAGE

SETTING AND ROUTES

- 01 Village Green setting** - will provide an appropriate setting for the farmstead within which residents and visitors can interact, play and relax. The setting will be defined by the farmstead to the east, the fields existing to the north and south, and the Eastlands Spring to the west. New homes will define, and be orientated to activate the edge of the Village Green. Heights will be limited to 3 storeys and the design will respond to the architectural vernacular of the farmstead, sensitively respecting this historic setting within the Garden Village.
- 02 Existing farmstead drive** - to the east of the Eastlands Spring will be preserved and incorporated into the design of the Village Green. The existing farmstead drive will form a key part of the pedestrian and cycle route that connects the Village Centre to the Secondary School and Dunton Waters, in addition to connecting the farmstead with the Market Square.
- 03 Historic farmstead drive** - the original and historic drive to the farmstead will be re-instated, enhancing the connectivity between the Village Green, the historic farmstead and Nightingale Lane.
- 04 Nightingale Lane** - will be integrated into the design of the movement network, promoting sustainable movement within the wider Garden Village as well as healthy living.
- 05 Nightingale Hall Woods** - historic setting will be preserved and respected as a key feature within Dunton Woods.

VIEW CORRIDORS

- 06 Farmstead Avenue and view corridor** - will preserve a direct visual relationship between the junction onto the A128 and the Grade II listed farm house and associated farmstead. This is one of many masterplanning approaches that ensures that the historic farmstead becomes a focal point within the overall Garden Village. There is potential to thin the trees along Eastlands Spring to improve visibility of the farmstead.
- 07 Church views:** between the farmstead forecourt and All Saints Church - the silhouette of the Church against the skyline should be preserved, so new development in the foreground and middle ground should not occlude views of the Church, and should preserve the viewers' ability to recognise and appreciate the landmark.
- 08 Church views:** development in the foreground and middle ground will not occlude the views of the Church of St Mary from the viewpoint to the east of the farmstead, and will preserve the viewers' ability to recognise and appreciate the landmarks.
- 09 Church view:** development in the foreground and middle ground will not occlude the view of the Church of St Mary from the south-west of the site, and will preserve the viewers' ability to recognise and appreciate the landmark.

DENSITY

A range of densities should be applied to further emphasise the character of the development. These will be appropriate to their location and setting within the Garden Village.

The Garden Village will comprise a range of different densities within the overarching framework.

The highest densities are accommodated around the Village Centre and at key gateways along the A128, comprising apartment buildings and terraces of townhouses.

The central areas of Dunton Fanns allow for mid-high densities, creating the ability to deliver a mixture of apartments and housing that is more compact. Areas of higher density are located around the Neighbourhood Hubs within Dunton Woods and Dunton Waters close to local amenities and services.

Large areas of Dunton Lakes and Dunton Woods would comprise lower density family housing of up to 40 dph.

Lower densities of up to 30dph are found along the more sensitive eastern boundary of the these neighbourhoods to maintain a rural feel.

The table below shows the potential numbers of homes which could be achieved within each development parcel as shown on the adjacent plan. These totals are based on the density ranges within the table to the right.

Density ranges for the indicative density strategy

Range	Lower	Middle	Highest
Up to 30	22	25	28
Up to 40	32	35	38
Up to 50	42	45	48
Up to 60	52	55	58
Over 60	62	65	68

Indicative densities for each sub-phase








Phase	Total units - at the lower density range	Total units - at the middle density range	Total units - at the highest density range
Phase 1A	758	798	839
Phase 1B	391	417	442
Phase 1C	360	390	420
Total	1509	1605	1701
Phase 2A	648	708	767
Phase 2B	200	218	236
Phase 2C	266	291	317
Total	1114	1217	1320
Phase 3A	423	462	500
Phase 3B	148	161	175
Phase 3C	199	222	246
Total	770	845	921

DENSITY



KEY

 Over 60dph	 up to 50dph	 up to 30dph
 up to 60dph	 up to 40dph	

MANDATORY SPATIAL PRINCIPLES - DENSITY

General note: the density plan sets out broad density parameters for the Framework Masterplan (based on the density ranges above), in line with the overarching vision for the Garden Village. Depending where the boundary line is drawn, there may be pockets of density that exceed the overall density of the parcel. This is acceptable so long as the overall average density parameter is not exceeded.

- 01 Village Centre** - As per the plan, higher densities are permitted within in the area envisaged as the Village Centre. This area stretches from the A128 along the western edge to the Market Square, where taller buildings will need to provide a suitable degree of enclosure. Higher densities in this location will allow for a range of different residential typologies to be delivered, including apartments, maisonettes and townhouses.
- 02 A128 edge** - in addition to the Village Centre, the A128 edge will allow for higher densities with apartments and townhouses forming a prominent frontage address onto this main road. Taller buildings will particularly be encouraged around gateways into the village. Whilst a wall of built form will not be permitted, taller buildings here will aid in screening noise from the A128 and create a presence on the road frontage.

- 03 Dunton Waters and Woods Neighbourhood Hubs** - greater densities are allowed for within the Neighbourhood Hubs, permitting apartments with non-residential uses at grade. This will ensure that these hubs realise their potential in becoming active and vibrant nodes within the village.

- 04 Reduced outer densities** - outer areas, away from the Village Centre or Neighbourhood Hubs are designated with lower densities and are envisaged as comprising larger housing typologies on more generous plots.

BUILDING HEIGHT

A range of building heights will add variety and interest to the streetscape, enhance internal legibility and ensure that the Garden Village has a distinctive identity.

The building heights within the Garden Village will vary, but broadly correspond to the same spatial strategy as the proposed densities on the previous page.

Taller buildings will comprise apartments with the potential for non-residential uses at ground level. The tallest of these buildings will be located at the Village Centre, and in particular around the Market Square and the Station Road extension/Mobility Corridor. This will help to create a sense of enclosure to these key public spaces and routes.

Furthermore, taller buildings will be required along the western edge of the Garden Village as part of a noise mitigation strategy dealing with traffic noise on the A128. Taller buildings here will also offer the chance for more prominent gateway buildings at key entrance points into the site.

Taller buildings could be located in other parts of the site including key areas around the wetlands area (to prevent a uniform approach to height here) and in the area around the Neighbourhood Hub in Dunton Waters - to achieve higher density close to the facilities here.

As with the density plan, heights generally reduce towards the east of the site and along the more sensitive ridge-line, with a maximum height here of 12.5m. This area is likely to comprise housing of no more than two stories in height.

HEIGHTS



KEY

 5 storeys (18.5m)	 3 storeys (13.5m)
 4 storeys (15.5m)	 3 storeys (12.5m)

MANDATORY SPATIAL PRINCIPLES - BUILDING HEIGHTS

General note: the building heights plan sets out broad building height parameters for the Framework Masterplan, in line with the overarching vision for the Garden Village.

The building heights parameters established for the Village Centre and Neighbourhood Hubs must be adhered to in terms of the upper limits. Outside of these areas the upper limits are set at 3 storeys. However, some flexibility for occasional taller buildings in carefully considered locations could be considered where appropriate. This would add interest to large areas which might otherwise become overly uniform in height.

- 01 Village Centre** - will allow for taller mixed-use buildings, up to 5 storeys in height with non-residential uses at ground floor level. The tallest buildings will be focused around the Market Square and provide an appropriate degree of enclosure.
- 02 A128 edge** - will allow for a range of taller apartment buildings, ensuring that a prominent frontage address can be established along the western edge of the Garden Village. Taller buildings will particularly be encouraged around gateways into the village however, building heights should not affect views towards All Saints Church, identified in the Mandatory Spatial Principles relating to Heritage.
- 03 Neighbourhood Hubs** - will allow for taller mixed-use buildings up to 4 storeys, ensuring that a small but prominent centres can be established at the centre of both Dunton Waters and Dunton Woods.

- 04 School buildings** - will allow for the flexibility to deliver 2 storey landmark buildings with generous floor-ceiling heights.
- 05 Village Green and farmstead setting** - heights surrounding the Village Green will be limited to 3 storeys, balancing the need to respect the historic farmstead (which sits on higher ground) setting, whilst ensuring that the large Village Green is appropriately fronted and overlooked.
- 06 Employment buildings** - will allow for flexibility in providing buildings with generous floor-ceiling heights. Building heights of up to 3 storeys will be required so as to provide a suitable noise barrier against the A127, shielding homes to the south.
- 07 Linear park** - will allow for taller apartment buildings up to 4 storeys in height, providing a definition for the open space that leads from the ridge-line to the Dunton Woods Neighbourhood Hub. Taller buildings here will also signify the centre of Dunton Woods from lower ground within the overall Garden Village and
- 08 Eastern outer edges** - will be lower in height (as well as density) to ensure that development doesn't adversely impact views from Basildon or views towards the church of St Mary, identified in the Mandatory Spatial Principles relating to Heritage.



CHAPTER 6

MOBILITY
STRATEGY

This chapter details the overarching Mandatory Overarching Principles for mobility in the Garden Village. These promote a step change in personal mobility and delivers a sustainable transport vision that underpins the Masterplan for Dunton Hills Garden Village.

6.



MOBILITY STRATEGY

The overarching objective of the mobility strategy is to contribute positively to climate change and healthy living whilst creating an integrated and socially inclusive society.

Dunton Hills can do this, and it will do this, because of its size, its location and its design.

It is not enough to simplistically do, and assess, mobility on the basis of what has gone before. Attitudes to mobility are shifting faster now than they have at any other time in recent history, and there is a marked difference between the generations. This is fuelled by equally fast changes in mobility technology,

creating new options and expectations that meld liveability, mobility, health and climate effect with each element inextricably linked with the other.

The building of a new Garden Village is an opportunity for radical step change in the way people move around, both within the development and across the surrounding area.

At the core of the objective is an aspiration for local living, measured across the day and week, and including but not focussing on the commuter peak period. When education, visiting friends, leisure, working, home or work hub working, shopping, healthcare and the other day to day activities are taken into account it is not unreasonable to aspire to 60% of activity to be undertaken locally, within the scheme or neighbouring settlements, employment and residential areas.

The design of the scheme itself, and connections to neighbouring villages, is at a pedestrian scale, and so this local living represents an opportunity to reinforce community spirit and inclusive society.

For travel within and beyond the vicinity of the local area, the design, availability and convenience of choice and behavioural influences are aligned in an order of priority that places those that achieve the objectives as highest first. Namely:

- Virtual Mobility
- Active Travel
- Shared Travel
- Single Occupancy Car Travel



Working from home



Convenient and high quality pedestrian and cycle links



Facilitating Active Travel



Delivery Drone (on land)

VIRTUAL MOBILITY

The internet is changing mobility patterns. Social media for is increasingly used for communication and the internet for shopping, research and home or hub working within the Neighbourhood Hubs, extending ones reach beyond their home. It is mobility without travel.

The consequences of virtual mobility, such as deliveries, will be dealt with through micro consolidation centres by the Community Concierge team, enabling either personal pick up, which is good for community integration, or efficient last mile of travel techniques using amongst others, ground drones.

To achieve virtual mobility high quality broadband connectivity is to be provided serving all homes, employment/commercial areas and community buildings.

ACTIVE TRAVEL

The masterplan has been designed at a walkable and cyclable scale. Clearly legible Mobility Corridors (set out earlier in this document) promote easy and direct access to key hubs and facilities by foot, bike, or scooters within the Garden Village. These form a mobility skeleton and are the most important network of corridors. This approach will make walking and cycling (aided or unaided) the default choice of travel for most residents and visitor, and make choosing to use a private car both unnecessary and less attractive.

Where some of these corridors happen to incorporate a carriageway it will be designed to be no more than 20mph and the cycleway/footway will be segregated to create a safe environment for pedestrians and cyclists.

Active Travel extends beyond the site with the sustainability route leading from the Village Centre to connect to an improved footway/cycleway along the north side of Station Road to promote walking and cycling towards West Horndon railway station for which there are improvements proposed. A footway/cycleway link is being proposed towards Laindon and Basildon albeit this relies upon the consent of the adjoining authority.



Online taxi service



Facilitating sustainable personal mobility

SHARED TRAVEL

The sharing economy is most significantly embraced by the younger generations, including Millennials, although not exclusively.

Modern shared travel includes buying rides from Transport Network Companies (TNCs such as Uber), and creating networks for private shared travel. Dunton Hills will create a real time private shared travel network, administered by Community Concierge team, and be alive to shifts in the way these networks are evolving, given the very fast pace of change.

It will also work with demand responsive (DRT) public shared travel companies to provide either a new or extended DRT service connecting the site with local employment sites and neighbouring settlements such as Brentwood, Basildon and Thurrock. This will provide significant benefit to the rural area surrounding Dunton Hills, reducing rural vulnerability.

The scale of Dunton Hills is sufficient to attract an increased provision of fixed route bus services, providing further benefits to West Horndon as well as adding to the attractiveness of shared travel for residents and visitors of Dunton Hills.

Finally, Dunton Hills is well connected to mass transit at West Horndon railway station. For people travelling occasionally, or even regularly, further afield, West Horndon station, which will be accessible by active travel and shared travel, provides excellent strategic connections, including to Central London, Basildon and Southend.

In the initial stages DRT and bus services to local secondary schools will be required until the new facility within Dunton Hills is available.

Choices such as Uber and other taxi services available in the local area are equally part of the choices available for shared travel.

INFLUENCING BEHAVIOUR

A important element in the promotion of sustainable travel choices is the Mobility Hub. This is prominently located within the Village Centre where there will be the highest level of use and access by the community. This facility will provide a focal point for the administration of the Mobility Plan and the shared transport initiatives, including Car Club, cycle and electric cycle hire, Community Concierge and micro consolidation.

The key principles of the Mobility Hub are as follows:

- Be in place (at first in a temporary facility) for the first residents moving into the development and act as a gateway facility for visitors;
- Forecourt/wide footway to allow cycles to be stored in front of the hub during main operational hours where, for example, people then go on to use other shared travel choices to go off-site;
- Internal storage facilities for bike share bicycles, electric bicycles, conventional cycles, electric scooter and cargo bikes within the hub to provide high levels of security for overnight storage etc;
- Locally accessed storage space for electric car sharing;
- Storage space for parcels for ‘last mile’ delivery and convenient drop off/loading facilities for delivery vehicles to allow transfer to storage area, for subsequent pick up, or cargo bikes or ground drones for efficient onward delivery. This will include appropriate future proofing for autonomous delivery vehicles as they are adopted; and
- Information provision covering Site Wide Travel Plan, Demand Responsive Transport (DRT), walking and cycling routes within the wider area, Car Club operation and car share schemes across Dunton Hills and Real Time Passenger Information.

The Community Concierge service will be based at the Mobility Hub to:

- Monitor the success of achieving the sustainable travel mode target;
- Provide the IT platform for the various shared travel initiatives and maintain the travel section of the community website and smart phone application;
- Deliver Personalised Travel Planning to residents and employees including the provision of digital or physical Welcome Packs;
- Co-ordinate the preparation and implementation of Travel Plans for employment and school users under the umbrella of the Mobility Plan;
- Offer bespoke travel planning advice to future businesses and schools when they are developed and co-ordinating these with the wider travel planning initiatives for Dunton Hills;
- Support the active travel across the Dunton Hills site, including promotional initiatives or activities;
- Hold regular events, including trials with new operators and organised community walks and rides;
- Manage the Car Club, car sharing and cycle hire and ensure that the mobility routes are available for people to use;
- Provide maintenance for cycles and other personalise modes of travel;
- Ensure the goods are delivered to the Mobility Hub reach their final destination; and
- Being alive to changes in travel habits and respond to emerging technologies.



EV charging



Easy, secure cycle parking and storage should be located at key destination points

PARKING

Dunton Hills Garden Village will support a modal shift towards a reduced need for cars. Appropriate levels of cycle and scooter parking provision should be located at key community and retail facilities and the Mobility Hub ensuring that cycling, both as a means of commuting and for leisure purposes, is made as convenient as possible.

Safe and secure cycle and scooter parking for each dwelling. Such parking can be provided in various forms and include the ability to charge e-bikes.

While the car will be accommodated in early phases, the Garden Village must be designed to promote and encourage sustainable modes of transport and be future proofed to take account of emerging policy with regards to provision of electric charging points. A critical factor in delivering this vision will be the development of an efficient, site specific parking strategy reflecting the reduced dependency on single user car travel. This strategy will pay particular focus to areas of higher density, the Village Centre/ Neighbourhood Hubs and promote car free education facilities. The reduced requirement for parking provision will yield more space to create an attractive, human scale public realm with a distinctive sense of place.

In light of this, the parking arrangement should be flexible and should be designed to preserve the human scale character of the streetscapes and avoid creating a car dominated environment. Masterplanning work undertaken to date has been based on both Essex County Council Policy Standards (September 2009) and discussions with Brentwood Borough Council relating to lower standards in line with advice from transport consultants Vectos (summarised on this page).

Indicative parking approaches are shown overleaf. Alternatively, more remote parking approaches could be considered to make driving less appealing (e.g. parking barns).

INDICATIVE CAR PARKING STRATEGY

Structure

- Garages generally provided for 3 bed houses and above.
- Parking to the front of dwellings to be utilised for terraces of 2 and some smaller 3 bed units. These can also be used to create parking squares where necessary.
- Parking courts for apartments should be secured and overlooked.
- Rear parking areas should be generally avoided but where they are to be used, this should be to serve a small number of houses (limited to 10 cars) and the area should be gated and overlooked.
- Visitor parking to be provided through on-street, parallel bays.

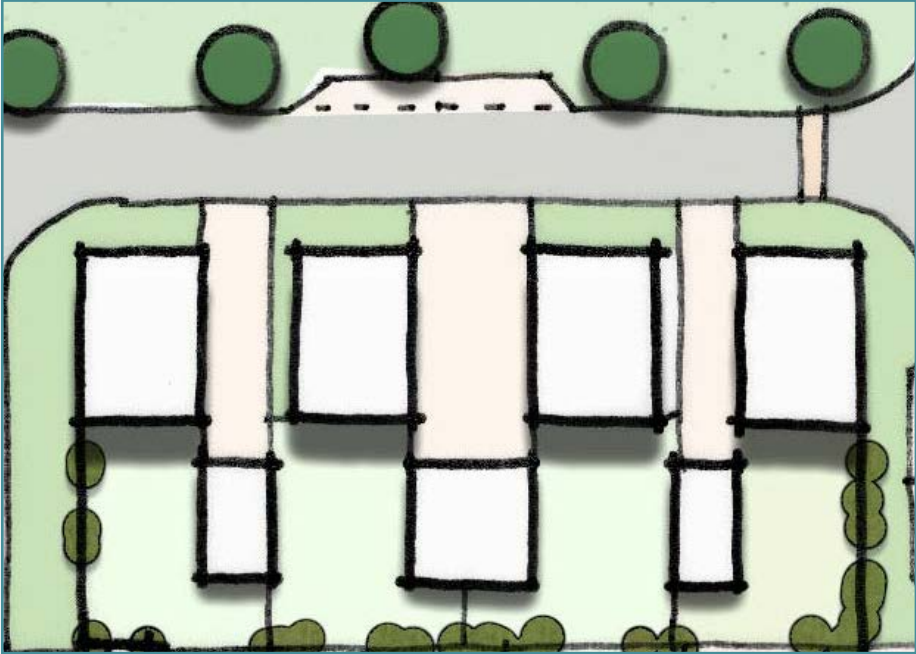
Potential parking ratios:

- 1 bedroom flats - 0.5 spaces/dwelling
- 2 bedroom flats - 0.75 spaces/dwelling
- 2+ bedroom houses - 2 spaces/dwelling
- Visitor parking - 0.25 spaces/dwelling

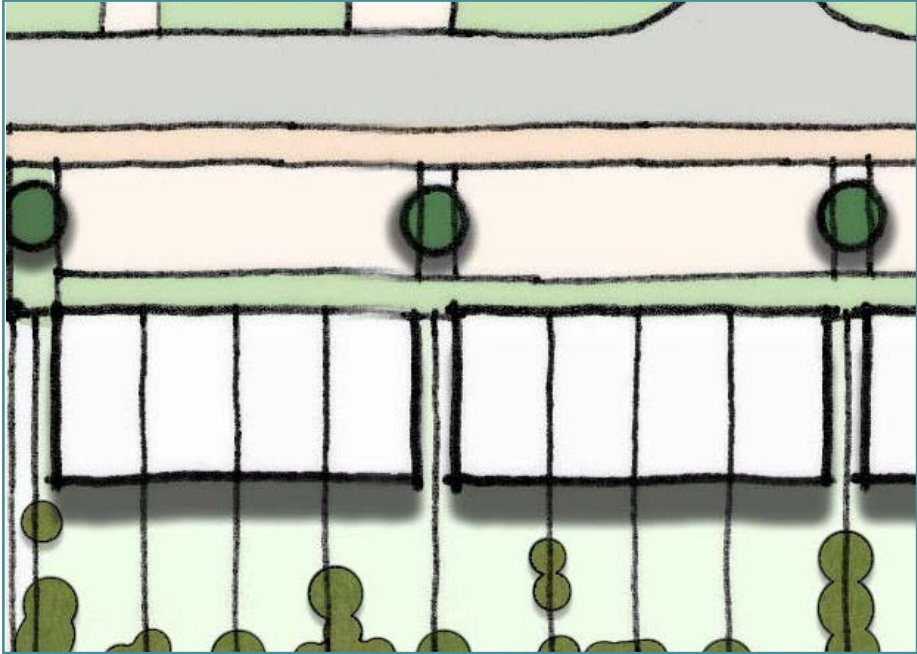
Other:

- Access to charging points for electric vehicles.
- Ability to charge e-bikes.

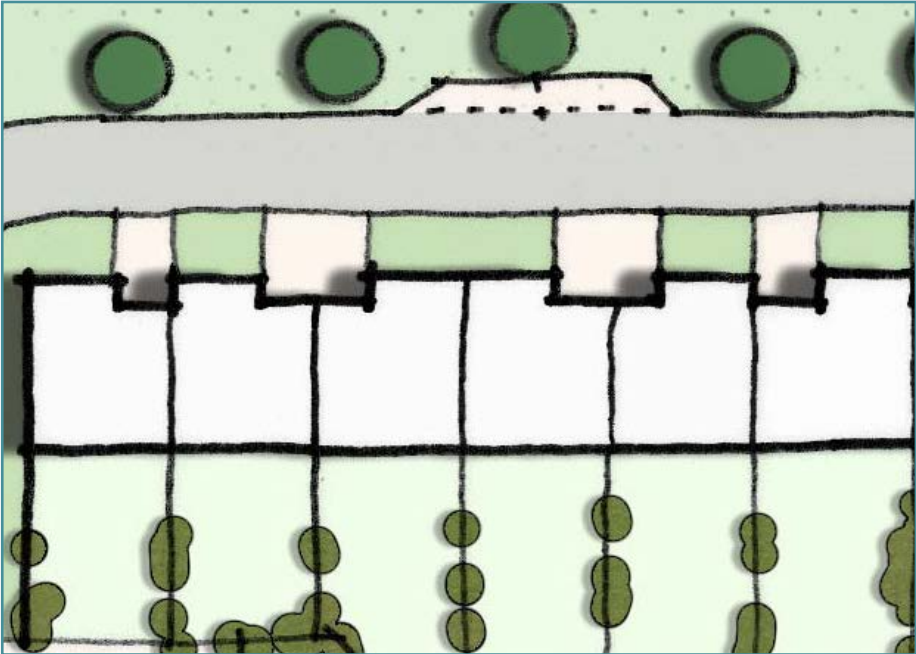
Indicative parking approaches



On-plot side parking



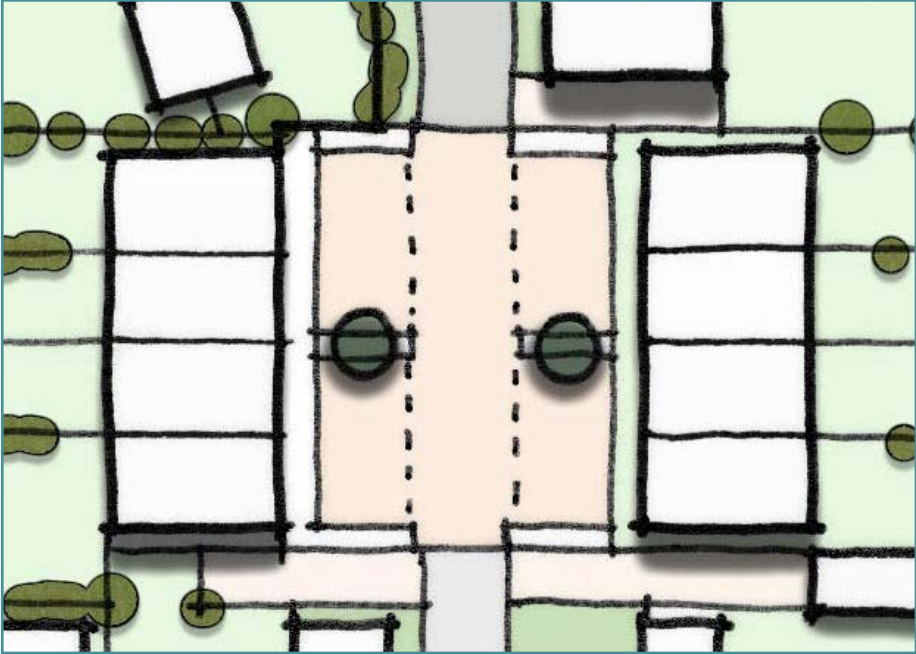
On-street - perpendicular Parking



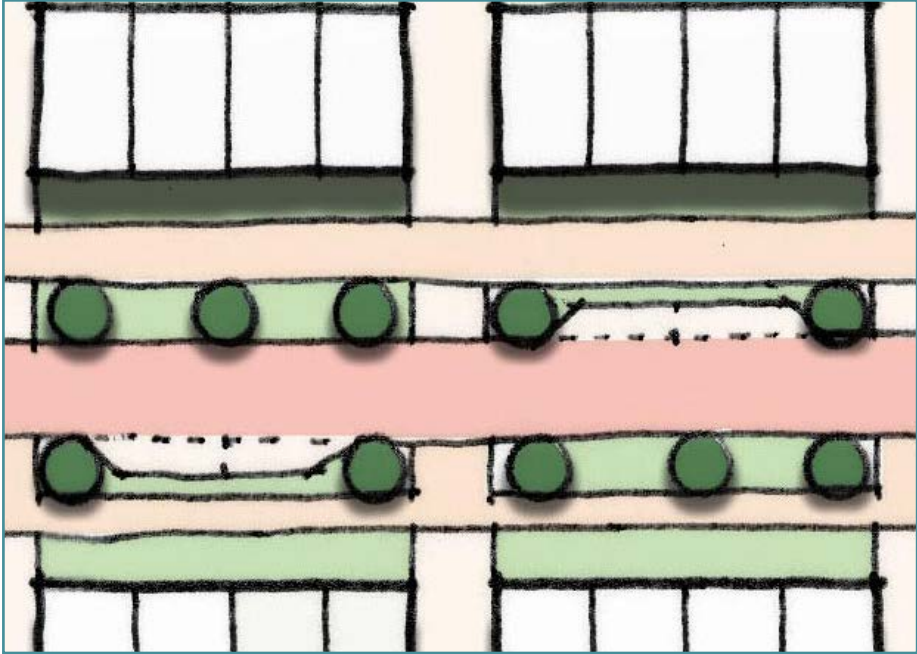
On-plot undercroft parking



Rear courtyard parking



Front courtyard/mews court parking



On-street parallel visitor parking

MANDATORY PRINCIPLES - MOBILITY

The Mobility Plan which promotes a step change in personal mobility and delivers a sustainable transport vision which underpins the Masterplan for Dunton Hills Garden Village by addressing the following key matters:

- 01

Promoting sustainable travel and healthy lifestyles within the Garden Village - creating and maintaining safe, attractive pedestrian and cycle routes, integrated within the network of streets and open spaces, including the wellness trail, a footpath/ cycle route adjacent to the A128 and a connection to the A127 cycleway.
- 02

A Mobility Hub - a Mobility Hub located within the Village Centre shall provide electric vehicle charging points, bicycle parking and hire, car club, bus stop, Demand Responsive Travel node, accommodation for the Community Concierge service and other related mobility facilities.
- 03

Community Concierge - Community Concierge Service which will co-ordinate and monitor mobility/travel planning, provide information about travel options whether via the web or other communication channels, operate the car club and car share schemes, co-ordinate occupiers’ and schools’ travel plans and promote other initiatives, including receiving delivered goods, shopping or parcels for onward transport to homes and businesses by cargo bikes and drones.
- 04

Share Travel Initiatives - the creating the ability for future residents and occupiers to use shared travel as a first choice for trips off-site including Demand Responsive Travel, traditional fixed bus services and other initiatives such as car sharing. The Primary Mobility Route shall be designed to accommodate buses to access all three neighbourhoods to encourage the creation of viable services.
- 05

Travel to School - establishing arrangements for pupils to travel to secondary schools (until the new secondary/all through schools is open) and 6th form education establishments via shared travel (i.e. principally buses)) rather than relying on personal travel.
- 06

Parking strategy - will be developed to control/limit parking to encourage a reduction in single use car travel both within the site and to other destinations within the local area. The Strategy will include a details of public bicycle parking.
- 07

Electric Charging - the provision and management of public charging facilities for electric vehicles, bicycles and mobility vehicles.

MANDATORY PRINCIPLES - MOBILITY (OFF SITE)

As part of the wider mobility initiatives secured by condition or obligation, the Garden Village will deliver or support the delivery of the following physical off-site works to promote wider connectivity:

- 01

Station Road - widening of the existing footway to provide a safe and lit route for pedestrians and cyclists from the Garden Village to West Horndon, including a controlled junction at Station Road to enable ensure pedestrians, cyclists and buses to have direct access to the Village via the Mobility Corridor.
- 02

East Horndon Hall - a controlled crossing of A128 Tilbury Road between the Village and this employment area.
- 03

A128 Tilbury Road - through design reducing traffic speed.
- 04

Thorndon Country Park- a footpath/cycle route to Thorndon Country Park’s southern entrance.
- 05

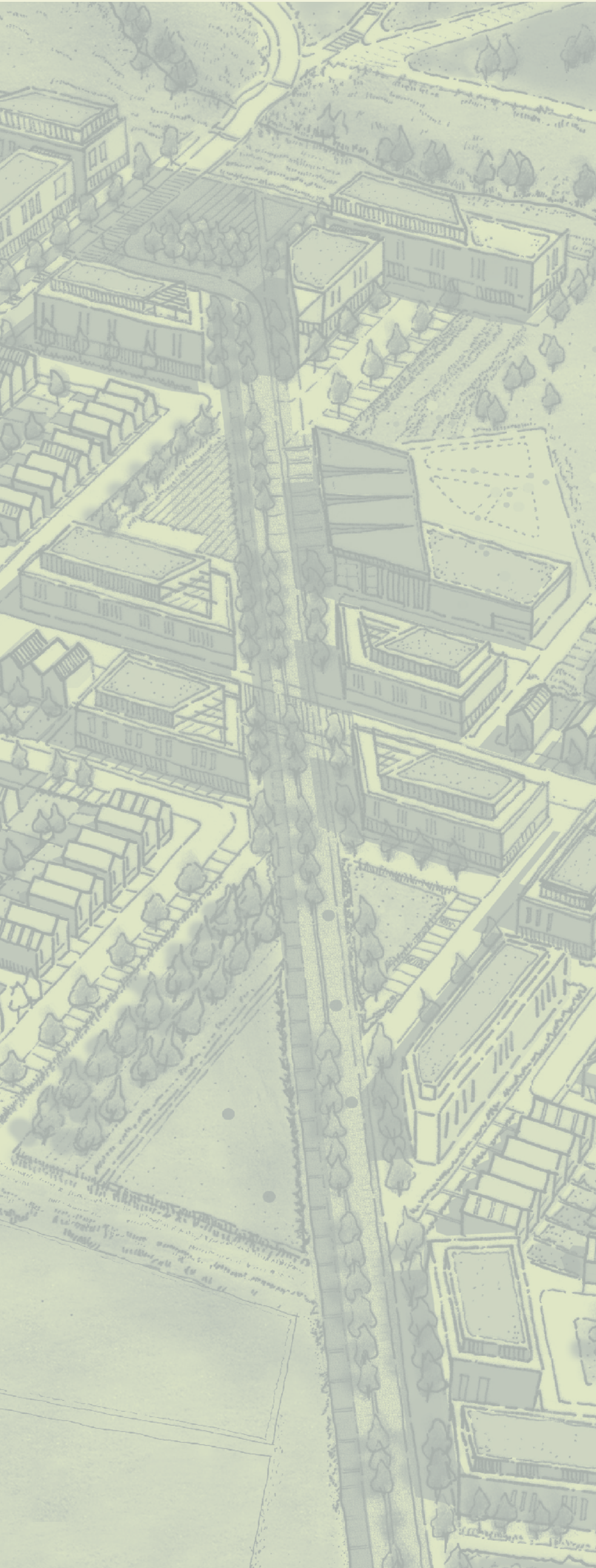
West Horndon - financial support for improvements within West Horndon to improve safety conditions for pedestrians and cyclists.
- 06

West Horndon Railway Station - financial support for the delivery of improvements to West Horndon railway station.
- 07

A127 Corridor - financial support for the delivery of appropriate and necessary schemes suggested in the A127 Growth Corridor Strategy and as may also be identified in the Infrastructure Delivery Plan.
- 08

Basildon Link - subject to the approval of Basildon Borough Council, a footway/cycleway link via Church Lane to Lower Dunton Road which can also serve as an access for emergency vehicles.





CHAPTER 7

SUSTAINABILITY STRATEGY

Creating a truly sustainable place is key to the long term success of Dunton Hills Garden Village. This strategy is wide ranging and includes social vitality, mental and physical well-being, education, employment and sustainable energy which are described in this chapter.



COMMUNITY INTERACTION, HEALTH AND WELLBEING

To create a truly sustainable, healthy and socially integrated community, Active Design Principles promoting physical activity and well-being have been embedded at the heart of our vision for Dunton Hills Garden Village.

ACHIEVING ACTIVE DESIGN - ESSEX DESIGN GUIDE AND SPORT ENGLAND

The Essex Design Guide 2018 has presented a new theme in its latest edition establishing the need to give far greater weight to aspects of active design. These core principles are a driver to help activate spaces and encourage involvement and the strengthening of community.

The ten Active Design Principles echo urban design best practice and are also highly relevant for new Garden Villages. We consider these Active Design Principles as a strong starting point for the creation of well-being and a physically active community.

Activity for all



The Framework Masterplan ensures a range of recreational needs of the new community are met with easily accessible facilities including sports pitches for all ages (e.g. cricket and football), play facilities for toddlers to teenagers (LAP, LEAP, NEAPS), outdoor gym facilities and the Wellness Trail and high quality open spaces encouraging healthy movement, community engagement, physical activity and by extension social, physical and mental well-being. The indoor sports needs are catered for at the community Sports Hub associated with the secondary school.

Walkable communities



The Village Centre and two Neighbourhood Hubs are located to ensure maximum walkability at the wider settlement and neighbourhood scales. Schools, retail, employment facilities and open spaces are all linked by a comprehensive and convenient network of walking and cycling links.

Connected walking and cycling routes



Dunton Hills will have a sustainability connected Garden Village with a safe and attractive cycle routes integrated within the network of roads and open spaces. A 6.2 km wellness trail will further promote active recreation and connectivity within the site. The no-car Mobility Corridor provides a direct connection to Station Road and then on to West Horndon railway station.

Co-location of community facilities



The distribution of facilities within the Framework Masterplan is based on the co-location of retail, education and community facilities within three interlinked hubs. This will ensure a synergy of uses and will create active and well-populated public spaces to support an active community. The Village Centre with its Market Square provide the key central location for facilities and services.



Dunton Hills is a landscape led masterplan and as such homes are set within an extensive network of multi-functional open spaces to support a wide array of users and uses including play and sports facilities, woodland, existing ponds, drainage features and parkland. The Village Green is a key social space for community activities.



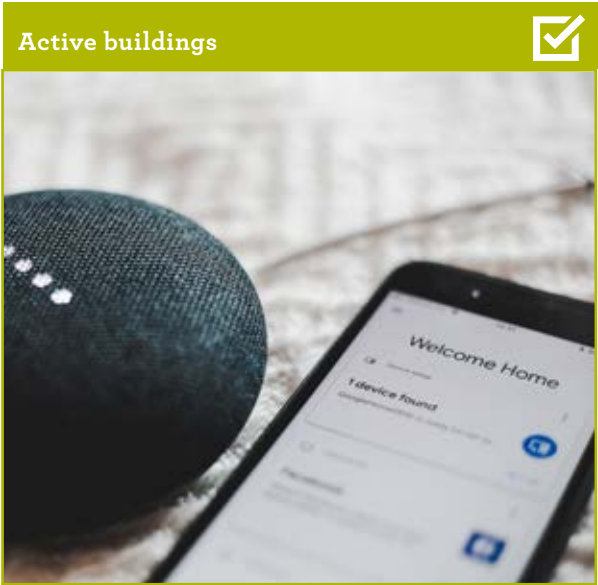
Key to creating a vibrant and attractive Garden Village is the early delivery of infrastructure and services on site which fully meets the future needs of residents and supports healthy and sustainable lifestyles. The range and nature of facilities has been fully considered to ensure that the majority of everyday needs can be met within the site. One of the facilities is a healthcare centre located within the Village Centre to cater for the needs of future residents and the wider local community.



The site management and legacy of the Garden Village will be overseen by the community comprised of residents and representatives from the Borough and Parish Councils alongside an Estates trust (e.g. The Lands Trust). These parties would be responsible for the day to day management and maintenance of the site facilities and open spaces to make neighbourhoods safe, attractive and secure places to live and encourage active participation.



Dunton Hills will comprise of permeable, inclusive neighbourhoods which prioritise sustainable transport and are connected through safe walking, cycling and bus routes. Attractive and well maintained green streets that accommodate all users will facilitate leisure and active transport opportunities.



Buildings will be designed to ensure sustainability and energy efficiency are achieved. While this is an issue for later stages of detailed design and the SPD it is envisaged that this could include achievable methods of green energy generation such as P.V. panels, heat pumps, passive heating and homes with smart technologies that reduce energy consumption. In addition the housing mix should enable people to live at Dunton Hills throughout their lifetime, including the provision of suitable care home accommodation and affordable homes available to those residents in need.



Local residents groups, clubs and forums will be established to promote opportunities for social engagement, active citizenship and interaction helping create a vibrant and integrated community. The Community Orchard and Community Growing Space are ideal focal points for such groups or clubs.



Creating opportunities that encourage outdoor activity and sustainable transport are to central to the design ethos and vision for Dunton Hills.

WELLNESS TRAIL

Our approach to connectivity is inextricably linked to mobility (touched upon in previous chapters) and is integral to promoting health and well-being within the Garden Village encouraging people to walk and cycle between their homes, place of work, learning and recreation.

The 6.2 Km wellness trail provides residents with a convenient way to get out of the house and keep active with their neighbours. It links together a number of key destinations along direct, pedestrian and cycle friendly routes. Key nodes include the Village Centre, the northern Employment Hub, the two Neighbourhood Hubs and the schools.

Large parts of this route are through open green space including the Ancient woodland, the ridge-line, and the linear corridor along the spring. As well as providing sustainable and high quality connections, this route could include trim trails for outdoor exercise for all age groups.

HEALTHY STREETS

Through the careful design of the streetscape we will improve air quality, reduce the dependence on the car and help make communities greener, healthier and more attractive, to optimise the network of open spaces and wooded areas within Dunton Hills Garden Village.

While the detailed design will come through at a later stage, street design should:

- Encourage walking and cycling for all residents especially children;
- Create streets that are easy to cross;
- Ensure there are adequate places to stop and rest (shade and shelter)
- Help people feel safe and are relaxed;
- Ensure that streets are overlooked and there is activity.

These elements have been incorporated into initial designs for the Framework Masterplan



Proposed route of the Wellness Trail

KEY

■ ■ ■ Proposed Wellness Trail

MANDATORY PRINCIPLES - COMMUNITY INTERACTION, HEALTH AND WELLBEING

The Masterplan Framework includes the following mandatory principles for delivering community infrastructure and creates formal and informal spaces for social, cultural and recreational activities to encourage interaction, foster a healthy community and promote individual wellbeing:

- 01

Accessibility - shops, schools and community facilities at locations which are both accessible and prioritise foot and cycle as the preferred mode of travel.
- 02

Village Green - a safe space to relax, play and interact at the heart of the Garden Village. The Green provides a setting for events that could be hosted throughout the year.
- 03

Market Square - a formal space events that could be hosted throughout the year including farmers’ markets.
- 04

Healthcare Centre - will be provided within the Market Square, providing healthcare services for all residents at the heart of the Garden Village.
- 05

Other Formal Spaces - other areas provided as part of the Neighbourhood Hubs, principally associated with the schools, allowing parents/carers waiting for their children to interact.
- 06

Formal Play Areas for Children – spread throughout the site with different levels of equipment to serve different age groups.
- 07

Green and Blue Infrastructure – an extensive area of land, including interpretation boards and a viewing platform, available to the community for general recreation and play.
- 08

Community Orchard and Growing Space – providing a space for community interaction at the heart of the Garden Village while also promoting healthy eating and proving opportunities to learn new skills
- 09

Wellness Trail - a dedicated and signposted pedestrian/cycling trail though the Green Infrastructure incorporating external gym equipment.
- 10

Footpaths/Cycleways -including Nightingale Lane, non car routes connecting neighbourhoods, hubs, schools and other facilities. Externally, connections to the cycleway along the A127 and to the southern entrance of Thorndon Country Park.
- 11

Community Sports Hub – a sports hall and sports pitches at the centre of the Village shared by the community with the secondary/all-through school.
- 12

Sports Pitches – dedicated football hub and cricket pitches including changing rooms.
- 13

Community/Village Hall – a space within a building available to the community for a variety of meetings or activities.
- 14

Mobility Hub – promoting mobility initiatives to encourage sharing transport and sustainable forms of mobility.
- 15

Housing Mix – homes that allow people to stay in the community over changing circumstances and life stages, including homes for the older and vulnerable members of the population.
- 16

Healthy and Energy Efficient Buildings – including houses with gardens for play and growing food.

MANDATORY PRINCIPLES - OTHER INITIATIVES

- 01

Social Events - the ability through the community management body or Friends of Dunton to use the buildings and spaces within the Village for a programme of events that would bring the community together.
- 02

Affordable Housing- devising a housing strategy to support a planning application which can retain existing residents, especially younger people, and priorities identified key worker groups at Dunton Hills.



Creating a strong sense of community is a key aspect of a truly sustainable Garden Village.

EDUCATION, EMPLOYMENT AND LEARNING

The Masterplan integrates a range of education and employment facilities throughout the masterplan ensuring the Garden Village meets a wide range of needs and requirements.



The Framework Masterplan will provide up to three new primary schools while also offering opportunities to learn new skills through outdoor learning.

EDUCATION

The rationale for the physical location of the education facilities, required as an integral part of the Garden Village, has already been established through the Mandatory Spatial Principles. These education facilities include free-standing nurseries, co-located 2 form entry primary schools and either a secondary school or an all-through school are focused on the Village Centre, Neighbourhood Hubs and the Employment Hub. All should include car free spaces by their entrances. These locations place the primary schools facilities at the heart of the three neighbourhoods and the secondary school and its sporting facilities at the heart of the Dunton Hills.

All these facilities are accessible on foot and foster vibrancy and activity at these hubs. The specifications and standards for the schools are a matter for detailed design. The secondary or all through school will include sporting facilities that will be a shared resource with the community.

By providing a range of schools and nurseries there will be enough places on-site for every child living at Dunton Hills who wants one. There is the basis to create an all through learning environment for the community with children being able to progress from early years to secondary education at Dunton Hills.

The first co-located primary school will be available at an early stage of the development as part of the Village Centre so that there is a realistic opportunity for children to attend their local school. There will inevitably be a gap in the delivery of the secondary education provision whilst the new school is delivered and it will be necessary for suitable sustainable transport provision to be provided between Dunton Hills and local education facilities.

Some of the new educational facilities may attract children from a wider area and, as such, there is a need to ensure the provision of suitable space for buses, DRT vehicles, cycles and scooters at the schools to encourage the use of sustainable modes of travel. Active travel planning for all educational facilities will need to fit within the umbrella of the wider mobility principles for Dunton Hills.

Education is more than just the physical location of any buildings and their high design standard. Instead, there is the access to, and creation of, external spaces for educational activities enabling children to directly connect to their surrounding landscape and wildlife. The connectivity also extends to the provision of a range of constructive and challenging play areas and other facilities which are accessible to children of all ages and abilities.

Connectivity to the wider environment, whether through formal learning or play, is about enabling children to be actively engaged in understanding, maintaining and positively contributing to their surroundings instilling a culture of being proud to be part of the Dunton Hills community. Connecting children with their wider environment will support their physical and mental health and well-being as well as their learning development.

Who might operate the schools has yet to be determined. However, the operator will be required to sign up to the vision and principles which underpin Dunton Hills Garden Village and be an active partner in the ongoing management of the community. Through the schools, the young voices of children living at Dunton Hills should be heard about what they want to be provided as part of the community, whether physical items or social events. Exploring the potential for key worker accommodation for teacher and other support staff should be explored as part of the housing strategy.

Learning also extends outside the formal education system to encompass apprenticeships being available for those living at Dunton Hills to engage younger members of the community to be involved in the place where they live, work and play. The opportunity exists to create apprenticeship and training schemes based at Dunton Hills which could, if the demand existed, be extended to retraining adults.

MANDATORY PRINCIPLES - EDUCATION AND LEARNING

The Masterplan Framework fosters a learning environment with the mandatory principles being:

- 01

Primary Schools - inclusion of sites for a primary school with early years provision within each Neighbourhood.
- 02

Early Years - up-to a further 4 nurseries or crèches located at the Neighbourhood Hubs and the Employment Hub.
- 03

Secondary Schooling - a secondary school or all through school site at the heart of the Garden Village with associated sports provision shared with the community.
- 04

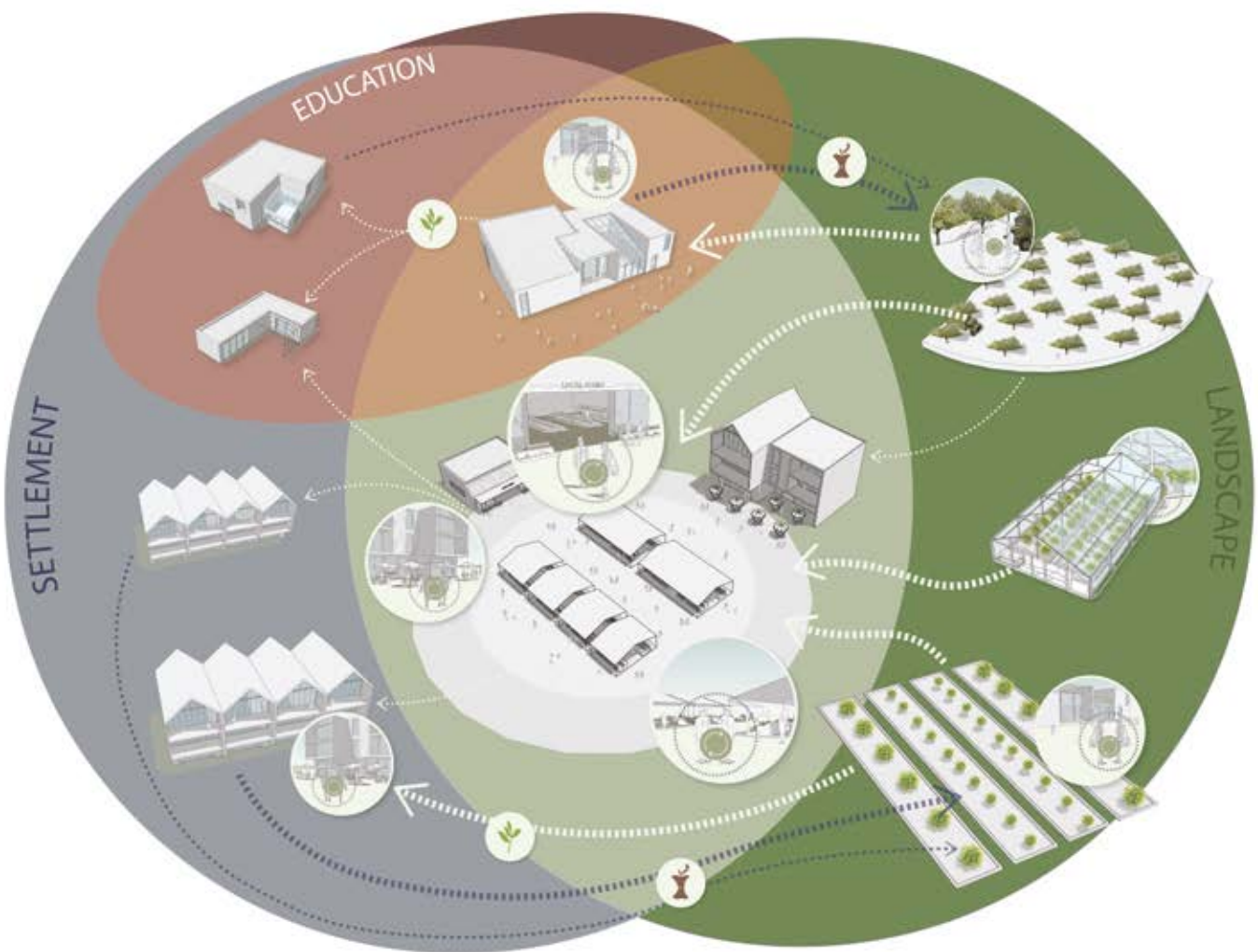
Space Around Schools - establishing safe car free spaces for taking children to and collecting them from schools and creating clean air zones around schools.
- 05

Outdoor learning - will be facilitated though careful positioning of school buildings within the Garden Village to enable access to quite areas within the surrounding Green infrastructure for outdoor learning.
- 06

Apprentices - recruiting young local people to be taken on as apprentices during the construction period and for the management of the Green and Blue Infrastructure.
- 07

High Quality and Innovative Design Standards -taking the best practice and innovative ideas for school design, both internally and externally, but applying these within the context of the design vision for Dunton Hills to create a high quality learning environment for children
- 08

Heart of the Community - the schools themselves, including the Community Hub, and the operators of the schools will be an active partner in the community and will promote the voice of children and other young people



The framework masterplan facilitates a synergy of uses ensuring that educational facilities are in close proximity to outdoor learning environments and public spaces.



Apprenticeships will be supported through the construction and on-going management while a range of jobs will also be provided for through services and on-site facilities.

EMPLOYMENT AND LEARNING

Supporting a vibrant community at Dunton Hills is not just about delivering housing and community facilities. Instead, it is about quality and availability of employment space to foster a dynamic economy. This is particularly true at Garden Villages where the opportunity should exist to live work and play and where the close proximity of residents and job opportunities minimises the need to travel, especially by private car.

However, because of technology the modern economy is flexible and traditional employers are less tied to a specific geographical space. Technology enables firms and workers to be footloose. The same technology enables people to innovate and start new businesses from their homes without needing formal employment floorspace. High quality broadband and other communication technology is key for the modern economy and this includes its provision at Dunton Hills.

To create the innovation and entrepreneurship culture, and to enable such businesses to thrive, Dunton Hills will provide a range of flexible spaces for business to establish and grow with excellent access to modern technology, a high quality environment and supporting local services such as shops, nurseries and both recreation and leisure opportunities. These spaces will be from people working from home, to small scale office space with support services such as meeting rooms in the Village Centre and then more traditional accommodation within the Employment Hub.

Jobs will also be created on-site through the retail, leisure and community facilities, including the healthcare centre and schools. People will be employed to manage and maintain Dunton Hills. However, flexibility is not just a matter for employment floorspace but equally applies to retail outlets. The high street is changing and whilst some shopping facilities and support services will inevitably be required on-site, other traditional retailers are moving more on-line. The aim to promote virtual mobility and the use of micro consolidation opportunities through the concierge service will discourage some retailers from operating at Dunton Hills. The retail floorspace within the Village Centre and Neighbourhood Hubs will need to be able to respond to changing shopping behaviour.

Dunton Hills is not expected to have large scale employment uses on-site because they are already planned elsewhere along the A127 growth corridor. Dunton Hills will complement rather than compete these strategic employment locations, including East Horndon Hall. Connectivity with these other locations is an integral part of the mobility strategy. This strategy extends to connectivity to West Horndon railway Station and places such as Basildon and Brentwood which are established employment locations.

The opportunity exists to employ local labour at Dunton Hills. This will be secured through young local people being taken on as apprentices and promoting the employment of people in the local area with the necessary skills or capable of learning such skills, including through Construction Training and Employment initiatives. These jobs can be both during the construction period and beyond. The availability of a good supply of skilled labour are now much more important than other location factors and this equally underpins the delivery of high quality educational opportunities at Dunton Hills.



MANDATORY PRINCIPLES - ECONOMY

The Masterplan Framework provides the opportunity to promote economic growth through the following mandatory principles:

- 01 **Living/Working at Dunton Hills** - space being available in a proportion of homes with connectivity to high speed broadband to enable people to work from home or start-up their own companies.

02 **Support Space and Facilities** - dedicated and available space, such as meeting rooms or teleconference facilities, where people living/working can hire/use to support their business activities.

03 **Employment Floorspace** - different types of flexible and adaptable employment and commercial floorspace at the Employment Hub, Village Centre and Neighbourhood Hubs offering a range of accommodation to potential occupiers both upon construction and in the future responding to market demands.

04 **Enabled Buildings** - provision of high speed broadband connectivity for all employment and commercial buildings.
- 05 **Retail Space** - commercial units within the Village Centre and Neighbourhood Hubs to be of a flexible design to adapt to changes in the retail sector.

06 **Apprentices** - recruiting young local people to be taken on as apprentices during the construction period and for the management of the Village.

07 **Local Recruitment Strategy** - promoting the employment of people with the necessary skills or capable of learning such skills through Construction Training and Employment initiatives.

ENERGY EFFICIENCY AND RENEWABLES

Dunton Hills will be a low Carbon Garden Village. This section sets out the site’s sustainability strategy.

SUSTAINABILITY STRATEGY

Energy Strategy which maximises energy efficiency, minimises energy use and promote renewable energy technologies will be prepared. However, energy efficiency and renewable energy initiatives continue to evolve alongside Government legislation and policy and, for these reasons, the Energy Strategy will need to be a living document to enable changes to be made in response to these external factors.

RENEWABLE ENERGY

Dunton Hills will be a very low carbon development and the starting point is to reduce energy use and hence carbon dioxide emissions. Although a matter for detailed design, high fabric standards combined with smart control systems enable buildings to be operated well from an energy perspective, reducing energy use and cost of utility bills.

The masterplanning of Dunton Hills has considered how it would be possible to maximise the number of buildings which can be orientated to maximise solar gain and daylight albeit there will be a need to minimise the risk of overheating. However, these types

of measures principally address heating of buildings, including reducing the risk of fuel poverty, but energy will be required for other activities, including lighting and changing of electric vehicles.

Through the Design Review process opportunities to incorporate renewable energy technologies have been explored. These opportunities have included those which are currently available. However, this is not to say that over the lifetime of the construction these will be the only technologies because new innovations may arise and become commonplace.

At this time, wind power has been ruled out on practical considerations. Biomass and combined heat and power have been discounted because they require a heat network which is considered unviable at Dunton Hills due to the low thermal demand density. Gas combined heat and power is now considered to be a high carbon technology due to the de-carbonisation of the electrical system. This might change if hydrogen gas becomes the norm.

Initially, some of the properties will include gas-fired boilers to provide space heating and hot water. However, this will stop in 2025 for new homes to be replaced by electricity. The renewable electricity generating technologies will include solar panels which themselves influence the orientation of buildings, air source heat pumps and ground source heat pumps. The potential for battery storage of renewable electricity, especially from solar panels offers the opportunity to reduce, rather than totally eliminate, the need for Dunton Hills to be on the grid. The current best practice is directed towards battery storage adjacent to sub stations rather than a battery for each dwelling. Storage of surplus daytime electricity offers a solution of charging of vehicles overnight by homeowners. Equally, vehicle batteries can be drawn upon by the occupiers at each dwelling.

MANDATORY PRINCIPLES - RENEWABLE ENERGY

The Energy Strategy shall address the following key matters::

- 01

Target for Carbon Reduction - placing shops, schools and community facilities at locations which are both accessible and prioritise foot and cycle as the preferred mode of travel.
- 02

Domestic Energy Efficiency - how buildings maximise energy conservation and efficiency through layout, siting, orientation, design and a ‘fabric first’ approach achieving, as far as is practicable based upon relevant technologies, nearly zero energy use.
- 03

Smart Homes - technology to monitor energy efficiency.
- 04

Commercial and Community Efficiency - achievement of BREEAM ‘excellent’ rating.
- 05

Overheating - principles for designing out overheating of buildings and avoiding the creation of urban heat islands.
- 06

Construction - use of low carbon technologies, materials and methods of construction.
- 07

Domestic Heating - adopting the Government’s stated policy of methane gas not being used for domestic heating from 2025.
- 08

Renewable Energy Target - achieving the Local Plan minimum of 10% of the predicted energy needs of the development from renewable energy.
- 09

Renewable Energy Technologies - identification of the suitable and appropriate technologies. The use of photovoltaic panels, air sources heat pumps and ground source heat pumps as the initial renewable energy technologies are currently the most appropriate forms of technology.
- 10

Centralised Heating - the potential for apartment schemes, commercial buildings and community facilities to incorporate low carbon combined heat and power technologies.
- 11

Battery Storage - using suitable battery storage facilities on-site to recover excess renewable energy for use later.

OTHER SUSTAINABILITY CREDENTIALS

ADDITIONAL PRINCIPLES

There are some mandatory principles which do not fit neatly into the previous chapters but are important to the delivery of a high quality Garden Village at Dunton Hills. These other Mandatory Principles are included in this section and are self-explanatory in their aims and objectives and are highlighted below.



Well integrated drainage will be key to placemaking and sustainability.

MANDATORY PRINCIPLES - OTHER SUSTAINABILITY CREDENTIALS

There are other principles that will need to be taken forward from the Masterplan Framework:

- 01

Air Quality – minimise emissions associated with Dunton Hills including through appropriate energy technologies, making walking and cycling the way to move around, clear employment uses and promoting electric vehicles.
- 02

Biodiversity – a net gain in biodiversity, protecting and retaining species and important green assets on the site, informal rather than formal landscaping and creating spaces/ planting species for wildlife to flourish.
- 03

Climate Change Resilience – through the construction period keeping sufficient flexibility to adapt to climate change and adopt new technologies as they emerge.
- 04

Heritage – retain and respect designated heritage assets and integrate these into the Garden Village.
- 05

Noise – careful layout of relationships between noisy and non-noisy uses and use of appropriate attenuation within building fabric.
- 06

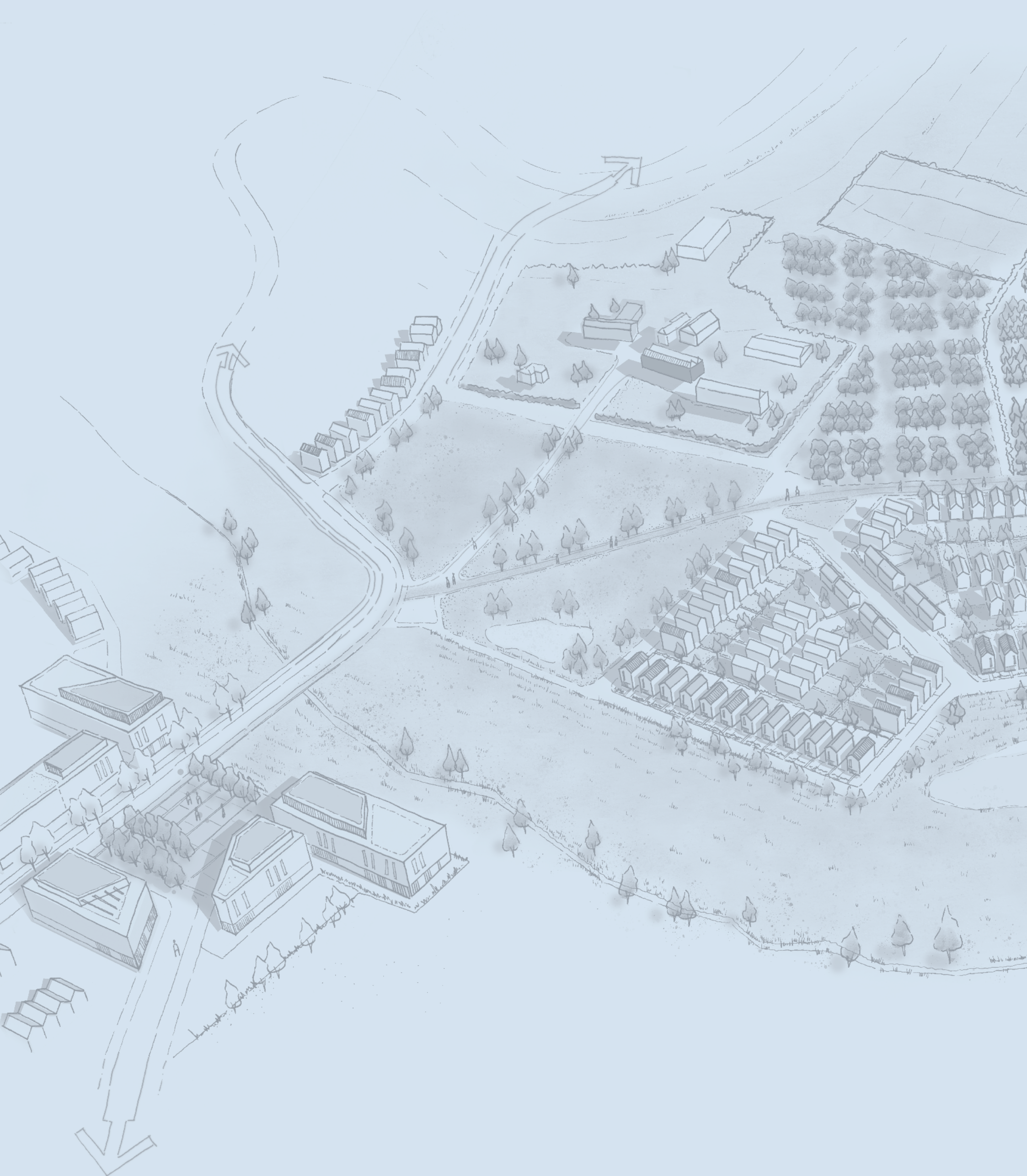
Soil – retaining and re-using soil on-site.
- 07

Sustainable Drainage – incorporation of sustainable drainage techniques based upon the Masterplan Framework’s strategy and for buildings to keep out of the flood zone.
- 08

Virtual Mobility – a strategy to enable on-line shopping and similar initiatives to enable goods and services to be purchased over the internet, including broadband, mobile telephone coverage and WiFi. Also allows for initiatives such as autonomous cars and ground drones to be adopted.
- 09

Waste Minimisation - a Waste Management Statement identifying measures to reduce waste during construction and operation.
- 10

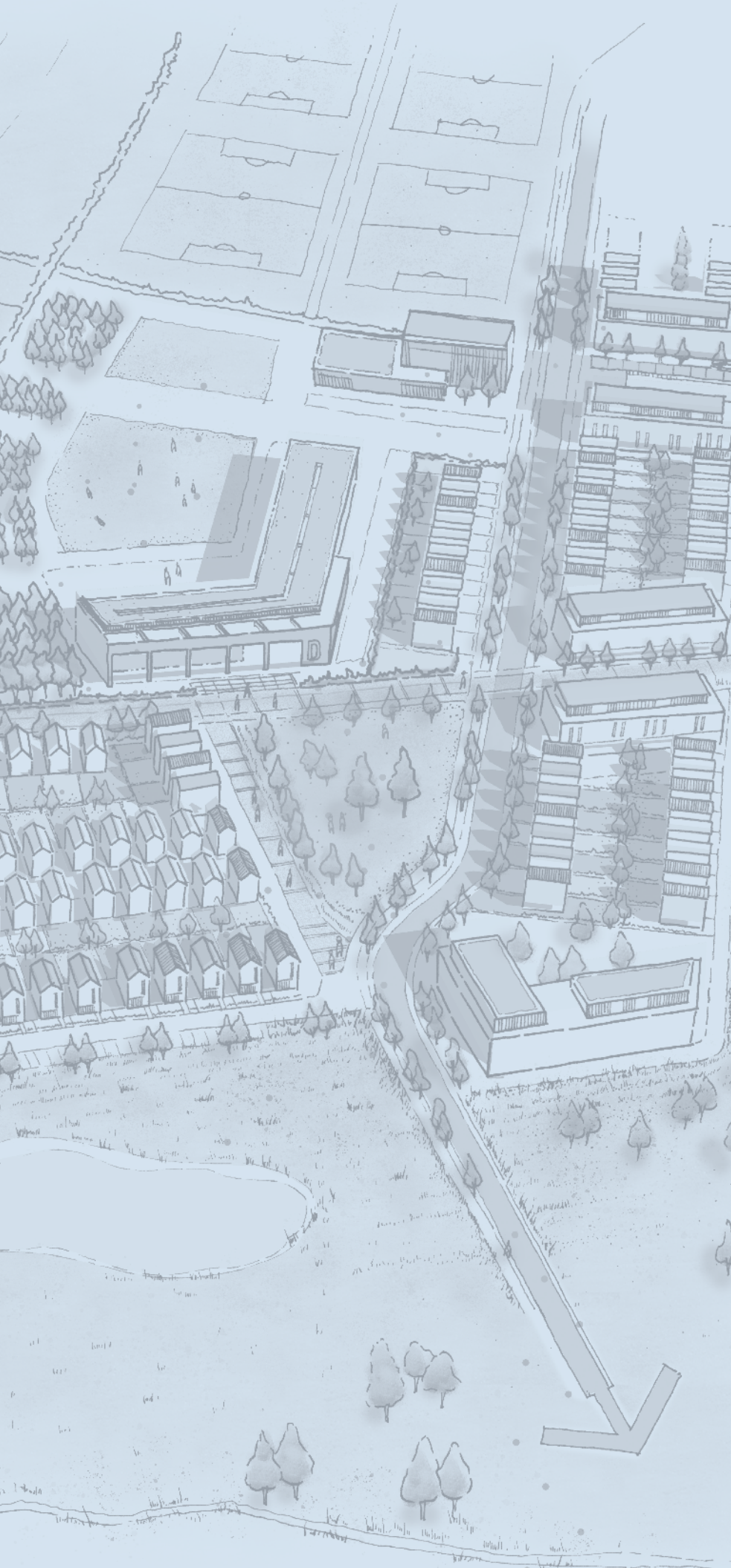
Water Efficiency - limiting the use of potable water to no more than 110 litres/person/day and harvesting rainwater, especially for maintaining gardens and landscaped areas.



CHAPTER 8

COMMUNITY, STEWARDSHIP AND LEGACY

This chapter outlines the long term sustainable management of Dunton Hills Garden Village, its public spaces and community assets for the benefit of all residents.



COMMUNITY, STEWARDSHIP AND LEGACY

MANAGEMENT STRUCTURE

The Management Approach to secure the legacy of the Garden Village is summarised in the hierarchy on the adjacent spread.

Community Management Organisation

The oversight of the management of Dunton Hills Garden Village is provided by the Community Management Organisation (CMO) which will predominantly comprise members of the Dunton Hills community together with representatives of the Borough and Parish Councils. The community representatives would be elected/appointed to serve an agreed on term.

The CMO would be responsible for the management strategy for Dunton Hills Garden Village; overseeing the activities of the Estate Trust; oversight of the concierge service, including the appointment of the key staff; approval of yearly management and business plans; agreeing to collective purchasing of services and utilities; monitoring local employment initiatives and confirmation of the annual precept payable by the occupiers. The CMO would hold the freehold of the site save for residential properties, the Employment Hub and other parcels of land as may be agreed. If established, the CMO would have input into the operation of a site specific Housing Association. Retaining the freehold would enable the CMO to capture any land value from sales or development.

Estate’s Trust

To enable the effective day-to-day management of the Green Infrastructure and other public spaces, potentially including the sustainable drainage features, an Estates Trust would be set up or the Lands Trust appointed. The Trust’s role could include collecting the precept from the occupiers of the properties; ensuring any other estate covenants are observed and administrative support for the CMO Board. The income, including from any commercial activities operated by the Trust, would be distributed to and used by the Trust.

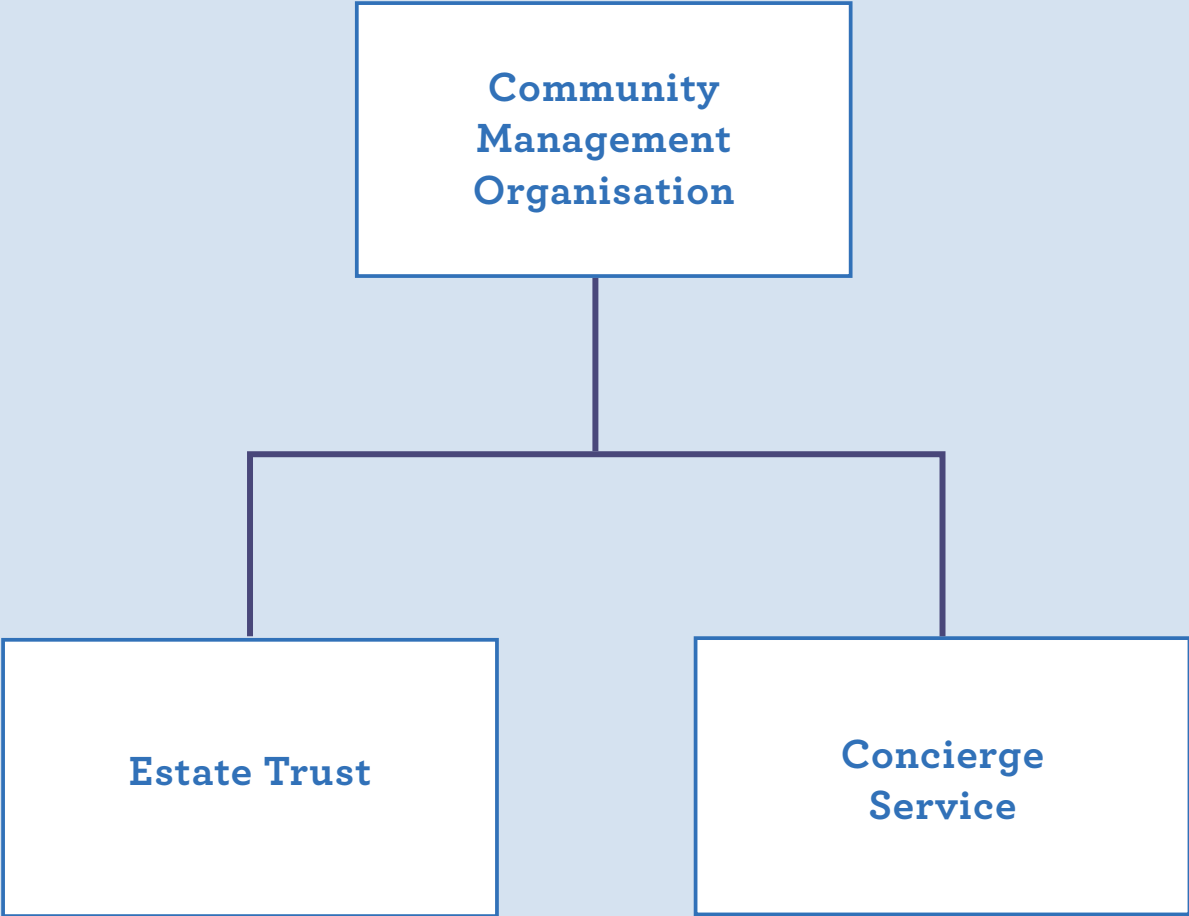
If the Lands Trust is involved then it would have a long leasehold of the land to be managed and maintained. The Trust would liaise with the management company for the Employment Hub to ensure effective management of the green spaces and parking areas is maintained.

Concierge Service

The concierge service, based at the Mobility Hub, would be overseen by the CMO but with the input from an independent Transport Review Group which would include members of the community together with representatives of the Borough and County Councils. The Group’s role is to monitor and review the operation of the Mobility Plan and advise the CMO how it is performing; what additional actions might be required by the concierge service and whether the Plan requires amendment to reflect new ideas/ change in circumstance. The concierge service would undertake personal travel planning and assist with the preparation of Travel Plans by others, such as schools and employers, to ensure they incorporate the Mobility Plan’s initiatives. Any commercial income to the concierge service would be used to off-set operating costs.



DUNTON HILLS MANAGEMENT STRUCTURE



MANDATORY PRINCIPLES - COMMUNITY, STEWARDSHIP AND LEGACY

The indicative management structure for the Garden Village above will evolve further as the legacy proposals are discussed between the stakeholders. However, based upon what is being discussed the key elements which can be taken forward are:

- 01

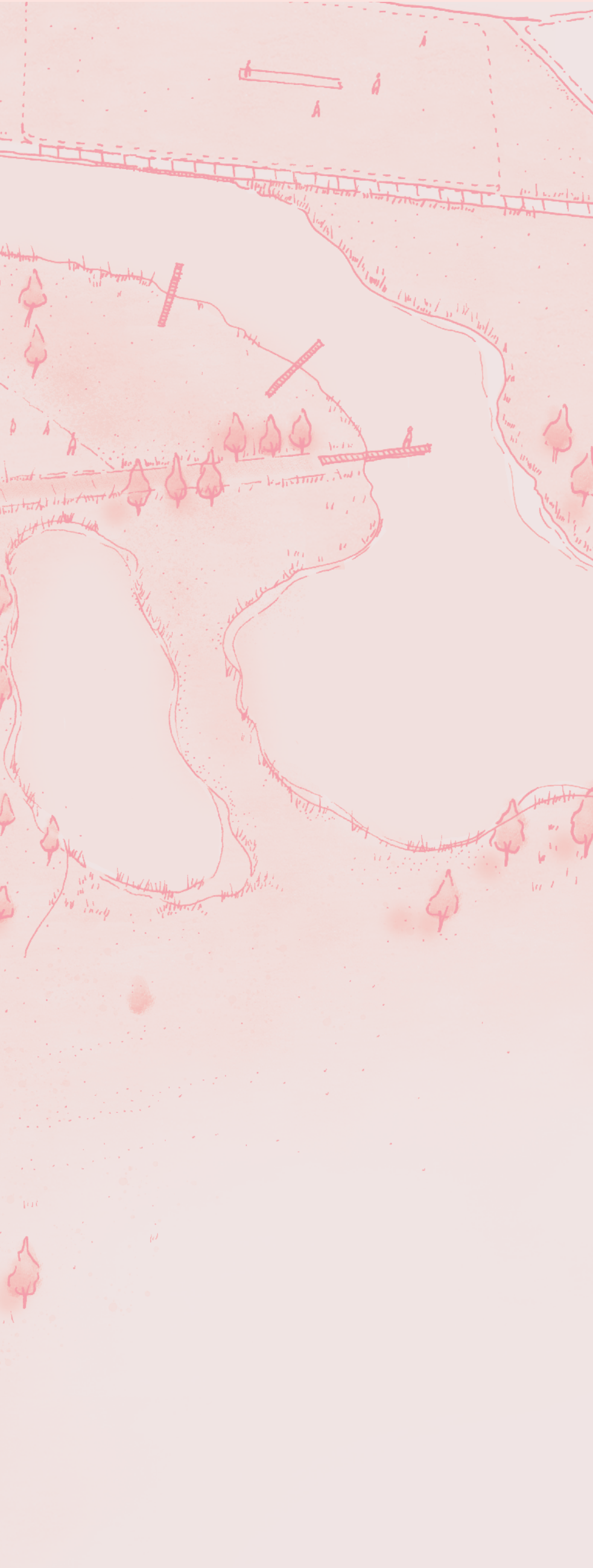
Community Management Organisation - will be established and comprise residents of the Garden Village as well as representatives from the Borough and Parish Councils.
- 02

Management Body - the body which will undertake the management and maintenance of the Garden Village initially funded via the landowners but the through income from community facilities and precepts.
- 03

A Community Concierge Service - located at the Mobility Hub to undertake a range of services set out in the Mobility Section.
- 04

Management Strategy - will be put in place with yearly management and business plans.





CHAPTER 9

PHASING AND DELIVERY

This chapter details the potential phasing strategy for Dunton Hills Garden Village and sets out estimated residential capacity, community facilities and other related works.



PHASING AND DELIVERY

MANDATORY PRINCIPLES - PHASING AND DELIVERY

Prepare a delivery plan which includes:

- 01

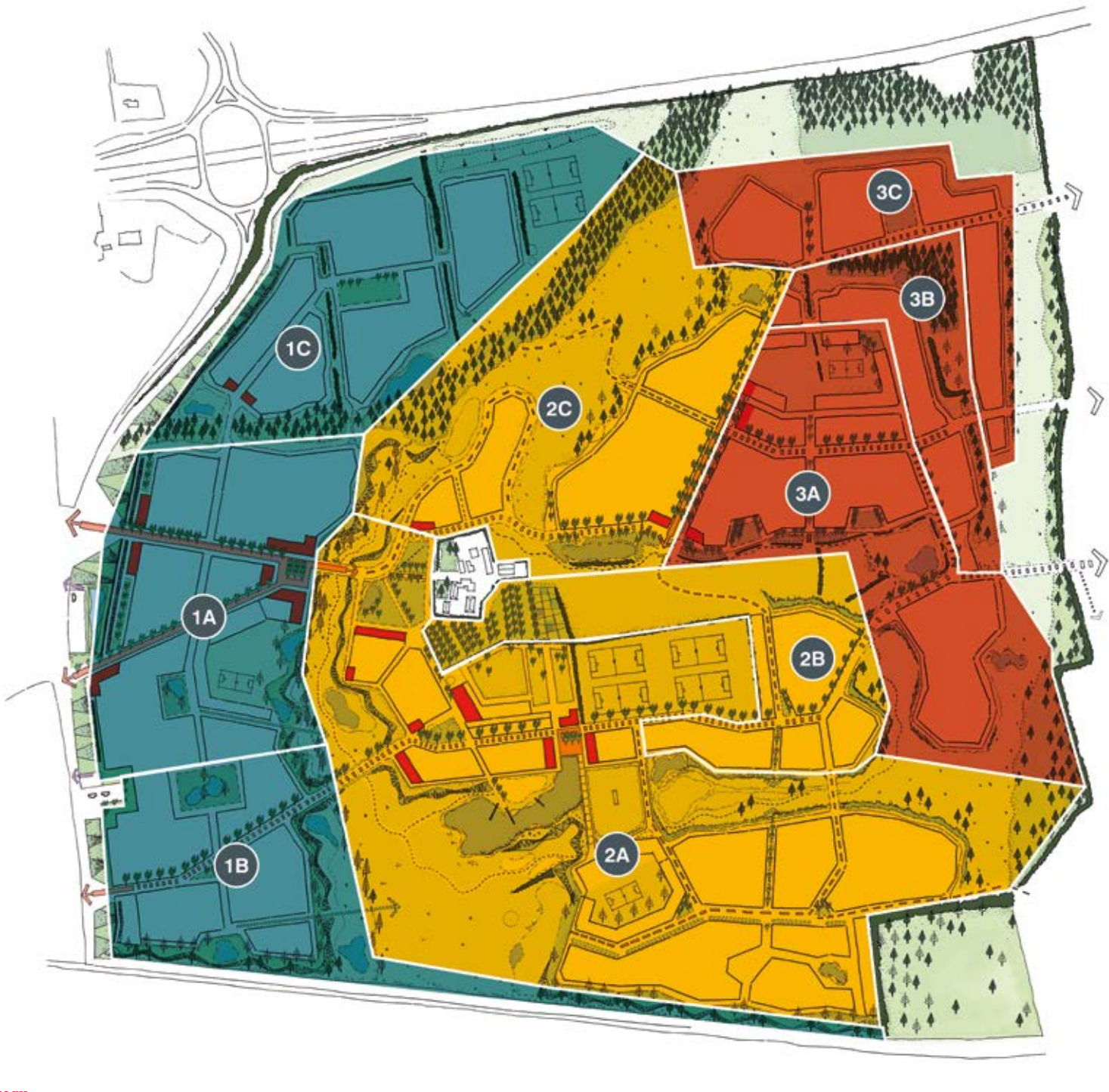
Phasing Plan – identifying the location of each phase and sub-phase. Together with estimated housing capacity and other uses.
- 02

Housing Delivery – anticipate rates of delivery of new homes.
- 03

Physical Infrastructure and Services – timing of key access, utilities/services, undergrounding of overhead electricity lines, ecological mitigation and advance planting for each phase and sub phase.
- 04

Social and Community Infrastructure – education, healthcare, open spaces, sporting facilities, village hall, etc. for each phase and sub phase.
- 05

Business Uses – phasing of Village Centre, Neighbourhood Hubs and Employment Hub within each phase and sub phase.



Indicative phasing strategy.

	Estimated Capacity	Estimated Time Period	Examples of Facilities to Be Provided On-Site	Examples of Other Related Works
Mobilisation		Years 0 to 1		Northern Access Services and Utilities to the site Start of undergrounding overhead lines – 3 years
Dunton Fanns				
Phase 1A	798	Years 1 to 3	2FE Co-located Primary School Healthcare Facility Mobility Hub and related facilities Temporary Management Facilities Private nursery Care Home Start of Village Centre around Square Play Facilities	Sustainability Route Mobility Routes Station Road footway/cycleway Station Road/Sustainability Route junction West Horndon Station interim works Temporary sports pitches using golfing facilities as a base Blue Infrastructure - SuDS Green Infrastructure – landscape/ecology including advanced planting Southern Access an remainder of A128 corridor works
Phase 1B	417	Years 3 to 4	Ongoing Village Centre Community Hall and Management Facilities 5 travellers pitches Play Facilities	A127/A128 Junction Link towards Country Park Mobility Routes Blue Infrastructure - SuDS Green Infrastructure – landscape/ecology including wetlands area
Phase 1C	390	Years 4 to 7	Ongoing Village Centre Employment Hub – take-up demand related Crèche/Nursery Football Hub Play Facilities	Noise attenuation Mobility Routes Blue Infrastructure - SuDS Green Infrastructure – landscape/ecology including orchard
Dunton Waters				
Phase 2A	708	Years 6 to 10	Ongoing Village Centre 2FE Co-located Primary School Private Nursery Neighbourhood Hub Play Facilities Cricket Pitch Village Green Care Home Secondary School including Community Sports Hub	Mobility Routes Blue Infrastructure - SuDS Green Infrastructure – landscape/ecology Link through to Basildon – pedestrian/cycle and emergency access
Phase 2B	218	Years 10 to 12	Ongoing Village Centre Community Growing Space Community Orchard	Mobility Routes Blue Infrastructure - SuDS Green Infrastructure – landscape/ecology including part of Ridge Park
Phase 2C	291	Years 12 to 14		Mobility Routes Blue Infrastructure - SuDS Green Infrastructure – landscape/ecology including rest of Ridge Park
Dunton Woods				
Phase 3A	462	Years 14 to 16	Play Facilities	Mobility Routes Blue Infrastructure - SuDS Green Infrastructure – landscape/ecology Wind turbine removal
Phase 3B	161	Years 14 to 15	2FE Co-located Primary School Private Nursery Neighbourhood Hub Play Facilities Care Home	Mobility Routes Blue Infrastructure - SuDS Green Infrastructure – landscape/ecology
Phase 3C	222	Years 15 to 17	Play Facilities	Mobility Routes Blue Infrastructure - SuDS Green Infrastructure – landscape/ecology



APPENDIX 1

SUPPORTING
CONTEXT ANALYSIS
AND TECHNICAL
WORK

The information provided within Appendix 1 forms part of the detailed background work relating to the Masterplan Framework. The majority of the work within this appendix was compiled prior to and during early stages of the design process. The information includes an in-depth contextual analysis, as well as the masterplan evolution and design review process.

A1.1	WIDER CONTEXT ANALYSIS	P. 130
A1.2	SITE ANALYSIS - SUPPORTING TECHNICAL WORK	P. 148
A1.3	HERITAGE STATEMENT EXTRACT	P. 166
A1.4	DESIGN REVIEW PROCESS IN DETAIL	P. 172



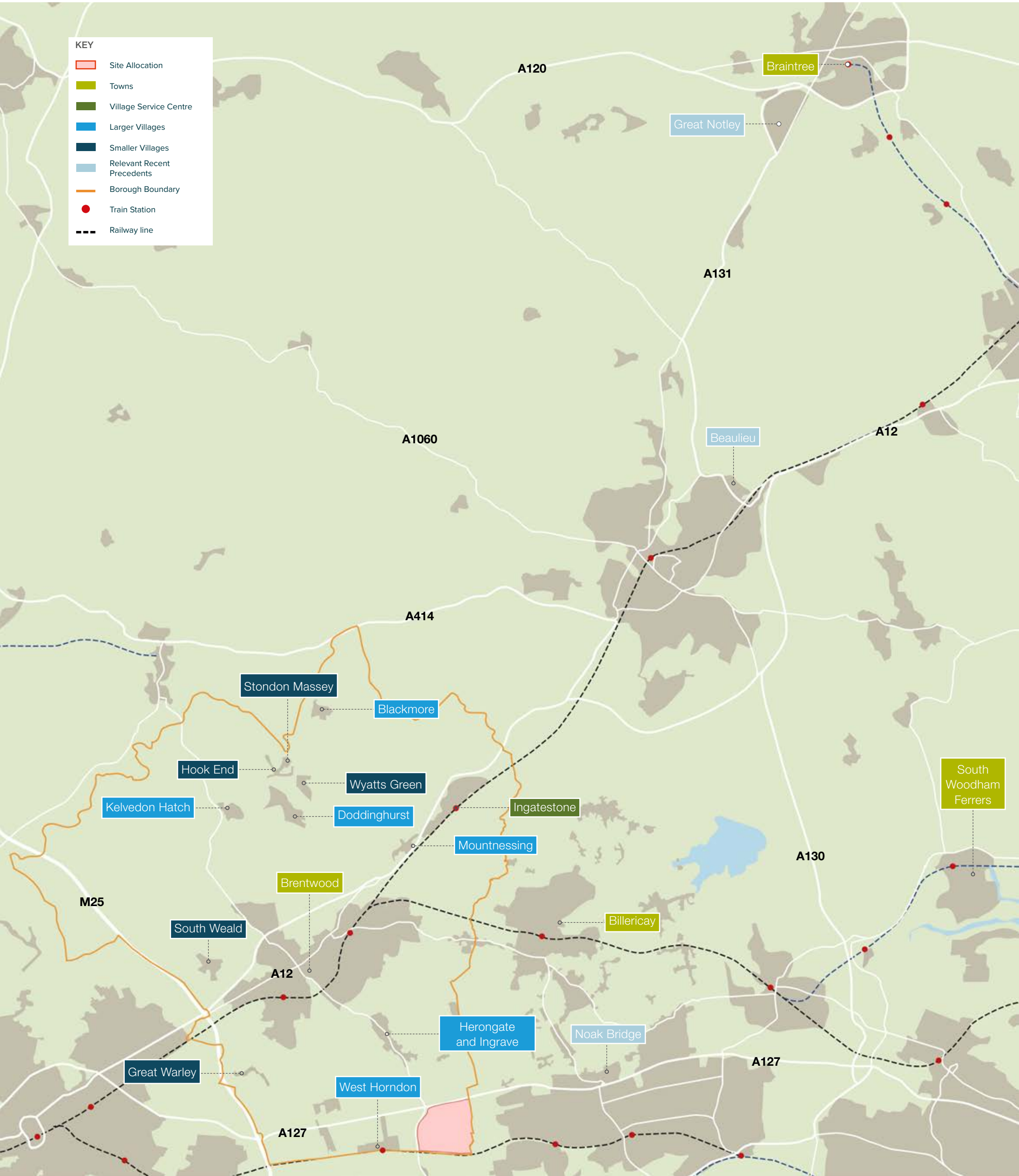


APPENDIX 1.1

WIDER CONTEXT ANALYSIS

Strong character helps enhance local identity and creates a strong and rich sense of place. The following chapter outlines the key lessons learned from the analysis of local settlements in the wider area.

A1.1





UNDERSTANDING THE SURROUNDING SETTLEMENTS

OVERALL SETTLEMENT PATTERNS IN BRENTWOOD

The Borough defines itself as a ‘Borough of Villages’, with a single predominant settlement, the market town of Brentwood, surrounded by countryside within which are several villages but no other equivalent towns (Brentwood Draft Local Plan Pattern Book page 7, Brentwood Borough Council, January 2016). Previous analysis by the Council has identified a clear settlement hierarchy within Brentwood Borough.

THE SCOPE FOR UNDERSTANDING SURROUNDING SETTLEMENTS

During our analysis of the surrounding villages and settlements, it was clear that the village typology would likely provide relevant and consistent examples of local character. However, taken as a whole, the proposals for Dunton Hills are likely to comprise a scale of settlement not represented within Brentwood Borough itself. Therefore, we have also looked further afield across the south-west Essex sub-region for contemporary developments of a more equivalent scale e.g Chelmsford (Beaulieu) and Braintree (Great Notley). The settlements chosen for analysis are shown on the adjacent plan.

METHODOLOGY AND AIMS

Our initial analysis of the local area ranged in scale and concentrated on the following elements:

- **Settlement Wide Scale:** Historic development, focal centres, facilities and relationship of settlement to local topography and landscape features;
- **Neighbourhood Scale:** Focal spaces, block typologies, street typologies, street frontages and building heights;
- **Plot Scale:** Building typologies, architectural treatments, facing materials and boundary treatments.

This analysis provided a number of typical elements and characteristics which could be used to guide future development at Dunton Hills Garden Village.

KEY POINTERS FOR DESIGN

The key overall characteristics and elements of the places assessed are as follows:

- Focal spaces are often the most important character elements within a settlement and help to create a distinctive and pleasant sense of place.
- Street hierarchy is well defined and characterful and helps to create a legible environment.
- Building line and building scales consistently generate a strong sense of place through patterns of variety and consistency. This is an opportunity to reference the rich and mixed character of the ‘Borough of Villages’.

Individual case studies that could relate well to the Garden Village masterplan are further explored over the following pages of this section. This study does not imply that individual elements and characteristics are to be faithfully repeated and replicated within Dunton Hills, rather that key elements of the local area influence the detailed design process.

SETTLEMENT STRUCTURE



Facilitites in Doddinghurst, Hook End, Stondon Massey and Wyatts Green

The settlement structure of the villages of Doddinghurst, Hook End, Stondon Massey and Wyatts Green provide an interesting reference point for Dunton Hills in terms of the multinodal distribution of community facilities and services.

Key

Education

Playing Fields

Shops

Food and Drink

Walkable Open Space

Religious

Community

Medical

Employment/Industry

ROLE AND FUNCTION

Doddinghurst, Hook End, Stondon Massey and Wyatts Green are a closely linked cluster of villages/neighbourhoods roughly 12km to the north of Dunton Hills.

Despite rapid post war expansion and coalescence the villages remain semi-rural in nature. The villages are set within open countryside with generous areas of recreational space and swathes of woodland and heath running centrally through the villages/neighbourhood.

The interface between rural and urban elements and the range, role and function of open space within this collection of villages helps to ensure that development is respectful of its setting.

URBAN STRUCTURE

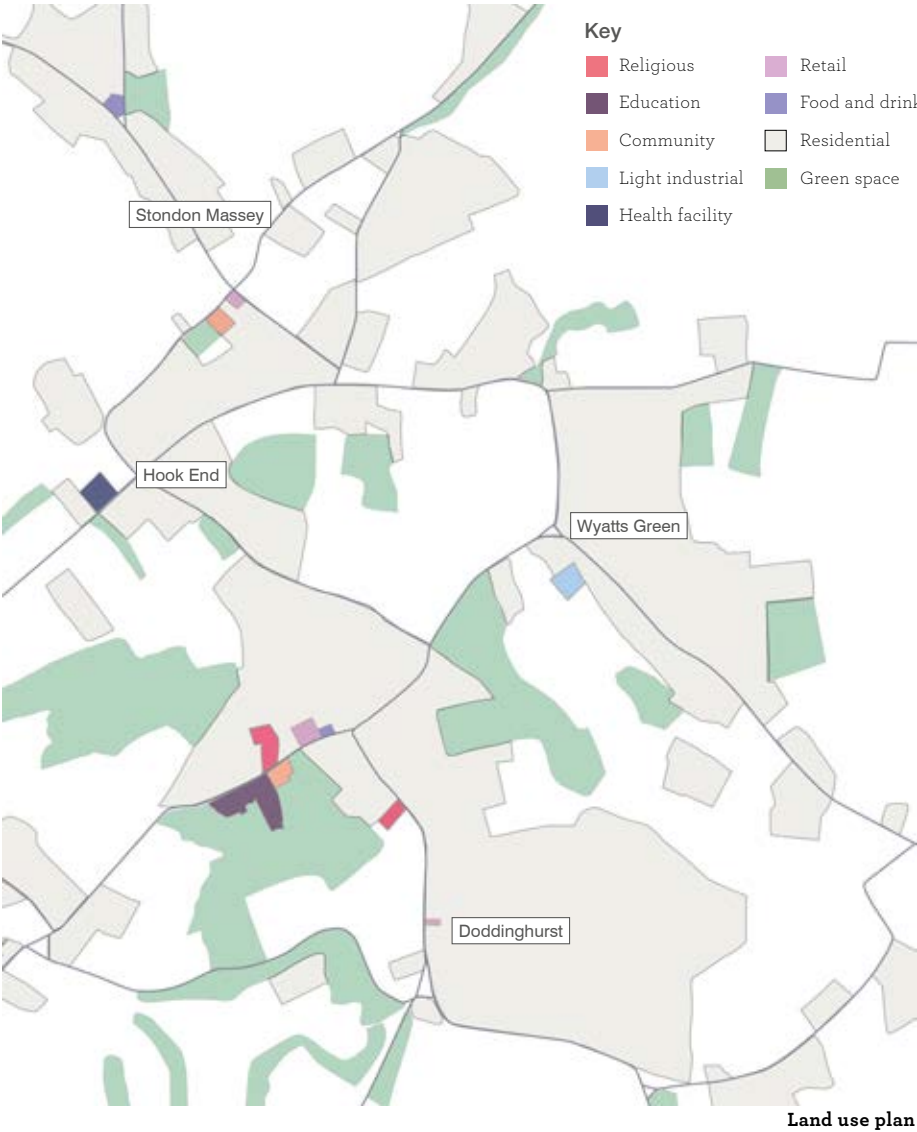
The urban form of the villages is characterised by linear residential development along the main transportation routes surrounded by open countryside.

As is typical of many historic settlements, growth is often concentrated around a key focal point. In Doddinghurst, All Saints Church was the anchor for the historic growth of the village and continues to play a central role in the village with the majority of retail facilities and services consolidated within an 800m walk of this historic feature.

Additional facilities are located throughout the villages with smaller retail cores (2-3 shops/facilities) evident in Stondon Massey and Hook End.

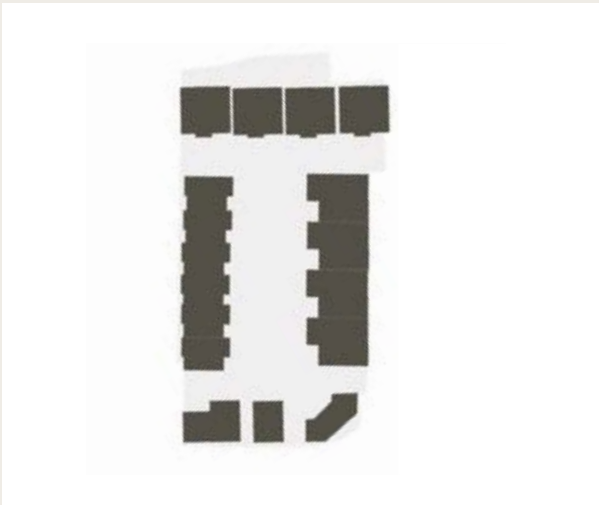
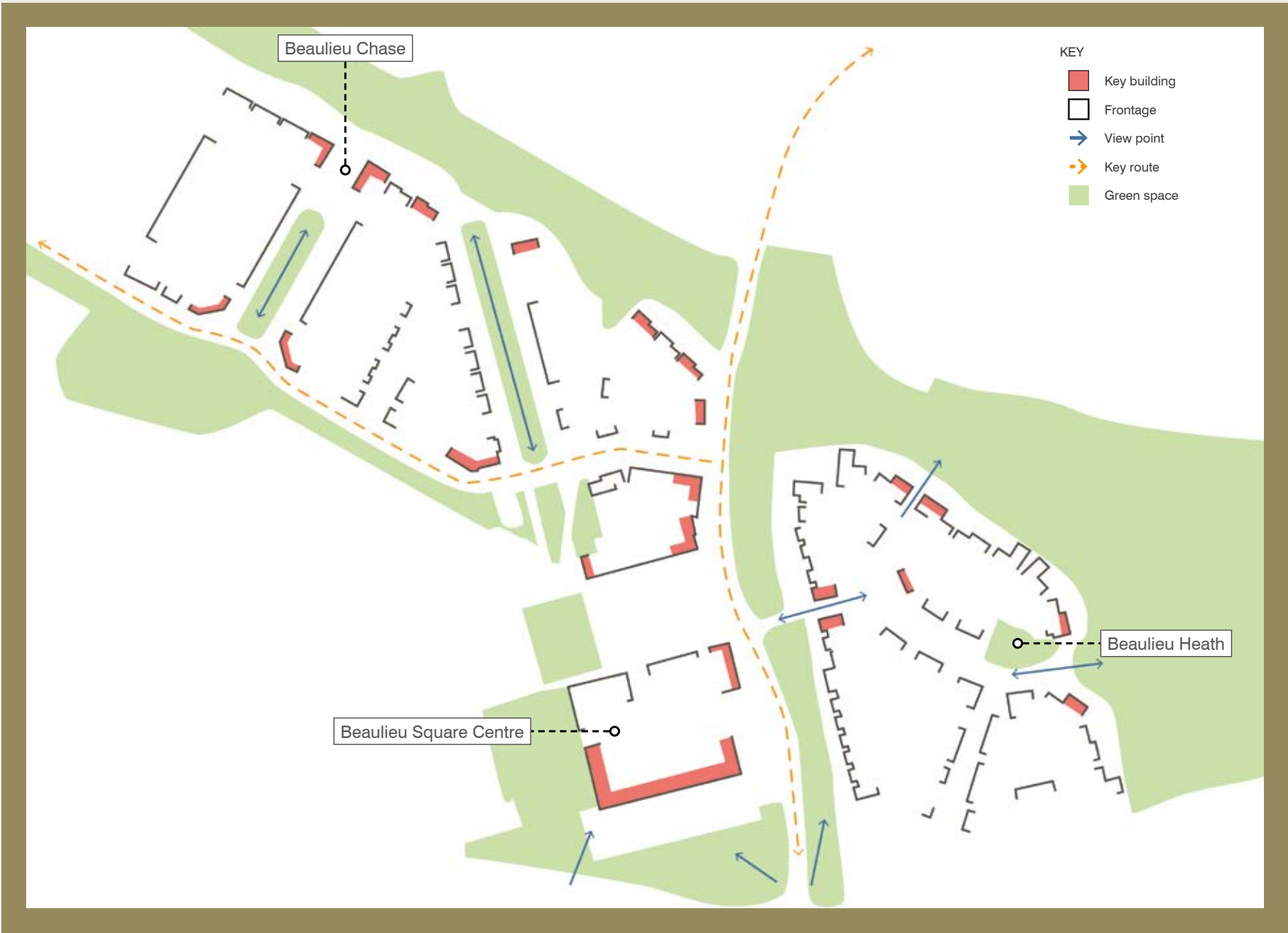
RELEVANCE TO DESIGN

- **Consistent pattern of land use distribution:** focal centre around community and commercial uses.
- **Sustainable distribution of wider services:** to ensure that the settlement is walkable and facilities are easily accessible.
- **Consistent pattern of a poly-nucleated settlement:** whilst each village ‘core’ varies in size and function.
- **Importance of green infrastructure:** each settlement sits naturally within the surrounding landscape, which permeates into the villages and plays a key function in promoting well being and healthy lifestyles.
- **Linear pattern of growth:** particularly along primary routes.



NEIGHBOURHOOD TYPOLOGIES

The mixed use development of Beaulieu contains three neighbourhoods, each of which have a distinctive character reflected in the block structure and layout. The green infrastructure provides a unifying features and snakes through the development as a whole.



Formal Block



Rural Edge



Residential Courtyard



The Green provides visual contrast to the built environment and enhances the rural character of the development.



The Green Infrastructure is well connected, creating a unified, walkable development.



Continuous frontage and contemporary take on traditional terrace design elements.

BUILDING LINE

Frontages have been carefully designed to create a strong presence, with corner buildings treated especially carefully. Along primary routes and open spaces, frontages are generally continuous.

CONSISTENT GEOMETRY

The approach to legibility within the built form is identifiably consistent throughout the three neighbourhoods, notwithstanding the differences in architectural style between them. This is achieved by consistency in key frontages and corner buildings.

Beaulieu Chase has a formal layout arranged around a clear orthogonal geometry. This is also reflected along the western edge of Beaulieu Heath, which is defined by a geometric arrangement of terraces.

Behind this, a more traditional, informal pattern of houses and streets is laid out. The houses are larger detached or semi-detached and frontages are informal and less regularly geometric on plan. Steps and setbacks in the building line also become more common here.

ROUTES

Primary routes are curvilinear with formal secondary streets running off this.

NODAL POINTS

Gateways and junctions are accentuated by feature buildings creating a legible layout. Beaulieu Square forms a strong landmark feature marking the arrival into the development. It is laid out as two ‘doughnut’ development blocks of linked buildings facing outwards with a formal open space between the built form.

As previously mentioned, the green infrastructure running in between the three neighbourhoods acts as a unifying feature. Within these landscaped nodal points, a number of mature existing trees are retained which enhances the quality of the streetscape and also provides a number of focal elements complementary to the adjoining built form.

RELEVANCE TO DESIGN

- Beaulieu manifests a **contemporary architectural inspiration**, reflecting elements of local tradition but seeking to establish a character and identity beyond the repetition of traditional pattern and form.
- Green Infrastructure should be used to soften and **break up built form**.
- Green Infrastructure that is interwoven and truly integrated helps creates a **unifying element**, within neighbourhoods of varied character.
- Legibility and a varied character can be achieved through **consistent geometry and building types**, whilst building details and materials can vary.

BLOCK TYPOLOGIES

The linear High Street is a defining feature of larger settlements within the Borough and help shape their overall character, as described later on in this section. Within Ingatestone High Street, a variety of block characters and typologies are evident as highlighted on this spread.

BUILDING LINE

The slight inflection and variation in width of the High Street is a legacy of the medieval street market and burgage plots. The compact building line and slight inflection in the building frontage combine to create interesting vistas and nodal points.

Built form is arranged tightly along the High Street and fronts directly onto the main thoroughfare creating an overall feeling of enclosure.

CONTRASTING ROUTES

The regular rhythm of the High Street frontage is intersected by a number of connector routes; narrow streets, alleyways and carriage arches. These lead to quiet residential lanes and rear courtyards which primarily function as car parks and gardens.

The close assemblage of tight alleyways and narrow lanes are visually appealing, terminating views and creating a character that contrasts to the linearity of High Street.

NODAL POINTS

Nodal points along the High Street are both hard landscaped and soft landscaped and are created through incidental widenings in the historic High Street. These nodal points vary from small breakout spaces (The Chequers) with planting and seating to the openness and soft landscaping of the churchyard, and provide relief from the hard surfaces and constrained nature of the High Street and valuable amenity space for relaxation and social interaction.

Built elements to the northern and southern end of the High Street are spaced further apart emphasising the transition from dense core to peripheral residential areas.



A strongly defined, regular building line along the High Street



The High Street opens up at a key point



Residential Courtyard typology to the rear of the High Street

RELEVANCE TO DESIGN

- **A regular frontage along primary routes** creates a sense of formality and enclosure and is a strong local precedent.
- Small elements of **inflection and openings along the street** creates visual interest and frame views.
- **Taller building heights** at focal points further enhances the sense of enclosure and legibility.
- The strong linearity of the High Street should be **interspersed with nodal points**, providing an opportunity to open up the High Street and accommodate focal spaces for rest and recreation.
- Secondary streets off the High Street provide an opportunity for **informality and less regular arrangements** contrasting to the linear High Street.



Ingatestone High Street

STREET TYPOLOGIES

Within the settlements studied, streets typologies generally fall into the four categories summarised below. Of these four, the most common streets are ‘residential streets’ and ‘lanes’, with the distinction based on the width of the street and the character of the frontages.



- Central focal element in larger settlements in the area (Brentwood, Billericay, Ingatestone);
- Characterised by non residential uses on both sides;
- Built form is often of larger scale than surrounding residential areas;
- Built form closely fronts street on both sides, enclosing space.



- Not a traditional feature of townscape in this part of Essex;
- A key feature in Great Notley, explicitly designed as a ‘Garden Village’, with a Boulevard spine road through the settlement;
- Streetscape within the area is generally defined spatially and in terms of built form character than landscaping.



RESIDENTIAL STREET



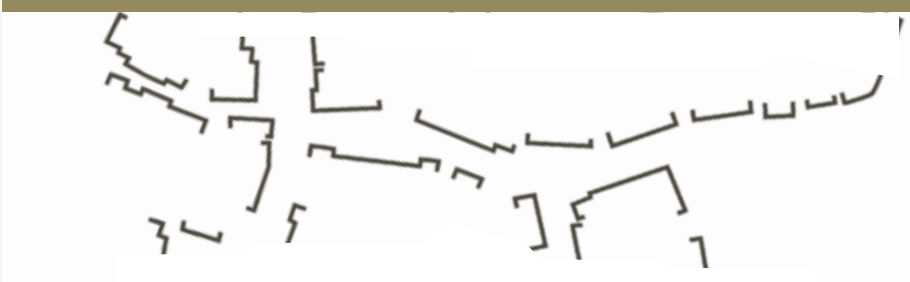
- Generally have separate vehicular and pedestrian functions, with pavements on one or both sides;
- Are fronted by a wide range of building types, usually set back behind a shallow front garden;
- Front garden depths and soft landscaping within the streetscape vary, as do the means of enclosure used to define the public and private realms.

LANE



- Narrower streets, lanes often comprise a shared surface with no separation between vehicles and pedestrians;
- Front garden depths are often small, and properties front directly onto the carriageway creating an enhanced sense of enclosure;
- Lanes can be very 'hard' in character, with minimal soft landscaping within the streetscape;

EXAMPLE: NOAK BRIDGE



EXAMPLE: BLACKMORE



FOCAL SPACE TYPOLOGIES

1.

1.	<div>MARKET SQUARE<ul style="list-style-type: none">• A feature in larger settlements.• A key retail and social hub for the settlement.• The central open space is flexible and can support a number of temporary uses.• Active frontages at ground level animate the central open space.</div>
2.	<div>RECREATIONAL CIVIC GREENS<ul style="list-style-type: none">• Acts as a `significant open space within the settlement; often civic.• Perform key spatial functions, such as recreation, incorporating formal and informal uses.• Potentially act as venues for community events.</div>
3.	<div>LOCAL VILLAGE GREENS<ul style="list-style-type: none">• Common throughout most of the settlements studied.• Perform important spatial functions and provide a significant focus within immediate surroundings.• Recreational function is limited by their size.• Key visual amenity and occasional informal recreation.</div>
4.	<div>NODAL POINTS<ul style="list-style-type: none">• Open spaces are often located at key junctions within a settlement, their significance is generally denoted through:<ul style="list-style-type: none">- The built form or character around the junction.- The presence of a significant tree or other landscape feature</div>

MARKET SQUARE



Braintree Market Place

RELEVANCE TO DESIGN

- Built form varies in height and architectural composition with taller elements positioned at corner locations serving as marker buildings aiding legibility.
- Built form has a positive relationship with the street and a similar layout would be well suited to a village core, where surveillance and intimacy are important.
- Parking is sensitively incorporated into the streetscape with additional parking in rear courtyards.

2.

Within the settlements studied, focal spaces at a range of scales are an extremely important means of establishing settlement structure and providing legibility.

RECREATIONAL CIVIC GREENS



Ingrave Common



The Green, Great Notley

RELEVANCE TO DESIGN

- These spaces have an open character and provide an attractive green setting for adjacent built form.
- Their size and scale reflects their importance as a structural feature and role as a key community facility.
- The expansive nature of these spaces affords the opportunity for a variety of informal and formal recreational uses.
- Surrounding land uses are a mix of residential, community use and retail.

- Surrounding built form is arranged in a semi-continuous/informal building line (of 2-2.5 storeys) further emphasising the open nature of the space.
- The examples outlined here provide a valuable reference for potential future design, and are of particular relevance for large central greens at the heart of a development.

3.

LOCAL VILLAGE GREENS



Blackmore



Herongate

RELEVANCE TO DESIGN

- These compact green spaces serve as a pause in the built environment.
- These spaces have an informal, incidental nature and provide visitors with an opportunity to sit, relax and socialise.
- Trees are used to soften the streetscape and create a break between residential streets and busier vehicular routes, lessening the visual and acoustic impact and enhancing the rural nature of the streetscape.
- Strong frontage and overlooking with varied boundary treatments.

- These spaces are well integrated in to their surroundings and there is a good interplay between built form and green spaces providing natural surveillance.
- The scale and structural arrangement of these spaces could be used to inform the design of focal spaces and intimate small scale Neighbourhood Hubs.

4.

NODAL POINTS



Blackmore



Great Warley

RELEVANCE TO DESIGN

- The primary function of these spaces (irrespective of scale) is to serve as a visual marker at junctions.
- Feature buildings are often situated here, further emphasising their role as a spatial focal point.
- These spaces are defined by the surrounding built form. This is often informally arranged with irregular setbacks and boundary treatments (as seen in both Blackmore and Great Warley) which creates a rich and varied streetscape.
- The examples outlined here could influence the structure of key arrival space for designs at Dunton Hills helping to enhance legibility within the site.
- Where there is no landscaped green present at a junction, its focal significance is still denoted through built form and character.

BUILDING STYLE TYPOLOGIES

Dunton Hills is likely to feature a mix of architectural styles, given the scale of the development. A united and legible sense of place can be achieved whilst reflecting elements of local tradition, beyond the repetition of traditional pattern and form.



FENESTRATION

- Juxtaposition of horizontal and vertical fenestration is common, to add interest.
- Less pronounced/ornate fenestration at second floor level is frequently used.
- Casements generally follow a traditional palette and style.
- Simple brick pediment/timber frame often used.

ROOFLINE

- Tend to be irregular.
- Prominent chimney stacks consistently feature.
- Dormers and skylights are a common feature.
- Roof finishes are light or dark red plain tiles or slate.

MATERIALS

- Materials generally simple and pared back to unify more varied elements of built form, such as building line and roofscape.
- Horizontal weather boarding and banding is frequently used.
- Buff brick and render in a variety of light colours is consistent and creates contrast.
- Materials are varied on secondary elevations.





APPENDIX 1.2

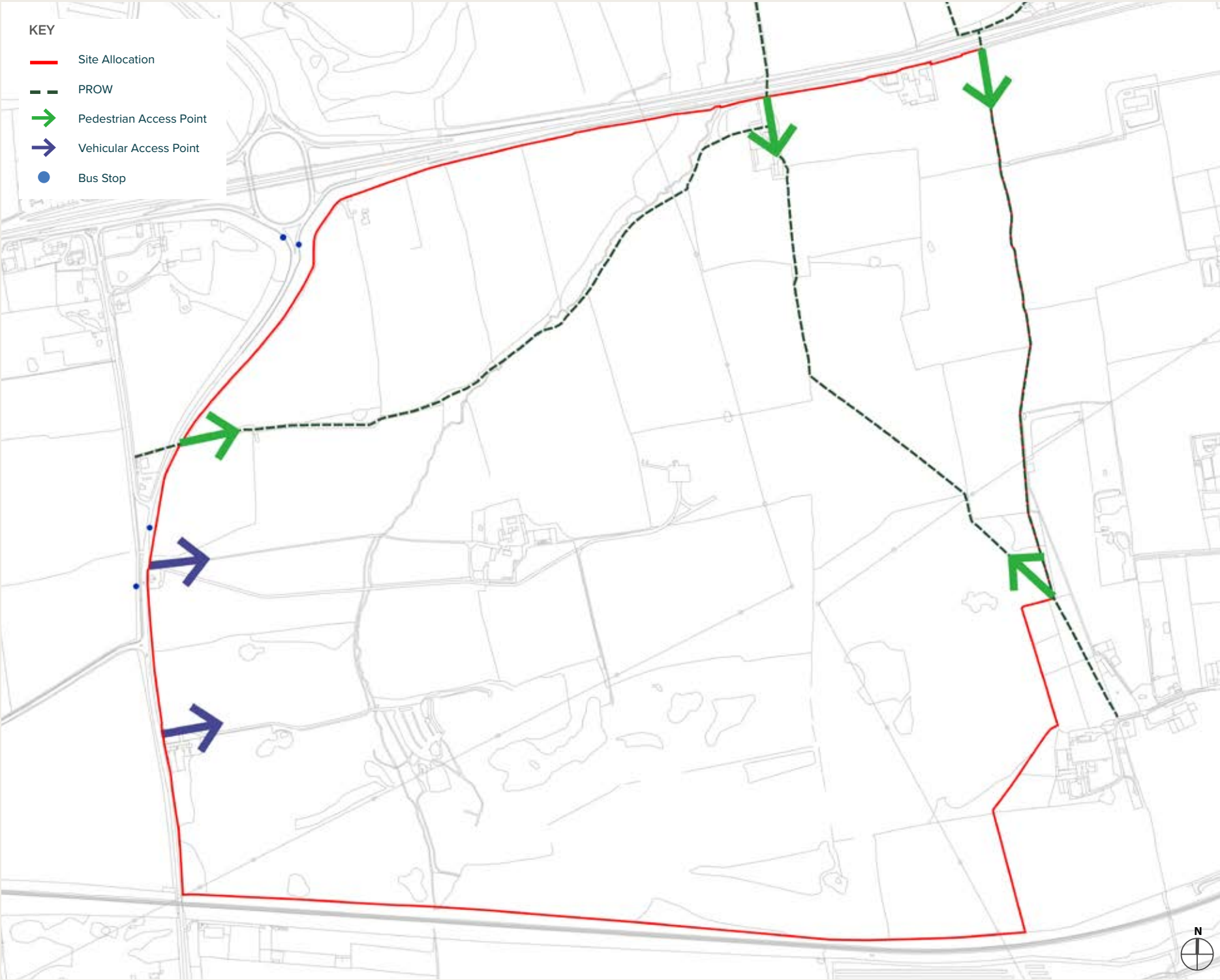
SITE ANALYSIS

This section provides further analysis of the site's main features including existing access and movement, utilities, noise and landscape character and ecology.



A1.2

ACCESS AND MOVEMENT



ACCESS

The site is currently accessed from the A128 to the west. Existing access points from here comprise: the driveway to Dunton Hills Farm: a track to a dwelling in the north west of the site; and the access road to the golf centre club house in the south west of the site. There is a vehicular access to the nursery from the A127. The C2C railway line restricts any access from the south.

WALKING AND CYCLING

A Byway (Nightingale Lane) runs across the north western part of the site, through the ancient woodland area and out towards the A127 in the north of the site, whilst a further Public Right of Way runs from the Timmermans Nursery site in the north east across the site and down towards the small settlement of Dunton in the south east. There is a further footway paralleling the eastern boundary of the site which links the A127 to Dunton.

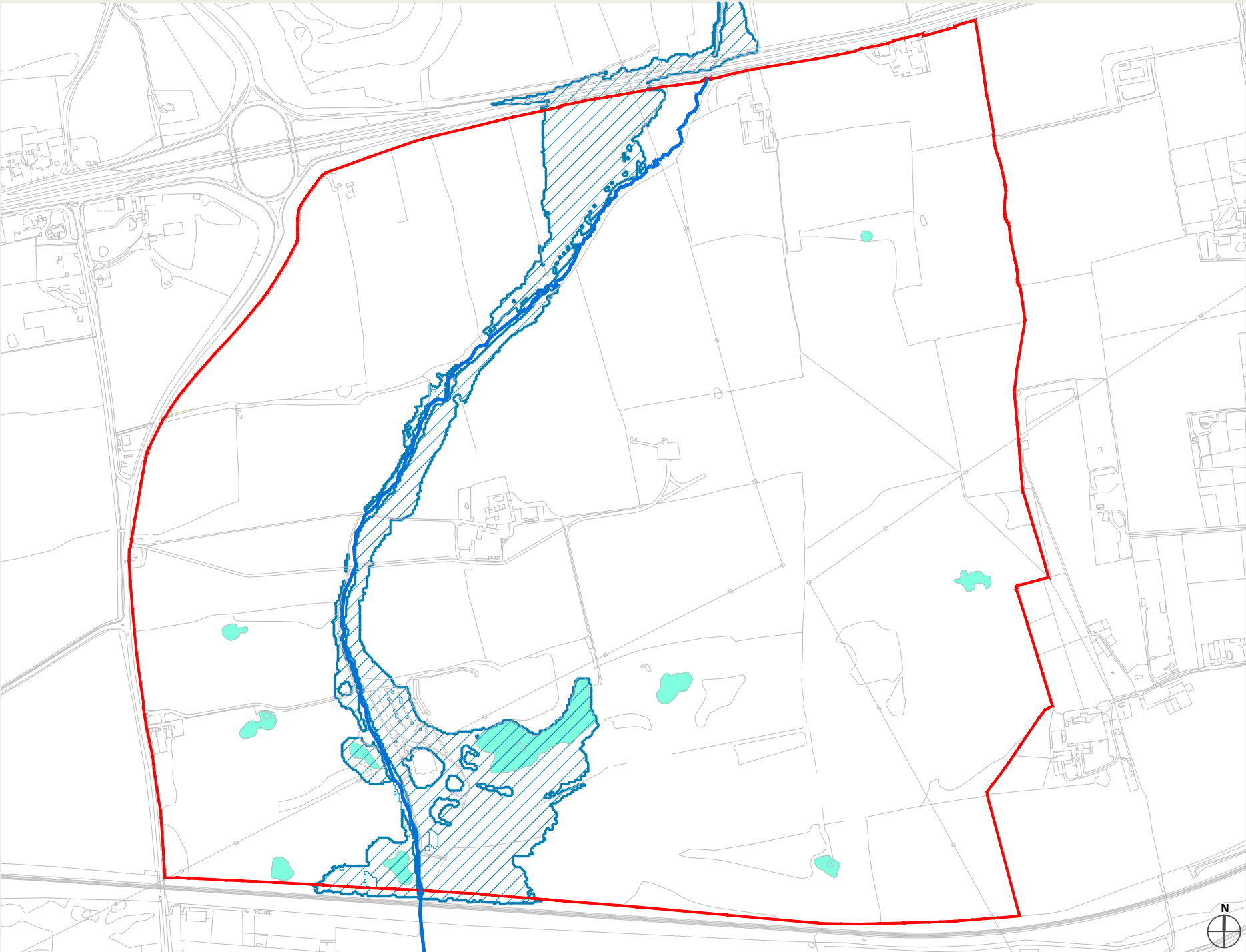
There are currently only a limited number of crossing points across the A128 and these only consist of small central islands. A narrow public footpath exists on the western side of the A128, running between Station Road and Tilbury Road.

There is a cycleway running along the south side of the A127.

PUBLIC TRANSPORT

A bus stop is located within the A128 public footpath serving the northbound route of the 565 bus. A further bus stop serving the south bound 565 bus route is located near the junction of the A128 and the driveway to Dunton Hills Farm. The 365 service runs 6 times a day with a journey time of around 20 minutes to Brentwood.

FLOOD AND DRAINAGE



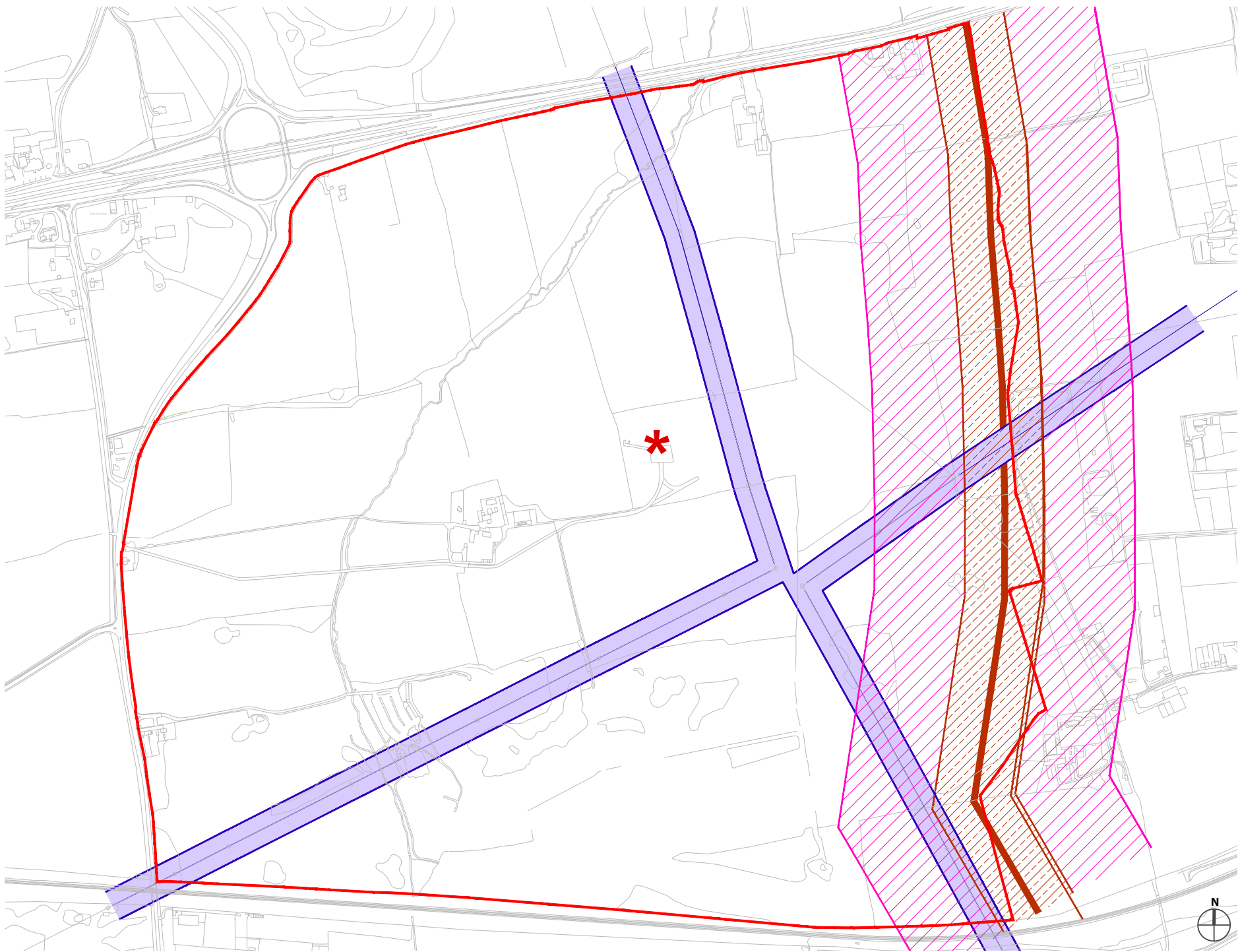
- KEY
- Site Allocation
 - Eastlands Spring Watercourse
 - Waterbody
 - Flood Zone 3

Eastlands Spring runs through the site in a north-south direction. It enters the site under the A127 just to the west of Timmermans Nursery before running through an area of dense ancient woodland. It then heads south running to the west of the grounds of Dunton Hills Farm and the golf centre club house before leaving the site in a culvert under the C2C railway line.

The floodplain (flood zone 3) associated with Eastlands Spring is shown on the map (above) and covers a larger expanse as the topography changes into more open, flatter land around the golf course in the south.

Other water features on the site include a number of lakes and ponds constructed as part of the golf course. A number of these contain great crested newts.

UTILITIES



- KEY**
- Site Allocation
 - Overhead 132 kW Powerline/easement (30m)
 - 500 kW Wind Turbine
 - High Pressure Gas Main
 - HSE Inner Zone
 - HSE Outer Zone

Two overhead 132 kW power lines criss-cross the site. The first power line enters the site in the south west corner and runs towards the lower reaches of the ridge-line before diverting north and leaving the site across the A127. The second line runs from the south east-corner and diverts (in close proximity to the other power line) towards the north. The two lines do not cross/meet.

These comprise a major site constraint and a no build buffer is shown on the plan (above). Discussions with the utility provider have indicated that these lines could be undergrounded, albeit the site would need to host termination towers.

A high pressure gas main is located in the east of the site, close to the eastern boundary. This main (the Roxwell/Horndon High Pressure Gas Main) enters the site under the C2C railway line before diverting off in a northerly direction.

The gas main has an immediate no build buffer extending 6m either side of the main and a further buffer 10m either side of the main where there are restrictions over planting.

The HSE provide indicative advice with regards to further zones comprising an Inner and Middle Zone (78m) and an Outer Zone (225m). Within the inner zone no built development can take place. However, roads, open space and parking areas are acceptable. Within the Outer Zone any development can take place, with the exception of vulnerable uses e.g. care homes.

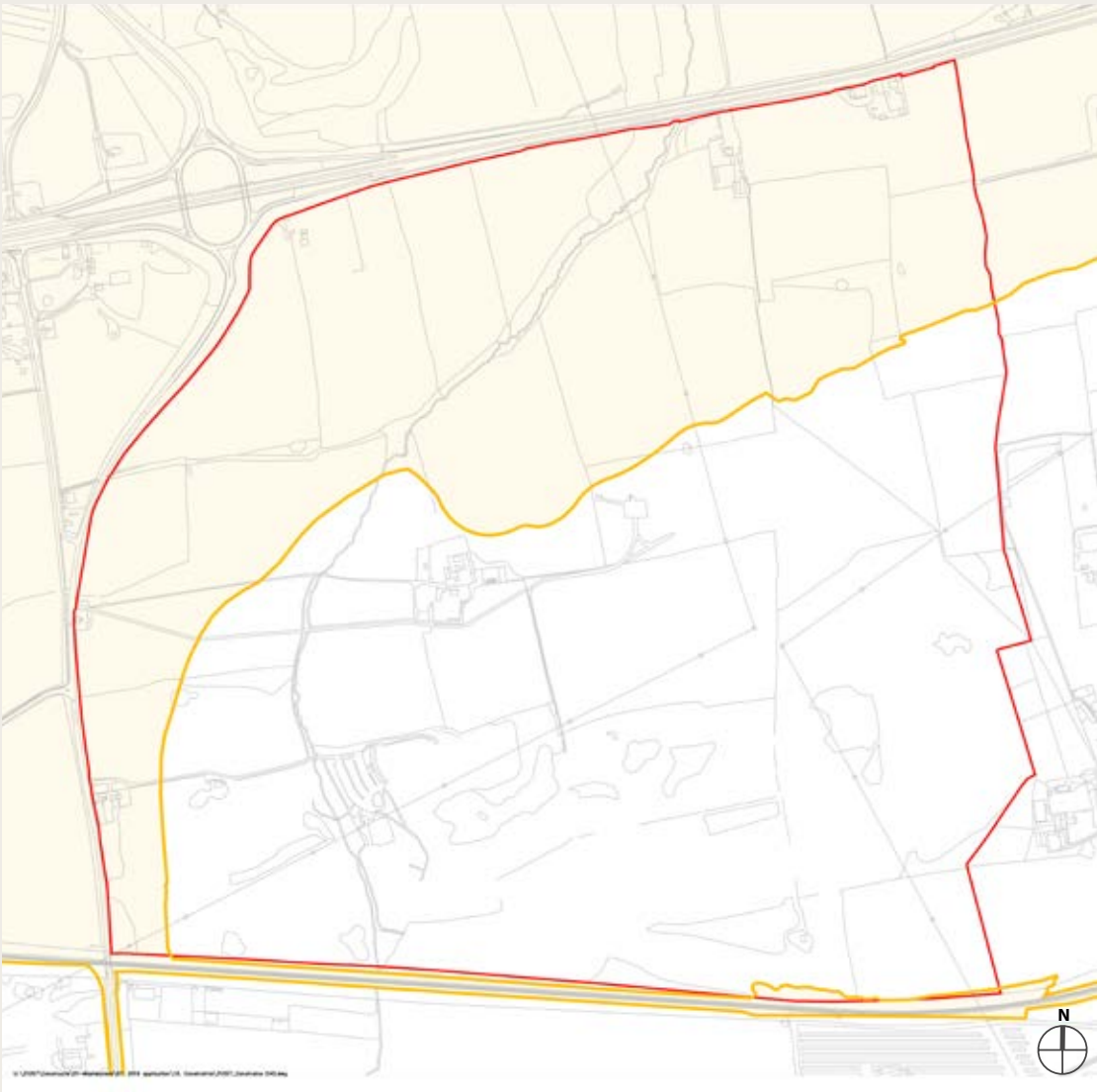
A 500kW wind turbine also sits within the site and is located at the top of the plateau to the north east of Dunton Hills Farm buildings. It is proposed that this would be dismantled in the future to allow for development and should not be considered a constraint to development.

NOISE

KEY

Site Allocation

> 55 db



Existing noise contours

NOISE CRITERIA

An assessment of the noise environment over a 24 hour period has been undertaken to create 3D noise mapping.

The result of the noise modelling indicates that the highest noise levels were recorded to the north of the site, adjacent to the A127, and also along the eastern side, abutting the A128. The noise levels have exceed the 55dB external threshold identified by BS8233:2014 (Guidance on sound insulation and noise reduction for buildings). BS8233:2014 also includes recommendations for the control of noise in and around buildings, including internal noise limits for habitable rooms of residential dwellings.

During the evolution of the Masterplan different scenarios to provide noise attenuation for the external areas and internal habitable rooms were considered and assessed through modelling. The modelling confirmed that because of the elevated circulator carriageways of the A127/A128 junction and the approach roads, a noise barrier of up to 9m in height is required albeit lower in height for locations further away from the junction. Under different scenarios modelled the noise barrier was assumed to be a fence, a bund and three-storey building blocks.

A combination of fencing, bunding and buildings are proposed to create an acceptable external noise environment suitable for residential development of Dunton Hills. The height of the noise barrier fronting the A127 would enable residential properties to be built to the south of this road with internal noise levels of habitable rooms not exceeding the limits identified in BS8233:2014. The buildings within the Employment Hub would create a noise barrier and these building blocks can be extended southwards along the A128 if additional employment floorspace was required. If residential development fronted the A128 then, for the elevated section of the road, a fence or bund would be required to provide for external and internal noise attenuation.



Potential noise mitigation strategy

KEY	
---	Potential location of noise barrier
	Potential built form
	≤ 55 db
	> 55 db

LANDSCAPE ANALYSIS

LOCAL LANDSCAPE CONTEXT

There are several landscape character assessments published by various Local Authorities and partnerships that cover the site and surrounding area. These include the following:

- Mid Essex Landscape Character Assessment (September 2006)
- Brentwood Landscape Sensitivity and Capacity Study (November 2018)
- Thurrock Borough Landscape Capacity Study (2005)
- Land of the Fanns Landscape Conservation Action Plan (2016)

The site lies at a transition between the low-lying, open landscape of the fenlands that extends to the south and west, and the wooded Brentwood Hills at Thorndon to the north and Langdon Hills to the east. As illustrated on the adjacent plan, the Land of the Fanns Landscape Conservation Action Plan divides the site and adjacent landscape into two distinct Landscape Character Areas:

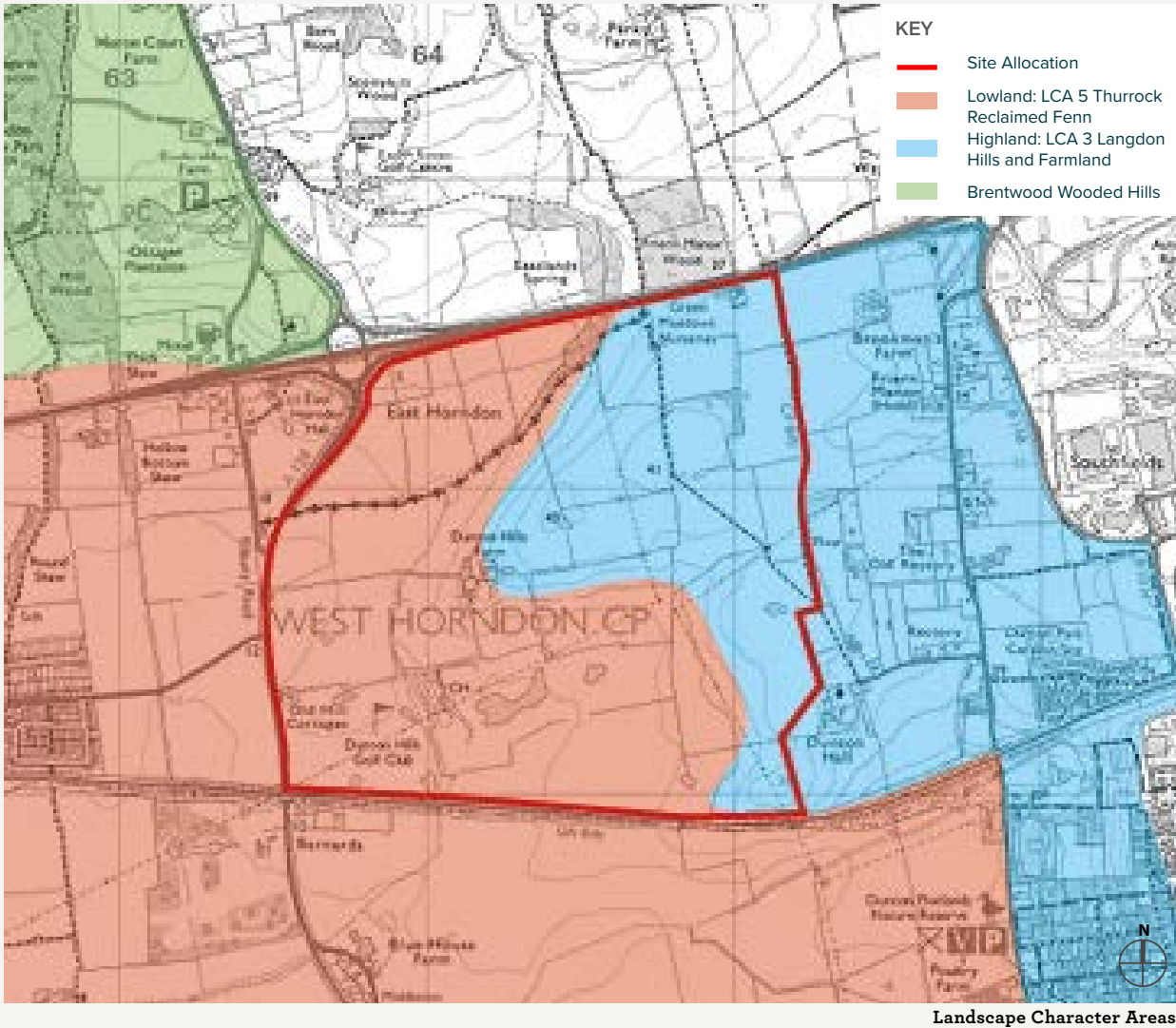
- Highland: LCA3: Langdon Hills and Farmland; and
- Lowland: LCA 5: Thurrock Reclaimed Fenn

These areas are defined by the change in topography within the site and the transition from the low-lying fenlands towards the Langdon Hills that is formed by the low ridge-line that crosses the site.

The sloping, rolling landform of the hills enclose the landscape and provide a wooded backdrop and skyline to views across the fenland, as well as expansive elevated views across the lower-lying open fenland landscape

In contrast, the fenland is open comprising predominantly large arable fields defined by gappy hedgerows, ditches and causeways. Trees are associated with watercourses, with occasional hedgerow trees and limited woodland copses.

The urban fringes at the edges of the character areas form backdrops in views across the landscape and combine with the transport corridors and pylons to place the landscape in an urban influenced landscape around the site. Urbanising influences include the Ford Dunton technical centre, urban edge of Basildon and West Horndon that are visible in views across the area.



The site shares characteristics that are common to both of these landscape areas, including:

- Large, open arable fields defined by gappy hedgerows;
- Churches on high ground as distinctive features/focal points in the landscape;
- Elevated views across the wider landscape towards London to the west and to the south towards the Langdon Hills, Thames Estuary and North Downs;
- Woodland on higher ground;
- Watercourses lined with trees;
- Waterbodies on lower-lying land of Fanns; and
- Influence of the A127, A128 and railway line upon tranquillity.

The landscape character assessments all recognise the strong influence that the transport corridors of the A127, A128 and railway line have upon the tranquillity of the area. This is especially pronounced in the area adjacent to and within the site that is bounded by all three of these corridors.

Guidelines for the area include:

- Conservation of views to landmark churches, long distance views across fenland and views to and from wooded hills;
- Screening of transport corridors and urban edges/Large scale development; and
- Management and enhancement of woodland.

SITE SPECIFIC LANDSCAPE CHARACTER

As illustrated on the adjacent plan, at a site-specific level, the site can be divided into Four Local Landscape Character Areas, the key characteristics of each of these LLCAs are described further below, as well as the distinctive features and visual characteristics within the site.

1) Fenland Edge

- Low-lying topography at base of ridge-line, sloping gently north-south along the line of Eastlands Spring;
- Large, rectilinear arable fields bounding A127 and A128;
- Mature hedgerows and hedgerow trees running north-south from the A127 to Nightingale Lane marking historic field boundaries;
- Historic route of Nightingale Lane and associated tree belts and ancient woodland connecting with A128 to the west and Eastlands Spring to the east;
- Tree-lined watercourse of Eastlands Spring bounding LLCA to the east providing distinctive feature and backdrop to fenland edge;
- Golf course to south includes fairways, greens, bunkers, ponds and trees. Retains largely open character, with trees surrounding ponds.
- Enclosed to the northwest by embanked road rising to A127 junction and lined by trees;
- Open stretch along A128 with open views across large arable fields towards trees lining Eastlands Spring and filtered views of Dunton Hills Farm, the landform of the ridge and wind turbine on the skyline beyond; and
- Traffic using A127 and A128 strongly influence tranquillity across the area, especially to the site boundaries.

2) Wetlands

- Low-lying land at base of ridge-line forming bowl landform draining from the ridge to the east towards Eastlands Spring to the southwest;
- Golf course comprising fairways, greens, bunkers giving a manicured amenity landscape character;
- Fragmented remnant field boundary hedgerows crossing golf course;
- Lakes and ponds with marginal vegetation and trees;



Local Landscape Character Areas

- Eastlands Spring and trees dividing main course from practice and pitch and put area and forming distinct feature and backdrop;
- Club house, car park and driving range introduce built form, areas of hard standing and vehicular activity within the LLCA;
- Ridge-line encloses the area to the north and east, with Dunton Hills Farmhouse, barns and sheds, wind turbine and pylons prominent on skyline; and
- Railway embankment encloses area to the south. Trains introduce noise and movement, affecting tranquillity.

3) Dunton Ridge

- The Dunton Ridge LLCA is defined by the slopes and ridge that rise from approximately 20m AOD at the base toward the ridge at 35m AOD, rising to the hilltop and plateau at 40m AOD to the east.
- Dunton Hills Farm forms a distinct feature on the western slopes of the ridge;
- Open slopes to north and south with large rectilinear arable fields divided by managed hedgerows running down the slopes;
- Wind turbine and pylons forming prominent features on the skyline on top of the ridge;
- Golf course on western slopes, to the east of the site;
- Ridge forming backdrop to views from the A128;
- Hillock to the southwestern corner of the site marking the southern edge of the ridge above lower-lying fenland to the south.

(4) Plateau Farmland

- Largely flat landform on plateau at height of 40m AOD;
- Large, open arable fields defined by managed hedgerows with few hedgerow trees;
- Eastern extent of golf course adjacent to Dunton Hall and west of The Old Rectory;
- Wind turbine and pylons on plateau form distinctive features on the skyline that are visible from the surrounding landscape;
- Varied boundary to east of the site, comprising hedgerows, copse and fencing dividing smaller fields predominantly managed for grazing. Degraded landscape structure to site boundaries, with gappy hedgerows and post and wire fences in places;
- Copses on higher ground providing wooded context, tying-in with adjacent woodland and that on hills to the north and southwest to provide a treed backdrop; and
- Views from edge of plateau across the wider landscape. Intervisibility with All Saints Church to the northwest, St Marys Church to the east and Dunton Hill Farm.

The degraded hedgerows and lack of woodland planting offer opportunities for the enhancement of field boundaries and new woodland planting to strengthen the landscape structure in this area. This reflects the management guidelines for the area as recommended by the published landscape character assessments.

TOPOGRAPHY AND VIEWS

The site lies within a transitional area between the low-lying flat fenland landscape to the east and south, and the rolling, landform of the Basildon Hills to the north and Langdon Hills to the east and southeast. The topography across the site is illustrated by the contours on the adjacent plan and summarised below:

- To the east of the A128, the land is generally flat at the interface with the fenland landscape, before falling away slightly towards Eastlands Spring that runs north – south across the site south of the woodland along Nightingale Lane.
- To the north of Nightingale Lane and Eastlands Spring, the land rises gently to the boundary with the A127 at the base of the slopes rising towards Thornbury Park and the Brentwood Hills beyond.
- The low ridge-line that crosses the site is a distinctive feature in the local landscape, rising from approximately 20m AOD to 35-40m AOD at the top of the ridge and onto the plateau that extends to the east of the site.
- To the south of the low ridge-line, the landform forms a gentle bowl at the base of a shallow valley that falls towards Eastlands Spring.
- To the southeast of the site, the landform slopes down towards the fenland to the south of Dunton Hall. As recognised within the Brentwood Landscape Character Assessment for the Dunton Settled Claylands LCA, this results in a low hillock that forms a localised feature.



Topography and Views

Key Views

To the north and east of the site where the landform is higher, there are expansive views across the wider landscape to the west and south, placing the landscape within its wider context. In contrast, the lower-lying land on the edge of the Fanns is more contained.

As recognised within the various published Landscape Character Assessments, there are characteristic views across the wider landscape of the Fanns and beyond from higher ground as well as views across the fenland towards the wooded hillsides as a backdrop. Churches and woodland form distinctive features on the skyline on higher ground.

Key views from within the site and from the surrounding countryside that illustrate the key characteristics and features are illustrated on the photographs within this section. The photographs have been annotated to show key features on the site and within the local landscape.

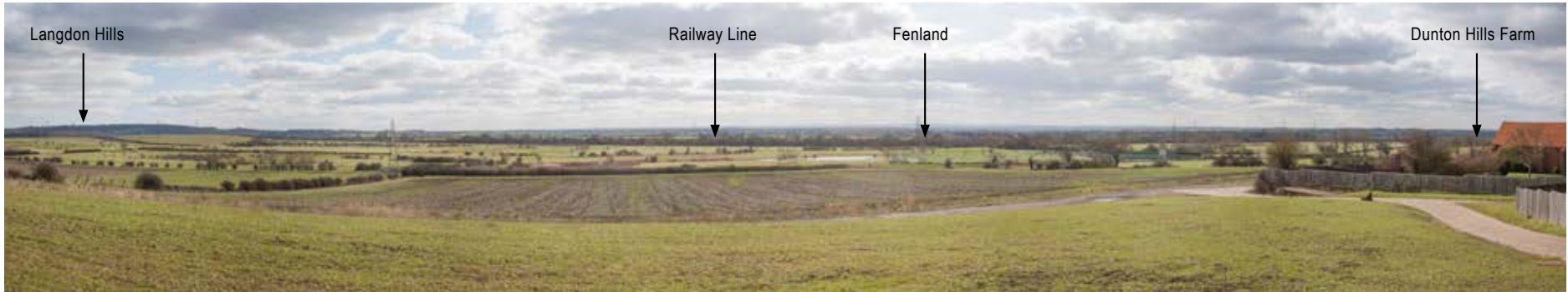
Views from within the site

Within the site, these include views from the ridge looking west towards London and south towards the Langdon Hills, Thames Estuary and North Downs to the south.



View 1 – Looking West

In views (view 1) looking west from within the Golf Course on the higher ground to the east of the site, there are long distance views towards the London Skyline. Local features in the landscape include views towards Dunton Hills Farm and All Saint’s Church situated on the high ground on the edge of Thorndon Park beyond the A128/ A127 junction.



View 2– Looking South

In views (view 2) looking south from the ridge there are expansive views across the fenland towards the Langdon Hills.

Views towards the site



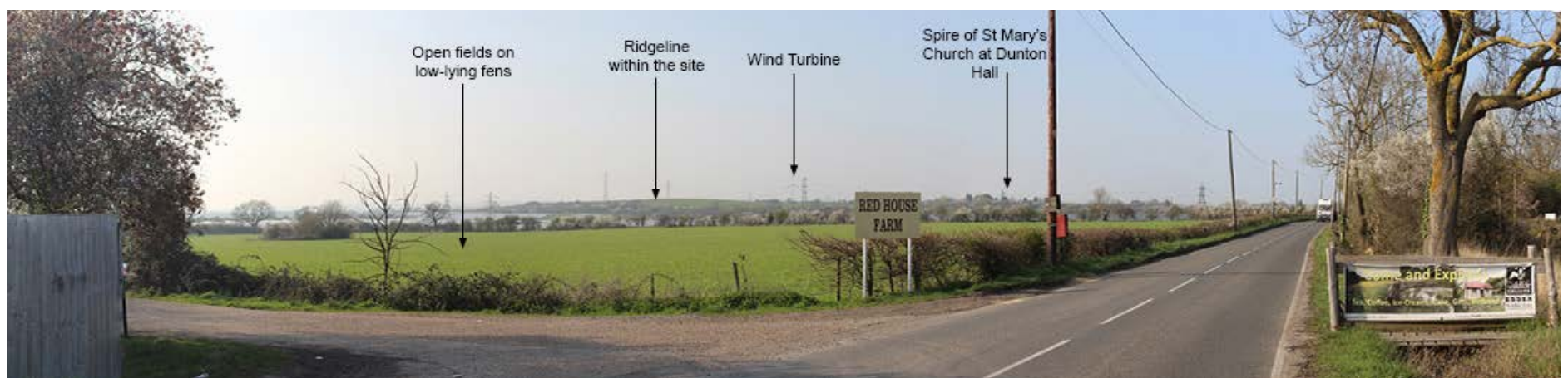
View 3 - Thurrock Country Park to the northwest



View 4 - A128 to the west



View 5 - Plateau Farmlands to the east



View 6 – Fenland to the south



View 7 – Langdon Hills to the southeast

ECOLOGY AND ARBORICULTURE

The site has been the subject of a number of surveys for ecology and arboriculture.

ECOLOGY

An initial Phase 1 Habitat Survey (SES, 2017) was undertaken which, along with consultation with statutory and non-statutory stakeholders, have informed the suite of ecological surveys (2016-2019) for the CEG land at Dunton Hills. Other land within the allocation has not been the subject of the same detailed suite of surveys, but results are not expected to be materially different. The following assessments have informed the ecological constraints plan:

Habitats

- Non statutory sites assessment
- Hedgerows; and
- Botany surveys of priority habitats including ancient woodland and stream and ponds.

Protected and Notable Species

- Badger;
- Bats – roosting (including emergence) and activity;
- Birds – breeding and wintering;
- Great crested newt;
- Hazel Dormouse;
- Invertebrate;
- Otter and water vole;
- Reptiles; and
- Small and medium-sized mammals.

For ease of reference each notable or protected species/habitat recorded has been mapped at the location recorded. Providing a spatial reference and context to the ecological data collected thus ensuring that the masterplan can be evolved to respect these constraints

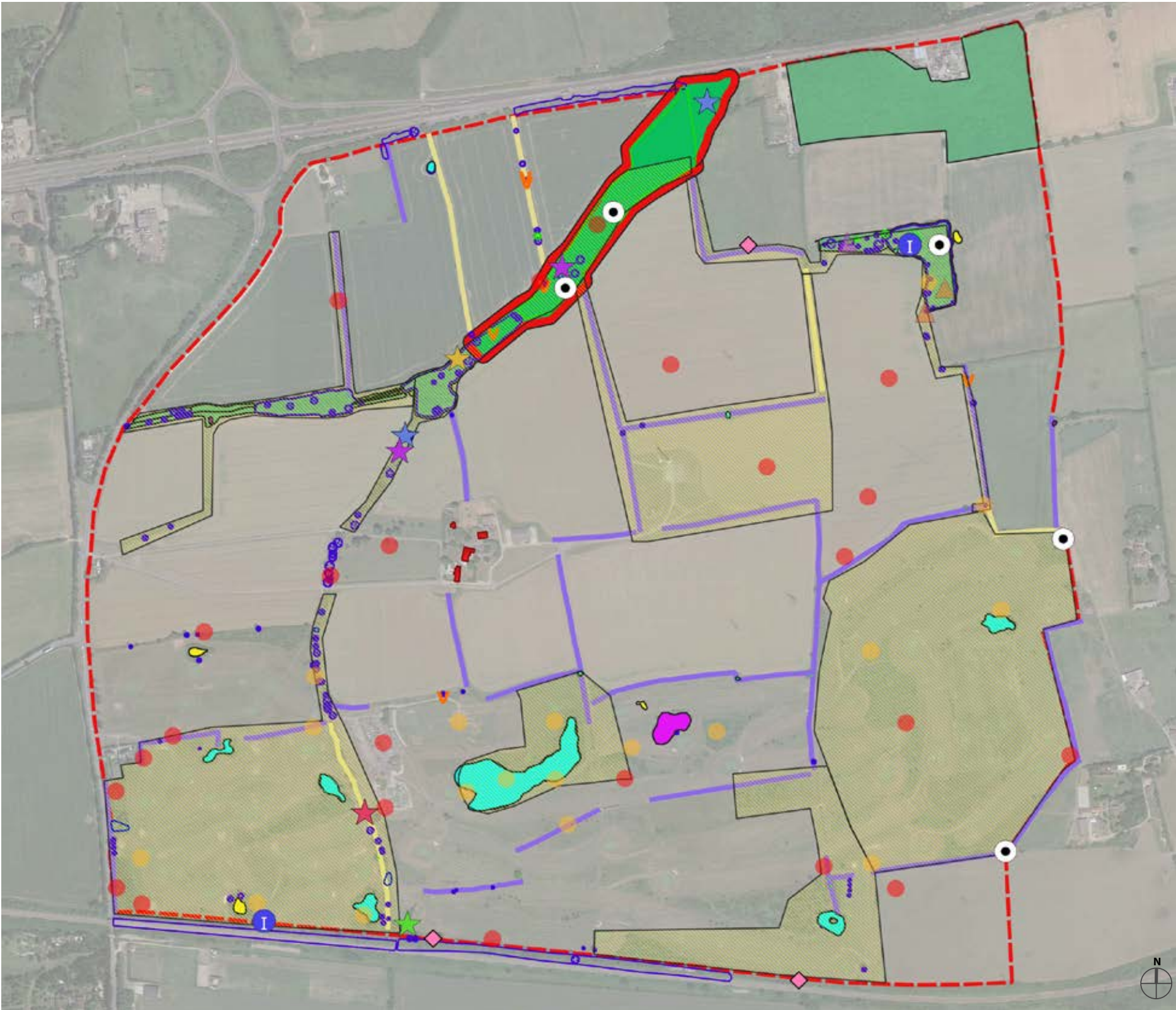
ARBORICULTURE

An initial site arboricultural appraisal in 2016 identified primary constraints in relation to trees and woodlands including hedgerows, groups of trees, single trees and ancient semi natural woodland. The report also identified historic management and future management potential for trees which have merit for retention. In addition, within the hedgerows were individual trees that have been identified as either being veteran (trees of significant age with exceptional cultural, landscape or nature conservation value) or trees with the potential to be veteran.

In 2017 a series of plans were produced to show the trees, their root protection areas and category rating within BS5837 2012. A further survey of all the trees was undertaken in June 2019 with a view of producing an up to date plan to help inform the master planning. The following have been included within the combined ecological and arboricultural constraints plan

- Category A trees
- Category B trees
- Veteran trees
- Ancient semi natural woodland

The combined ecological and arboricultural constraints plan illustrates the findings of the 2019 surveys, but the master planning process and ecological mitigation strategy incorporates the complete ecological data set.



Key Ecological and Arboricultural Features plan

- KEY

 - Site Allocation
 - Trees Cat A
 - Trees Cat B
 - Ancient Semi Natural Woodland
 - Ancient woodland 15m Buffer
 - Woodland
 - V and Nearly Veteran Trees
 - Important Hedgerow
 - Other Hedgerow - Priority Habitat
 - Badger Sett
 - Red Listed Breeding Bird Species
 - Amber Listed Breeding Bird Species
 - Green Listed Breeding Bird Species
- Barn Owl Nesting Site
 - Barn Owl Roosting Site
 - Building with Confirmed Roosts
 - Ponds with GCN Potential
 - GCN Breeding Pond
 - Other Priority Habitat - Pond
 - Reptiles Recorded
 - Invertebrate species of conservation concern
 - Dormouse identified on site

GREEN AND BLUE FRAMEWORK - HOW THE MASTERPLAN HAS RESPONDED

GREEN AND BLUE FRAMEWORK

The core vision for Dunton Hills Garden Village is to have three neighbourhoods all with community facilities at their heart, within a short walking/cycling distance of their residents.

These neighbourhoods will be brought together through the multi-functional green and blue infrastructure which weaves its way through the site and maximises the site’s wonderful assets including the Ridge-line and the woodland watercourse corridor. The site has a varied and dynamic existing green and blue infrastructure network, and the landscape vision seeks to enhance and celebrate these assets.

The green and blue infrastructure creates a robust platform for the creation of habitats, social interaction, exercise and recreation, and biodiversity gain.

The site contains a variety of distinct character areas and features, including the ancient woodland along Nightingale Lane, the Eastlands Spring and associated trees and riparian vegetation, and the natural topography of the existing ridge. These and the historic field pattern and associated hedgerows provide habitats and provide a naturalistic and agricultural character as well as a variety of habitats. In contrast, the golf course is a more manicured, managed landscape incorporating ponds that are of wildlife value.

The masterplan could respond to these features and the character across the site to provide enhancements and new habitats, including wetlands within the lower lying land to the south, the creation of habitats and landscapes that are in decline, including grassland meadows, and woodland edges on the slopes and ridge-line. The planting of orchards near the farmstead and reinstatement of historic field boundaries around areas for food production also add to the character and biodiversity of the site.

The landscape helps to provide a movement network for both destination trips e.g. to and from the Village Centre as well as recreational routes e.g. a circular walk. The landscape structure should take advantage of the topography to incorporate viewing points and view-lines through and across the site to allow for connections with the surrounding landscape. This provides legibility and sense of place as well as views to key landmarks, including the farmstead and churches and expansive views towards London to the west and the fenland, estuary and North Downs to the south.

Areas for communal open spaces associated with the Village Centre and Neighbourhood Hubs including a village green, orchard and food growing areas tie-in with the existing landscape green and blue infrastructure and various character areas, linked by routes through enhanced green spaces.

Ancient woodland

The ancient woodland in the central northern part of the site is a broadleaved woodland which follows the path of the Eastlands Spring watercourse. Oak, Hornbeam, Hazel and Hawthorn trees mainly comprise the woodland here.

To protect the ancient woodland boundaries an eco-tone woodland buffer should to run either side of the woodland edge. This buffer should be formed of broadleaved tree species at a variety of stock sizes to provide a range in canopy heights. This protection measure will ensure the continued longevity of the ancient woodland for residents and visitors of Dunton Hills Garden Village to enjoy.

Ridge-line

The Ridge-line is a striking feature of the natural topography of the site, and should be celebrated and enhanced within the masterplan. Expansive open views are afforded from the top of the ridge-line, and the proposals should seek to retain these vistas. New open spaces could be created at the higher contours and create a tangible link between development edges and the views.

Ecological enhancements to the ridge-line slopes could include managing the western slopes as hay meadows, and the southern slopes as scrubby grassland for invertebrates.

Wetlands and Eastlands Spring

The Eastlands Spring corridor runs north to south through the western side of the site, and could be celebrated as a feature through the new Village Green.

Enhancements to the riparian edge could include thinning back existing vegetation, the removal of dead trees and opening up the edges to the spring. These enhancements will allow residents and visitors to explore the banks of the spring and for the establishment of new aquatic vegetation.

The existing floodplain in the central southern part of the site is an area of low-lying land which could be enhanced with new wetland planting. The new Fen Meadow in this area will benefit flora and fauna such as wet grasslands and migrating wetland birds. Ephemeral ditches can fill and drain with the seasons and new ponds should be created to provide additional water capture capacity.

The wetlands could also be an area for recreation, picnics, bird watching, exercise and socialising; linking the two neighbourhoods of Dunton Fanns and Dunton Waters with an aquatic landscape.

Ponds and SuDS

A network of sustainable drainage features including both wet and dry ponds, swales, ditches, and rain gardens should celebrate water management at the surface. Dunton Hills Garden Village should seek to be an exemplar project where SuDS are implemented in a naturalistic and sensitive way, complementing the natural topography, hydrology and bringing biodiversity benefits.

These SuDS features should provide their primary drainage function as well as educational, recreational and biodiversity enhancement.

Accessible Green Space

A huge amount of accessible green open space could be provided within the masterplan framework for Dunton Hills Garden Village. Within each neighbourhood a variety of pocket parks, plazas and tree lined streets can provide green infrastructure connections through the built form to the wider landscape beyond.

All of the new green open spaces should provide a platform for play, recreation, sports, education and exercise.



Eco-tone tree planting to protect the Ancient woodland edge



Rain gardens in the streetscape



Recreation routes through wetlands



Pocket parks within neighbourhoods



APPENDIX 1.3

HERITAGE
STATEMENT
EXTRACT

The site’s unique Heritage features are a key consideration for design proposals, ensuring the site is firmly rooted in the local context. This chapter includes extracts from the heritage report which detail historic development, field boundaries and surrounding heritage assets.

HISTORIC DEVELOPMENT

HISTORIC DEVELOPMENT

This section of the report describes the historic development of the site and the surrounding area.

The analysis is based on the following sources:

- Archival research at the Essex Record Office
- N. Pevsner and J. Hettley, Buildings of England - Essex (Yale: Yale University Press, 2007)
- D. Walker, Basildon Plotlands: The Londoners' Rural Retreat (Chichester: Phillimore, 2001)
- D. Walker and p. Jackson, A Portrait of Basildon Plotland: The Enduring Spirit (Hampshire: Phillimore, 2010)
- British History Online, Dunton (Wayletts)
- <<https://www.british-history.ac.uk/rchme/essex/vol4/p35>> [accessed 20 June 2019].
- National Library of Scotland. Maps. Online. <https://www.nls.uk/> [accessed 20 June 2019].
- Historic England National Heritage List for England <<https://historicengland.org.uk/listing/the-list/map-search?clearresults=True>> [accessed 20 June 2019].
- Heritage Statement for Dunton Hills, Corrie Newell HBC, Brentwood Borough Council.
- Map of Essex 1777 <<https://map-of-essex.uk/>> [accessed 21 June 2019].
- Laindon & District Community Archive <<https://www.laindonhistory.org.uk/>> [accessed 22 June 2019]
- West Horndon Parish Council <http://westhorndonparishcouncil.org.uk/li/index.php?id=village-history> [accessed 22 June 2019]
- Friends of All Saints East Horndon <http://www.all-saints-east-horndon.co.uk/History.asp> [accessed 22 June 2019]

Early History

Referred to in the Domesday Book as 'Torninduna', the land at Dunton Hills was controlled by manorial lords of East Horndon in the C12. Later gifted to the Waltham Abbey, this area was seized by the crown after the Dissolution of the Monasteries, along with the land at Dunton Wayletts previously owned by Bec Abbey.

Subsequently sold to the Sir William Petre, father of the 1st Baron Petre and Secretary of State to Henry VIII, this land became part of the large Petre estate, which included the settlements of Ingatestone, Writtle, Herongate, West Horndon and Childerditch. The land at Dunton Wayletts, including Dunton Hall, was given to King's College Cambridge in the 1540s.

The area comprising the Site was first shown on Walker's

Map of Lands in East Horndon and West Horndon in 1598. This map depicts large open fields in agricultural use along with the route of Nightingale Lane and Eastlands Spring shown in their present location. Woodland areas are also shown to the south of the farmstead buildings. The access route to the farmstead at this point is not clear from the map, however it seems likely it was accessed from Nightingale Lane to the north, which is the closest thoroughfare.



Map of Lands in East Horndon and West Horndon, Walker, 1598

Late-C18 to Early-C19

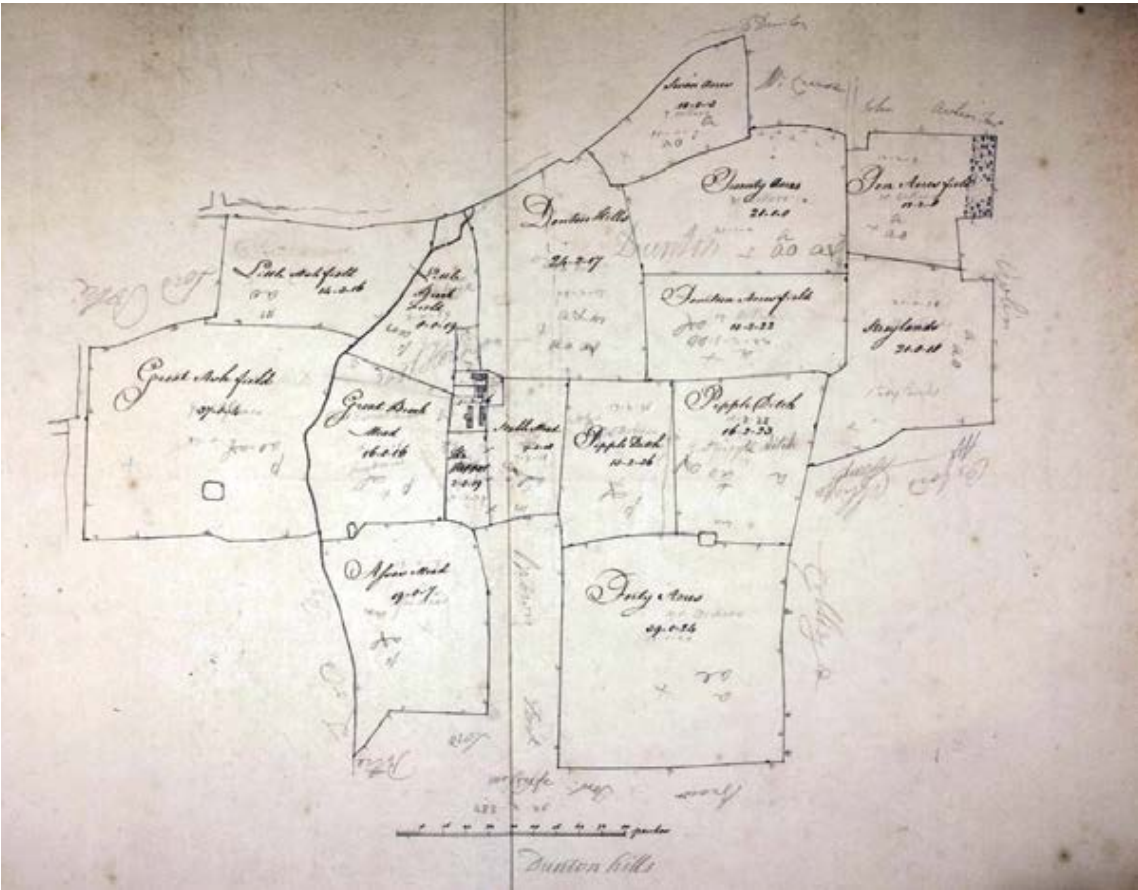
The Dunton Hills farmstead is first labelled as such on Chapman and Andre's 1777 Map of the County of Essex. Here, the farm is shown to the north-west of Dunton Hall and St Mary's Church, and to the west of the associated parsonage. Other farmsteads are shown in the surrounding area, including Barnards, Amess and Field house to the south-west.

Several of these farms were occupied and worked by members of the Squier family in the late-C18 and early-C19. Indeed, the c.1817 survey of the Petre Estate lands documents Joseph Squier as the tenant of Dunton Hills. The farmstead was well established by this time, with the L-shaped farmhouse shown centrally within this cluster. Large structures, likely threshing barns, are also depicted; one to the north and two to the south.

This survey also shows the presence of field boundaries, some of which still exist, and other landscape enduring features such as Nightingale Lane and woodland on the former Nightingale Hall site.



Map of the County of Essex, Chapman and Andre, 1777.



Dunton Hills, Lord Petre Estate Survey, c.1817

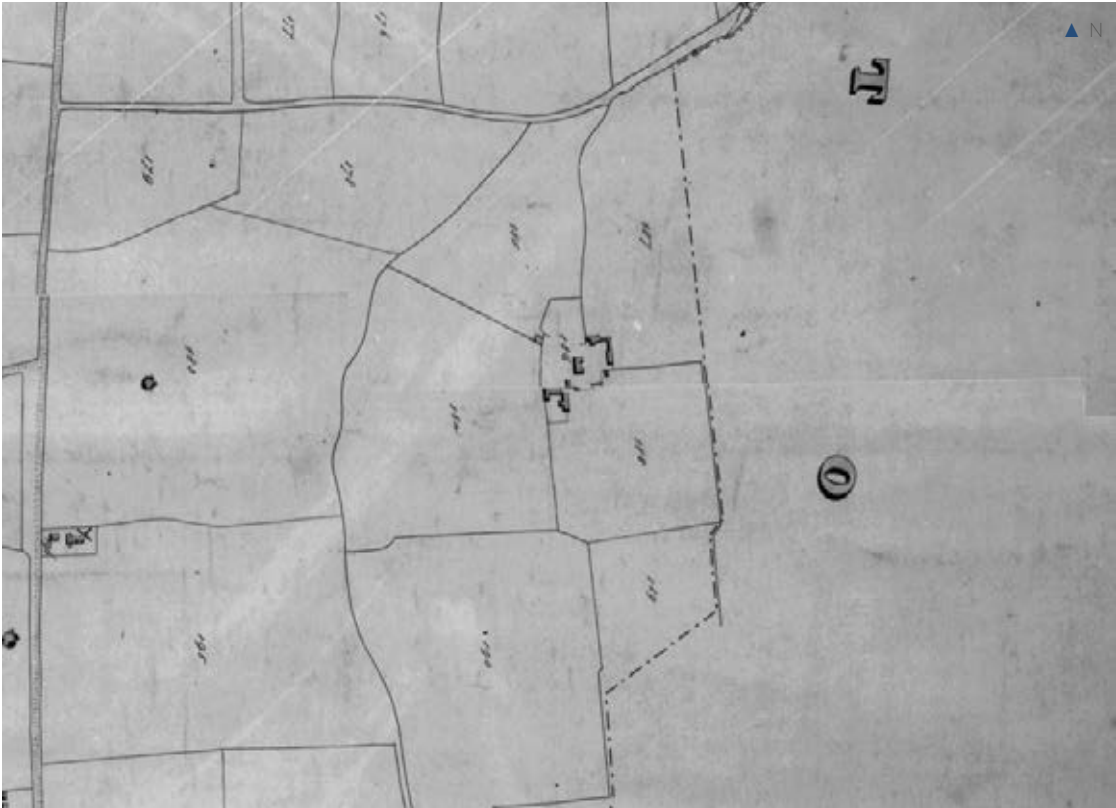
Early-C19 to Late-C19

The 1836 and 1845 tithe maps show that, whilst there was little change to the land within the Site, the East Horndon Mills – comprising a millhouse and windmill – were built along its western boundary c.1800.

Similarly the farmstead was developed in the early-C19. Here, a symmetrical property is shown at the centre of the site, correlating with the Georgian reordering of the farmhouse, and the extant North and South Barns are shown with adjoining structures to form L-shaped ranges around courtyards. The corresponding tithe apportionments show that Joseph Squier was still the tenant farmer.



1838 Dunton Parish Tithe Map)



1846 East Horndon Tithe Map

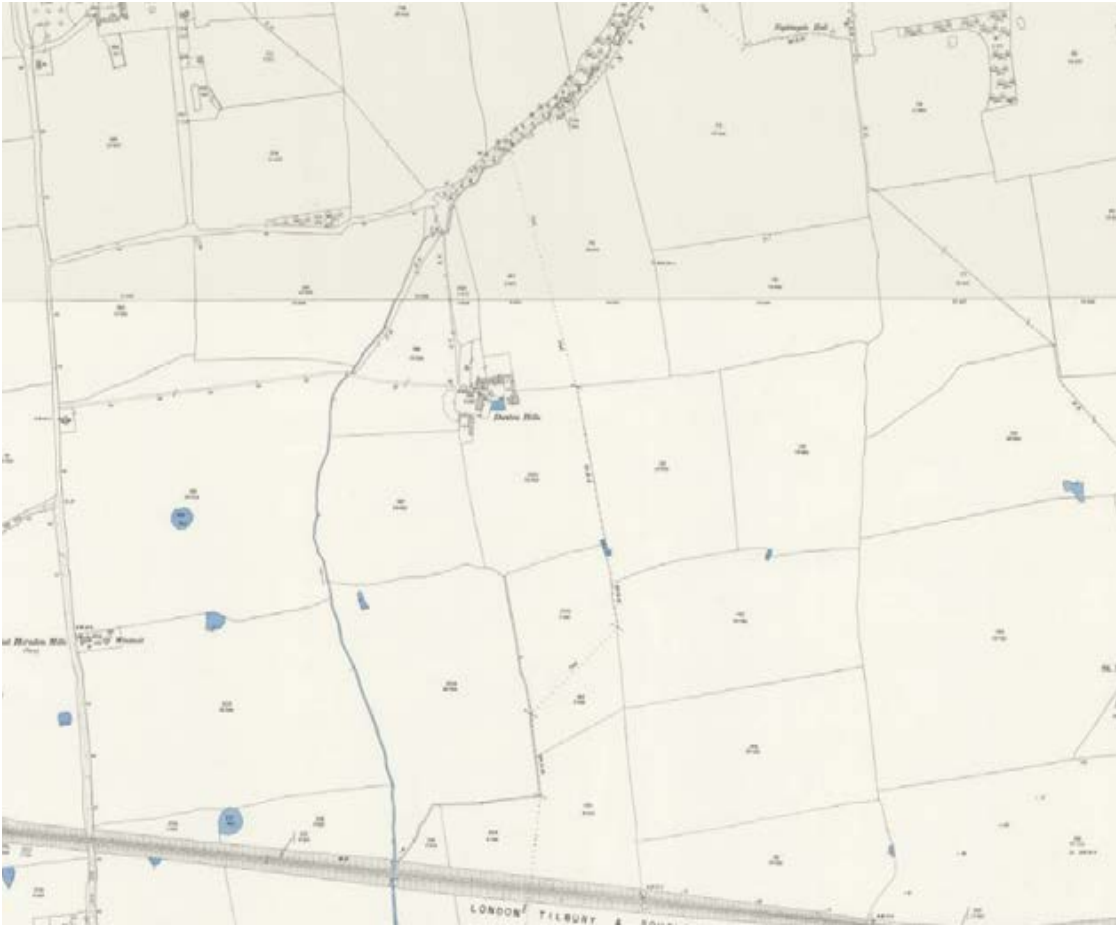
As detailed in the 1895 OS map, a major development in the area was the construction of the London, Tilbury and Southend Railway (1852-54). This was extended to Horndon in late-1854 with the embankment and tracks laid out along the Site's southern boundary. Later phases of development saw the line extended to Leigh-on-Sea and then Southend by 1856. As such the landscape character of the Site changed considerably in mid-C19 as physical and visual connections to southern areas were separated.

Between the mid- and late-C19 the farmstead was further developed with the main house extended to the rear and a cottage built to the north. Additionally new structures were added to the north and south farmyard ranges, with two new ponds, one small and one large, created nearby. Various other ponds are also shown throughout the Site at field boundaries, created to water livestock.

Although the rural landscape and field boundaries remained largely unchanged in this period, other important developments included the laying out of the farmstead's extant formal driveway to the west, and the construction of cottages at its junction with the Tilbury Road. Taken together, these C19 developments demonstrate the growing prosperity of the farm and its shift away from arable to pastoral farming.



1895 OS Map (Dunton Hills Farm)



1895 OS Map

Early-C20 to Mid-C20

Between the late-C19 and mid-C20, rural land within the Site remained substantially undeveloped, although some historic footpath routes were altered in this period. This was likely a result of infrastructure developments within the wider area, including the construction of the Southend Arterial Route (A127) along the northern boundary of the site in 1924.

Like the construction of the railway to the south, this considerably altered the landscape character of the Site by separating it from the Dunton Wayletts settlement to the north. Additionally this route severed the connection between Nightingale Lane and Friern Manor Wood, and between East Horndon Hall and its parish church – All Saints, East Horndon.

The Dunton Hills farmstead was further developed in the early-C20 with the addition of several small outbuildings to the north of the farmhouse and the removal of barns to make way for threshing machinery and a cowshed. Similarly, the South Barn was extended to the rear, and tracks laid out between the north and south farmyard ranges, in this period. By this time the East Horndon Mills had been demolished and replaced with two pairs of semi-detached cottages.

By 1945 parts of the northern farmyard range had been demolished and a sewage disposal works built to the south-west of the farmstead for the Brentwood Urban District Council. This is shown by the presence of tanks two circular filter beds and rectangular sludge beds, which were accessed from a new track off the main Tilbury Road.

In the 1950s, a small number of fields within the vicinity of the farmstead were enclosed. Additionally, new agricultural sheds were built to the east of the northern farmyard range, with the southern farmyard range extended to the west.

1952 Sales Particulars describe the farmstead buildings including the farmhouse, South Barn, lean-to granary, lean-to Implement Shelter, cowhouse and separate grain store.



56 OS Map



1956 OS Map (Dunton Hills Farm)



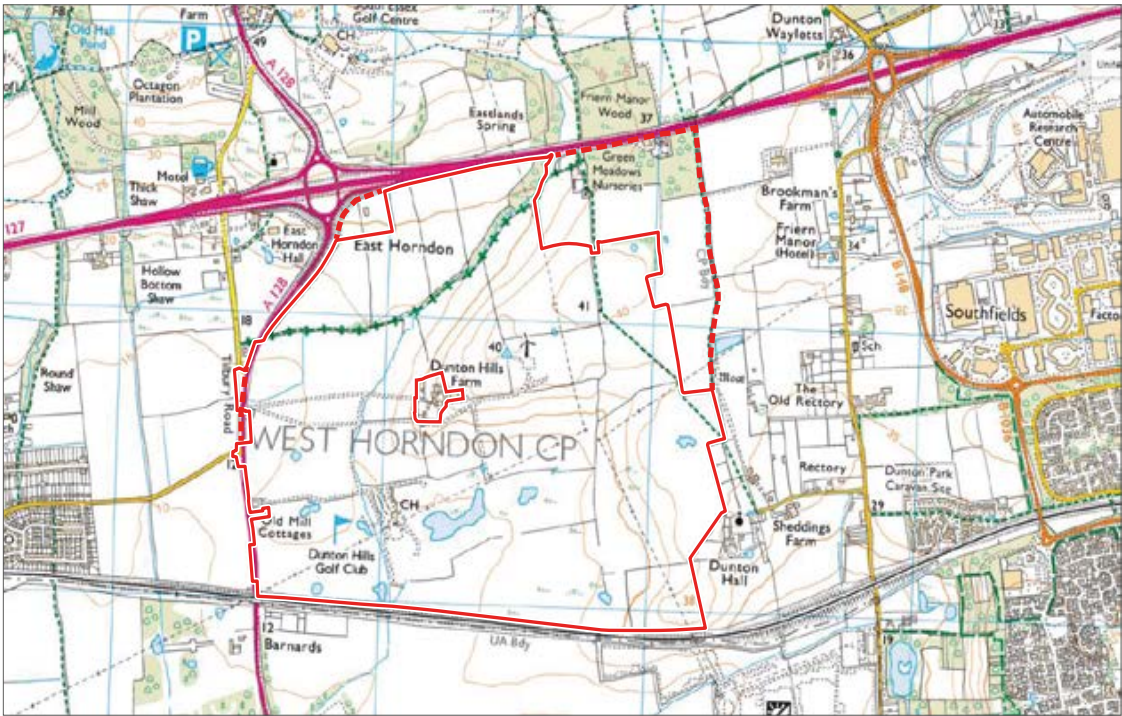
1952 Sales Particulars Dunton Hills Farm

Late-C20

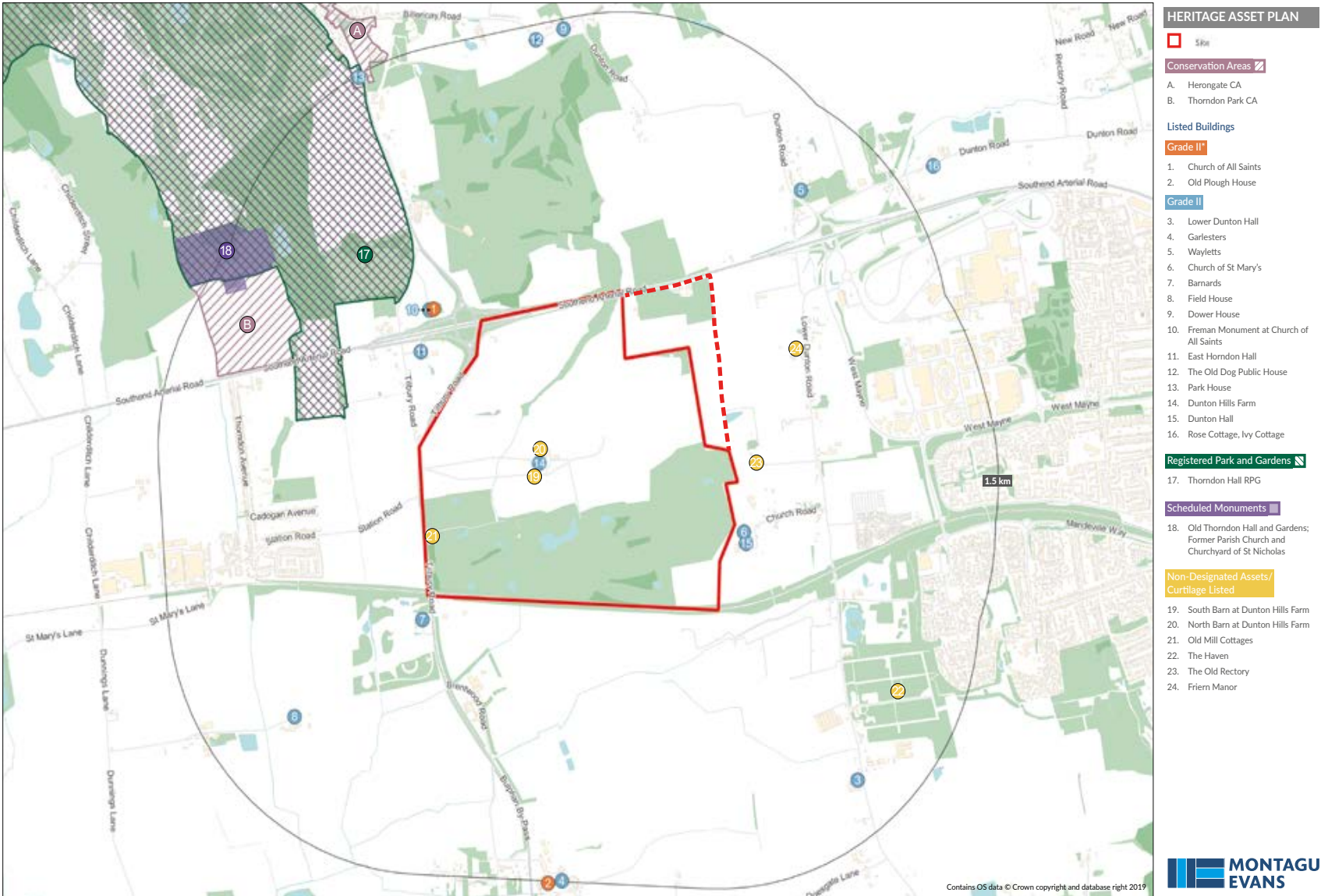
Further change occurred within the Site and surrounding areas from the mid-C20, mostly from infrastructure development. This included the construction of electricity pylons and overhead powerlines across the Site in the late 1950s, and the construction of the A128 and its junction with the A127 along the Site's western boundary in the 1970s. Further development occurred to the east with the suburban expansion of Basildon.

With regard to the Dunton Hills farmstead, the courtyard arrangement of the north and south ranges was lost when a number of stand-alone structures and extensions were demolished. Although the North and South Barns, cowshed and grain store were retained, the farmstead layout was altered with the addition of several modern sheds and barns in the post-war period, many of which are still present.

In the late-1980s the sewerage works buildings were removed and replaced by the present golf club, with the golf course and clubhouse buildings constructed in the early-1990s. The existing wind turbine, which is 78m in height, was constructed in 2015 under the consent granted in February 2014 (13/01295/FUL).



2019 VML Map

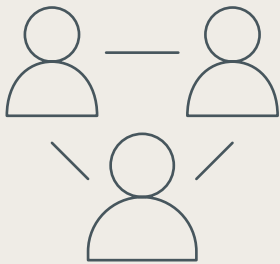


APPENDIX 1.4

DESIGN REVIEW PROCESS IN DETAIL

This chapter provides an in-depth chronology of the masterplan evolution through public engagement, stakeholder workshops, design charrettes and design review panels; each of which have had an influence on the vision and designs for the Garden Village.

A1.4



DESIGN EVOLUTION

This section explains the stakeholder engagement process and how it has helped to inform the masterplan design and evolution.

Whilst it should be noted that the masterplanning of the site has been on-going for a number of years, the current work on the masterplan really began in early 2019 with a series of stakeholder workshops and it is this process that this section largely focusses on.

Prior to this process, masterplanning work had been undertaken and the following provides a brief timeline of events from late 2014 to late 2018.

ENGAGEMENT (2014-2018)

2014

- **November/December** – Initial site capacity work/testing carried out by CEG

2015

- **February** – Submission of representations to the Strategic Growth Options consultation setting out:
 - Garden City/Garden Suburb principles;
 - Constraints and opportunities; and
 - Initial spatial ideas for the site
- **March** – Discussions with West Horndon Parish Council about the site and further early masterplanning/capacity work

2016

- **April** – Production of the Dunton Hills Country Park Document (submitted to the Borough Council) and covering:
 - Vision;
 - Landscape connectivity;
 - Landscape enhancement; and
 - Improving ecology, increasing recreation, preserving heritage
- **June** – West Horndon Briefing Document setting out the key benefits of the scheme
- **July** – Garden Village submission to the Government, setting out:
 - Proposals;
 - Economic benefits;
 - Leadership; and deliverability
- **September** – Production of the Responding to the Landscape Document, covering:
 - Landscape context;
 - Features;
 - Green Belt; and
 - Proposals
- **December** – Production of a Pattern Book Study, covering an assessment of surrounding villages and settlements across South Essex

2017

- **January** – Garden Village status confirmed
- **May-July** – Various masterplan design sessions with Borough Council
- **July** – First Design Council CABE workshop
- **October** – Second Design Council CABE workshop

2018

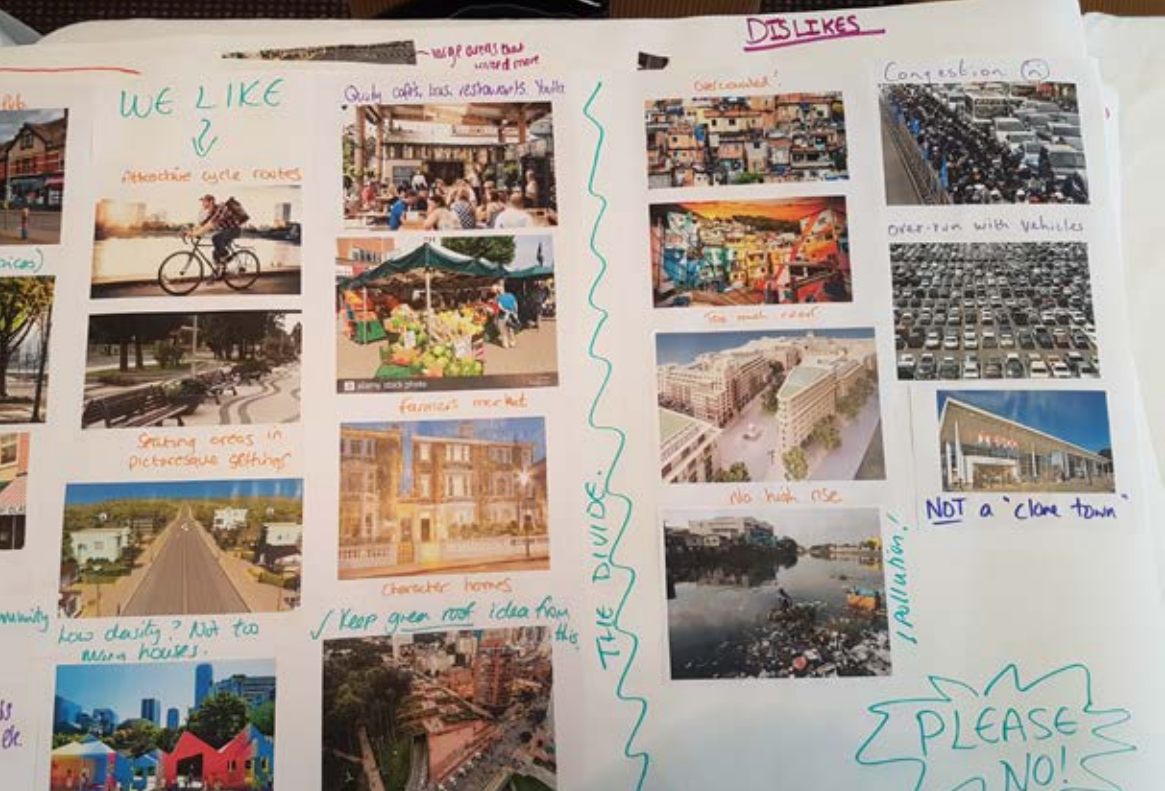
- **March/April** – Site visit and design session with the Borough Council



Education Workshops (September 2019)



Stakeholder Consultation Workshop (February 2019)



Poster created by students during the Education Workshops (September 2019)

ENGAGEMENT (2019)

In 2019 the landowners and the Borough Council agreed to start collaborative design review process and go back to first principles in order to develop a fresh masterplan that met the needs of everyone. Furthermore, an expert Design Review Panel (Design South East) was brought into the project to facilitate workshops (held in the golf clubhouse on site) and review the masterplan as it evolved through a series of formal Design Reviews.

This process comprised the following:

- **February 2019**
 - Technical Stakeholder Briefing and Masterplan Workshop (27th February)
- **April 2019:**
 - Vision, Concept and Narrative Workshop (12th April)
 - Green and Blue Infrastructure Workshop (17th April)
 - Heritage and Design Workshop (17th April)
 - Socio-economic Workshop (24th April)
- **May 2019**
 - Smart and Sustainable Infrastructure Workshop (1st May)
 - Sustainable Transport Workshop (3rd May)
 - Design South East Checkpoint Meeting (15th May)
- **June 2019**
 - 1st Formal Design Review Panel (5th June)
 - Public Exhibition in West Horndon (5th June)
 - Pre-app meeting with Historic England and Borough Council Heritage
- **July 2019**
 - 2nd Formal Design Review Panel (17th July)
- **September 2019**
 - Innovation and Design Guidelines Workshop (6th September)
- **October 2019**
 - 3rd Formal Design Review Panel (9th October)
- **February 2020**
 - Design Review Panel Chair Review (7th February)

Technical Stakeholder Briefing and Masterplan Workshop (27th February)

This workshop involved a series of presentations from the Borough Council and CEG on the process to date and information about the site. The session then broke out into a series of discussion groups focussing on the topics of:

- Landscape, Green Infrastructure and Biodiversity
- Heritage Assets
- Social infrastructure (education, community, health and Village Centre)
- Sustainable infrastructure (energy, travel and other)

At the end of the session the groups fed back on the issues that they had discussed.

Vision, concept and narrative workshop (12th April, 2019)

This workshop session was chaired by Design South East and used as an introductory session for the CEG team to present the masterplan to date. This included an overview of the site and a presentation of the design concept and capacity plans.

The Workshops

A series of workshops, led by Design South East ran between 17th April and 3rd May. These involved a wide group of stakeholders including the landowners, land promoters, the Borough Council, Essex County Council and professionals relating to the particular discipline being addressed. The workshops covered: Green and Blue Infrastructure; Heritage and Design, Socio-economics; Smart and Sustainable Infrastructure; and Sustainable Transport. Each session began with a presentation from the CEG team on the work that had been undertaken to date, before a wider Q+A session. The sessions then broke out into a series of topic based discussions which were then fed back to the chair. Design South East then produced a note of each event (which are available, separate to this report).

Design South East Checkpoint Meeting (15th May, 2019)

Having digested the comments from the workshops, CEG explored the site capacities and densities to provide the Borough Council and Design South East with realistic development capacities for the site – at the request of Design South East. This was used as a sense check to ensure that 3,500 – 4,000 homes could be accommodated on the site and, hence, there was still a need for the level of social and community infrastructure envisaged.

1st Formal Design Review Panel (5th June , 2019)

The first design review panel involved a formal presentation of the evolution of the masterplan to Design South East, the Borough Council, Homes England and several key stakeholders including the other landowners. In this presentation, CEG set out their vision for the Garden Village, the masterplan drivers, the evolution of three neighbourhoods, initial plans on access and movement and a more detailed exploration of the different characters and function. The density plans were also presented. The session then moved into a discussion and a Q+ A session before Design South East provided a summary. Following this workshop, a note of the meeting was produced.

Public Exhibition (5th June, 2019)

A public exhibition was held at St Francis Church Hall in West Horndon between 2:00pm and 8:00pm. A number of boards were displayed providing the local community with information about the scheme (with the main focus on the area of the site controlled by CEG). Members of the CEG team were on hand to discuss the proposals and listen to concerns. Comments forms were available for people to fill in or take away and send back.

2nd Formal Design Review Panel (17th July, 2019)

The second formal design review again involved a presentation by the CEG team to a similar audience as the previous session. This time a series of key spatial design drivers were presented as well as changes made to the masterplan since the last session. The

presentation also included the masterplan approach, showing how the key site influences were helping to shape the masterplan design, building up from a landscape led approach to the completion of the whole Garden Village. The presentation also showed how the masterplan has been embedded into the landscape and where the green infrastructure has been enhanced. Further detail was provided for each of the three neighbourhoods. As with before, the session then moved into a Q+A session before Design South East provided a summary and then a follow up workshop note.

Innovation and Design Guidelines Workshop (6th September, 2019)

A follow up workshop session was organised for early September where the matters for discussion were innovation and design guidelines. These were again chaired by Design South East with representatives from other key stakeholders including the Borough Council and Homes England. Presentations were made by the CEG team, focussing particularly on transport and community building which were then discussed in two groups. The second session explored the level of detail that this Framework Masterplan and Document should go down to and the role of the SPD (which will be produced by BBC).

Education Workshops (24th-26 September , 2019)

The purpose of these workshops were to inform the SPD document and allowed local students to engage with the masterplanning process. Activities focused on community building and placemaking culminating in students proposing strategies for key public spaces (with lego) and outlining community uses they would value in a new Garden Village.

3rd Formal Design Review Panel (9th October, 2019)

The final design review panel involved a presentation to Design South East, Brentwood Borough Council and other stakeholders. The presentation followed on from the submission of the draft Masterplan Framework Document to the panel and covered an update on the framework masterplan, the content of the document and our approach to setting out masterplan guidelines.

Design South East Chair Review (7th February, 2020)

A final review of the Masterplan Framework Document was discussed at a session with the D:SE chair and officers from Brentwood Borough Council. Final comments on the document were provided prior to the completion of the document.

Design development and evolution

Each stakeholder workshop session held in April and May lasted approximately 3 hours and covered a whole range of issues ranging from strategic down to detail. Summary notes were prepared for each workshop by Design South East. The key discussion points were then documented and responded to by the CEG team. This report does not seek to cover all the points raised (this will be covered in a separate document). Instead, the remainder of this section seeks to distil the key spatial points raised in the workshops and Design Review Panels and how the masterplan has responded to them.

THE WORKSHOPS
(APRIL - MAY 2019)

Further to the spatial and physical drivers of the site, a key component of the masterplan, and one that was the subject of discussion at the socio-economic workshop in particular, was the establishment of the Village Centre and supporting Neighbourhood Hubs. Key influences informing this included:

- The size of the site and the need to provide facilities within walking distance of the residents of the Garden Village
- The topography of the site, particularly the fact that the north eastern part of the site sits on a plateau at the top of the ridge-line
- The requirements of the site. This is set out in the emerging local plan policy and includes:
 - Schools - x3 primary schools and x1 secondary school
 - Local retail and community facilities
 - Employment

The topography and scale of the site is of key importance and, due to this, it was considered that in addition to a main Village Centre, further, walkable local facilities would need to be provided in order to encourage/allow residents within the Garden Village the ability to walk a short distance (5 minutes) to local facilities and local primary schools, rather than use the private car. It was considered, by the CEG team, that due to this, a Village Centre and two Neighbourhood Hubs would be needed within the site to fulfil this objective.

A further major consideration was the location of the secondary school with key factors here being the need to locate such a facility on relatively flat land and away from major noise and pollution generators (A127, A128 and the railway line) around the edges of the site. The high pressure gas main was a further influence on the location. A further objective of the schools, discussed at the workshop, was that they should be located close to/within the Village Centre/Neighbourhood Hubs.

With the above in mind, the CEG team presented a number of options at the workshop, setting out various configurations. These are illustrated below.

The CEG team considered that Option 1 was the best option as it provided a Neighbourhood Hub in the west (likely to be part of the first phase), a main Village Centre around the lake and adjacent to the historic farmstead and the new secondary school (located within the heart of the site and on flat land) and a third Neighbourhood Hub in the north east (serving the community on the upper plateau). The other options sought to locate the secondary school in the south west corner of the site (so as to be easily accessible from the wider area) as well as alternatives that sought to split the Village Centre from the secondary schools.

A key additional objective came out of this workshop relating to the locations of the schools. It was considered that they should also have access to green open space (ideally be located adjacent to areas of open green space).

OPTION 1.



OPTION 2A.



OPTION 2B.



OPTION 3.



Following the socio-economic workshop a preferred spatial option was drawn up (below) following the principles of option 1.



Whilst this was emerging as the preferred option further capacity testing of the site, focussing on a number of options, was drawn up and discussed at a meeting with Design South East and Brentwood Borough Council in mid May. This work started to look in more detail at density options within the site to ensure that the site still had the capacity to meet the local plan requirements and to support the range of social infrastructure set out in the emerging local plan.

The discussion also covered the site's heritage and the need for the historic farmstead to be very much at the heart of the Garden Village and for a stronger east-west street connection across the south eastern part of the site, as opposed to the longer loop shown.



Evolution of the capacity plan exploring a variety of initial design options

DESIGN EVOLUTION



JUNE 2019 DESIGN REVIEW PANEL 1

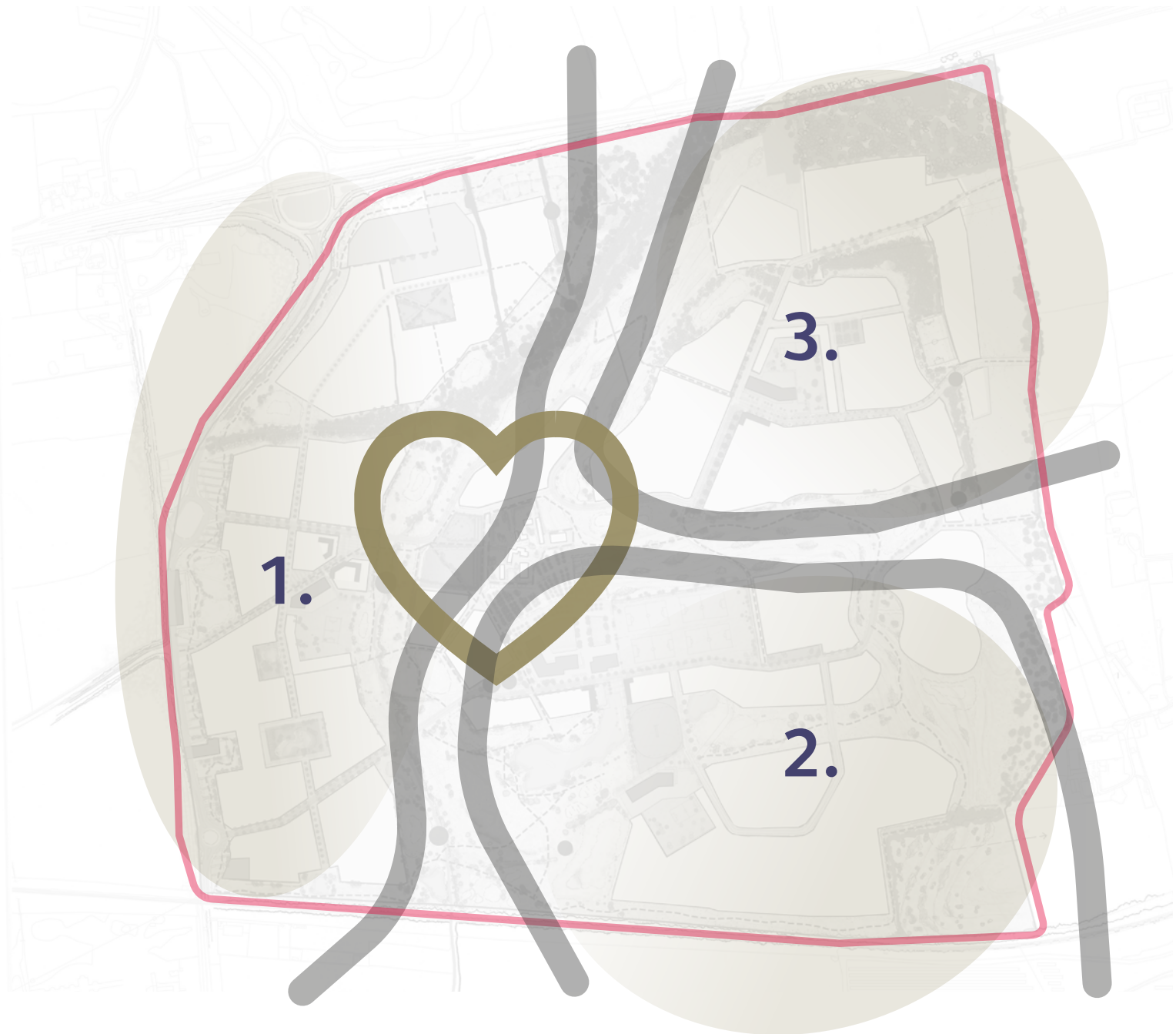
Following the meeting with Design South East in May 2019, the masterplan was refined and further consideration was given to the key spatial principles within the scheme including:

- The heart of the village (with the historic farmstead becoming a central feature of this)
- The neighbourhoods within the village (based on the spatial distribution of facilities/hubs and the influence of the landscape)

The diagram, shown below, clearly shows these spatial principles with the heart of the site located close to the farmstead and the three neighbourhoods identified as:

- 1. Western Neighbourhood** – located between the A128 and the Eastlands Spring and comprising an area of flat open land
- 2. South Eastern Neighbourhood** – comprising an areas east of Eastlands Spring and on gently undulating land at the bottom of the ridge line
- 3. North Eastern Neighbourhood** – comprising the area on the plateau at the top of the ridge-line

The emerging masterplan was presented to Design South East at the first formal Design Review Panel in June 2019. The masterplan was presented as shown on the plan (right).





Key changes that the June 2019 masterplan showed comprised:

- | | | |
|---|---|--|
| <ul style="list-style-type: none">1. A revised western neighbourhood, now focussed around an existing pond feature2. More prominent village green in front of the farmstead3. New sports pitches in the north west of the site, providing a focal point for this part of the site4. North Eastern Neighbourhood Hub5. A green boulevard from the north east Neighbourhood Hub to the ridge-line aligned so as to allow longer distance views across the wider landscape as well as shorter distance views through to the lake and lake side plaza | <ul style="list-style-type: none">6. A re-designed secondary school allowing for a new, more direct east - west street link immediately to the south7. A strong east-west street link, connecting the southern extents of the site together8. A re-located primary school, now split from the secondary school, framing the lake side and plaza setting to the south and helping to activate this space9. A lakeside plaza at the heart of the neighbourhood, framed on the east and west by development and to the north by the secondary school building. The southern aspect overlooks the lake, to create a wonderful setting and sense of place | <ul style="list-style-type: none">10. A more informal wetlands area within the floodplain11. A local food production area located close to the farmstead, potentially comprising allotments, community orchard or alternative community growing spaces12. A new access route in the south west of the site, helping to disperse traffic movement and increase permeability |
|---|---|--|

The feedback on the masterplan at the Design Review Panel was positive. However, key masterplanning principle feedback included:

- The need to develop a stronger landscape strategy and narrative
- The need to establish a stronger connection between the site and West Horndon Station
- The need to further embed the historic farmstead at the heart of the Garden Village
- The need to explore movement across the site, particularly for pedestrians and cyclists

A pubic exhibition was carried out the same evening, with boards setting out the background and context for the scheme. There was generally a strong level of support for the masterplan and most of the comments related to the principle of development and traffic, rather than the masterplan design.

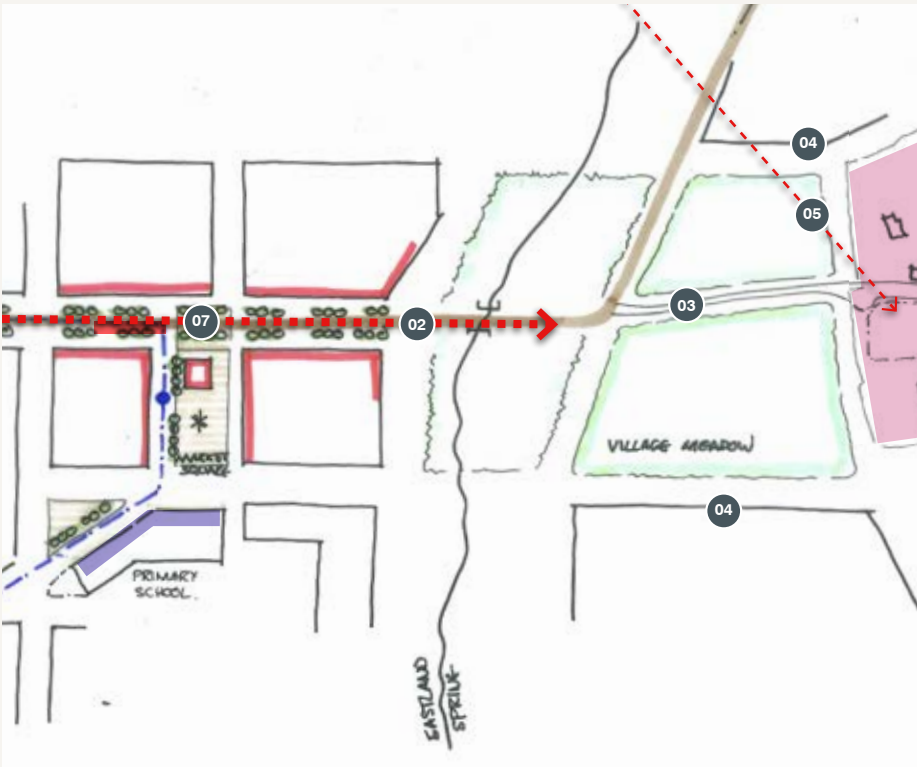
RE-CONSIDERATION OF THE VILLAGE CENTRE/HEART

One of the key design matters that the CEG team considered needed to be addressed was the Village Centre/heart. It was felt that the masterplan presented to Design South East in June highlighted conflicting tensions between the historic farmstead (the historic heart of the place) and the Village Centre (then located around the secondary school/lake plaza) in the south of the site.

A design decision was made to move the Village Centre to the west of the farmstead so as to really root the Garden Village into its historic core. Various options were explored, as set out in the diagrams (right).



WESTERN VILLAGE GREEN



HERITAGE GREEN

This option retains the green in front of the farm house. The Village Centre is laid out around a smaller plaza with a direct link through to the village green and farmstead. Housing frames the village green to the north and south. However, this option took away the clear visual relationship between the Village Centre and the Village Green.

EASTERN MARKET SQUARE

The preferred option was to retain the open setting to the west of the farmstead, which will in turn become the Village Green. The Village Green is enclosed on the north and south sides by housing. A new Market Square sits to the west of the green, with the eastern end opened out to allow views across the village green to the farmstead. The Market Square would comprise a mix of active uses to create a vibrant Village Centre and sense of place.

JULY 2019
DESIGN REVIEW PANEL 2

The revised masterplan was presented to Design South East, Brentwood Borough Council and other stakeholders in July 2019. This presentation set out 10 diagrams showing how the Framework Masterplan could be built up. These are presented below.



KEY LANDSCAPE FEATURES

- Key features which will be respected included:
- Ancient woodland, key trees and historic hedgerows
 - The ridge-line
 - The historic farmstead
 - Eastlands spring
 - Existing water feature

THE ENTRANCES

- 3 western points of access from the A128
- Central access point forms key pedestrian and cycle connection to West Horndon and its station. Responds to Station Road alignment
- Northern access also utilises proposed junction for East Horndon employment site
- North and south access points establish a calm environment for the Station Road link junction



FRAMING VISTAS

- Northern access point frames the view towards the Grade II listed farmstead
- Vistas converge on a new Market Square with a clear view over the Village Green and towards the farmstead

ESTABLISHING THE VILLAGE CENTRE

- Market Square and Village Green becomes the Village Centre
- Natural point of destination, easily accessible from the west as well as other neighbourhoods within the village
- Will be home to the highest densities within the village
- Will accommodate non-residential uses including retail, employment, cafés and community uses
- Approach respects the setting of the farmstead

5.



DUNTON FANNS

- Series of key spaces radiate from the Village Centre and along a north-south connection
- Incorporates existing key landscape features and uses these as key nodal points along the route

6.



EDUCATION AT THE HEART OF THE VILLAGE

- Expansion to the east
- Secondary School location places education (and pitches) at the heart of the site
- Located on flat land with a clear vista from the western approach
- Centrally located for maximum catchment within the wider village
- Well connected to the Village Centre and historic farmstead

7.



SOUTHERN NEIGHBOURHOOD HUB

- Hub for the southern neighbourhood
- New square/plaza framed by schools to the north and south
- Focussed around a south facing square fronting the lake with cafés and some small scale retail
- Community building (linked to school sports pitches) frames square to the north

8.



DEFINING THE SOUTHERN NEIGHBOURHOOD

- Strong east-west route continued
- Neighbourhood maximises views over the wetland setting
- Central east-west landscape corridor preserves views to the spire of St. Marys church

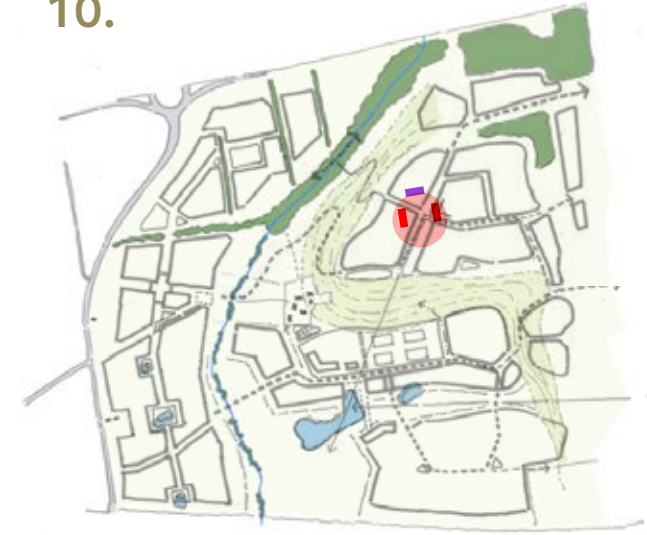
9.



NORTH EASTERN NEIGHBOURHOOD - VIEWS FOR ALL

- Maximises the views from the top of the ridge-line
- Integrates, embraces and enhances the woodland backdrop

10.



NORTH EAST NEIGHBOURHOOD HUB

- Neighbourhood Hub established at the intersection of routes
- Series of pocket parks ensure public views are retained with a key linear corridor framing the southern neighbourhood

The diagrams culminated in a Framework Masterplan for the Garden Village which was also presented at the Design Review.

The plan (below) shows some of the key design moves that were made since the last review, namely:

1. **Extension of Station Road** – a direct (traffic free) pedestrian, cycling and public transport route has been established linking Station Road to the centre of the Garden Village/Market Square. This has the potential to provide seamless sustainable travel routes from the Mobility Hub in the centre of the village to West Horndon Railway Station.

2. **New Village Centre/Market Square** – a new Market Square within the relocated Village Centre has been established. This sits at the end of the Station Road extension and to the immediate west of the Village Green, creating a multi-functional square, framed by active uses with wonderful views east across the Village Green to the historic farmstead.

3. **New employment area** – further to discussions between the landowners a new Employment Hub has been established at the north western edge of the site. This will provide grow-on space for the smaller businesses within the village, as well as other commercial organisations.

4. **New local park** – the formal pitches have been removed and a smaller pocket park has been provided to act as the centre point for this community and to provide an area to sit out in for the business unit occupiers. This park has a direct link down to the ancient woodland block to the south. The potential for the pitches to be moved to (5) was also discussed.

5. **Noise barrier** – whilst the buildings along the edges of the A127/A128 can provide adequate noise mitigation from the surrounding strategic roads, further technical studies have indicated that there will be a need to provide a barrier (bund/fence) along the north eastern area of this part of the site. This area could also accommodate sports pitches.

6. **New cricket pitch** – the area around the plaza, lake and Neighbourhood Hub has now been enhanced with a cricket pitch, to create a focal, sociable and active area at the heart of the neighbourhood.

7. **New alignment of the southern access** – the alignment of this street now creates a strong boulevard into the site, aligning with a vista that terminates with the important secondary school building.

8. **Retained Village Green** – further to a number of design options, set out earlier, the green space in front of the historic farmstead has been retained and now acts as the central Village Green, framed on all sides by development.



The approach to landscape, in particular the influence that it has on the character of the three neighbourhoods, was also presented. The overall landscape influences/character areas presented were:

- **Dunton Fanns** (previously known as the Western Neighbourhood) – is influenced by the strong open, flat fans landscape. This setting lends itself to being a very outward looking part of the site with the opportunity for a more formal, gridded structure

- **Dunton Waters** (previously known as the South Eastern Neighbourhood) – is influenced by the gently sloping land that falls in a westerly direction from the ridge-line slopes to the Eastlands Spring and the lake. This setting lends itself to a more semi-formal layout with opportunities for swales, rain gardens and SuDS to feature very strongly in its design.

- **Dunton Woods** (previously know as North Eastern Neighbourhood) – is influenced by the views out across the site and wider area and by its woodland backdrop. This setting offers the possibility of bringing the woodland (clusters) further into the area and enables a more organic, informal block structure to be laid out.

OCTOBER 2019
DESIGN REVIEW PANEL 3

The final design review panel was held in October 2019. Again, this involved a presentation to Design South East, Brentwood Borough Council and other stakeholders.

The presentation followed on from the submission of the draft Masterplan Framework Document to the panel and covered an update on the framework masterplan, the content of the document and our approach to setting out masterplan guidelines.

Updates to the framework masterplan included:

- 1. A more direct pedestrian and cycle link between Dunton Fanns and Dunton Waters
- 2. Street alignment alterations to work better with the topography
- 3. Additional sports pitches now incorporated to the north of the development, serving the northern community
- 4. Further updates on the sports provision at the secondary school
- 5. Further updates on the gypsy and travellers site and education provision

These changes are shown on the plan below.



Further, more detailed plans were also presented and included a breakdown of the character areas/ sub character areas to explain the design thinking and rationale behind each.



The presentation then went into further detail to explain the more detailed design principles covering urban form, landscape and focal spaces within each character area.

- 1. Mobility corridor;
- 2. Tilbury Road route and vista to Grade II listed farmhouse;
- 3. Central Market Square and Village Green;
- 4. Employment area;
- 5. Opportunity for key arrival space;
- 6. Key north-south route;
- 7. Potential for key direct pedestrian and cycle lane;
- 8. 'Living on The green' focussed around existing landscape;
- 9. Potential for farmstead clusters.



The feedback was generally positive. However, D:SE specifically requested that the design team set out a clearer set of mandatory principles that will ensure that the masterplan and the overall vision is delivered. Following the session, the design team worked closely with Brentwood Borough Council to develop a series of principles, falling under three categories:

- **Mandatory Spatial Principles** (covering land use/ spatial organisation, vistas/ access/ movement, landscape, play, heritage, density and building heights) - which aim to ensure that the key structural elements of the masterplan remain in place and are adhered to in further design guidance and planning applications. These are now covered in chapter 5 of this document.

- **Mandatory Overarching Principles** (covering mobility, sustainability, community/ stewardship/ legacy and phasing/ delivery) - which are more general principles, not specifically related to the spatial masterplan layout but which should also be adhered to in future design and planning applications. These are now covered in chapter 6-9 of this document.
- **Advisory Spatial Guidelines** (covering neighbourhood sub-character areas, urban form, landscape and focal spaces) - which are more illustrative and provide indicative guidance for further design work (e.g. the SPD) to consider. These are now covered in the appendix to this document

February 2020 Design Review Panel - Chair Review.

A further draft of the Masterplan Framework Document was discussed with Design South East. This discussion focussed on the Mandatory Principles and the overall content of the revised document. It was agreed that the structure of the document had been improved and the Mandatory Principles were clear and formed a sound basis for further design work / planning applications.



APPENDIX 2

ADVISORY
SPATIAL
GUIDELINES

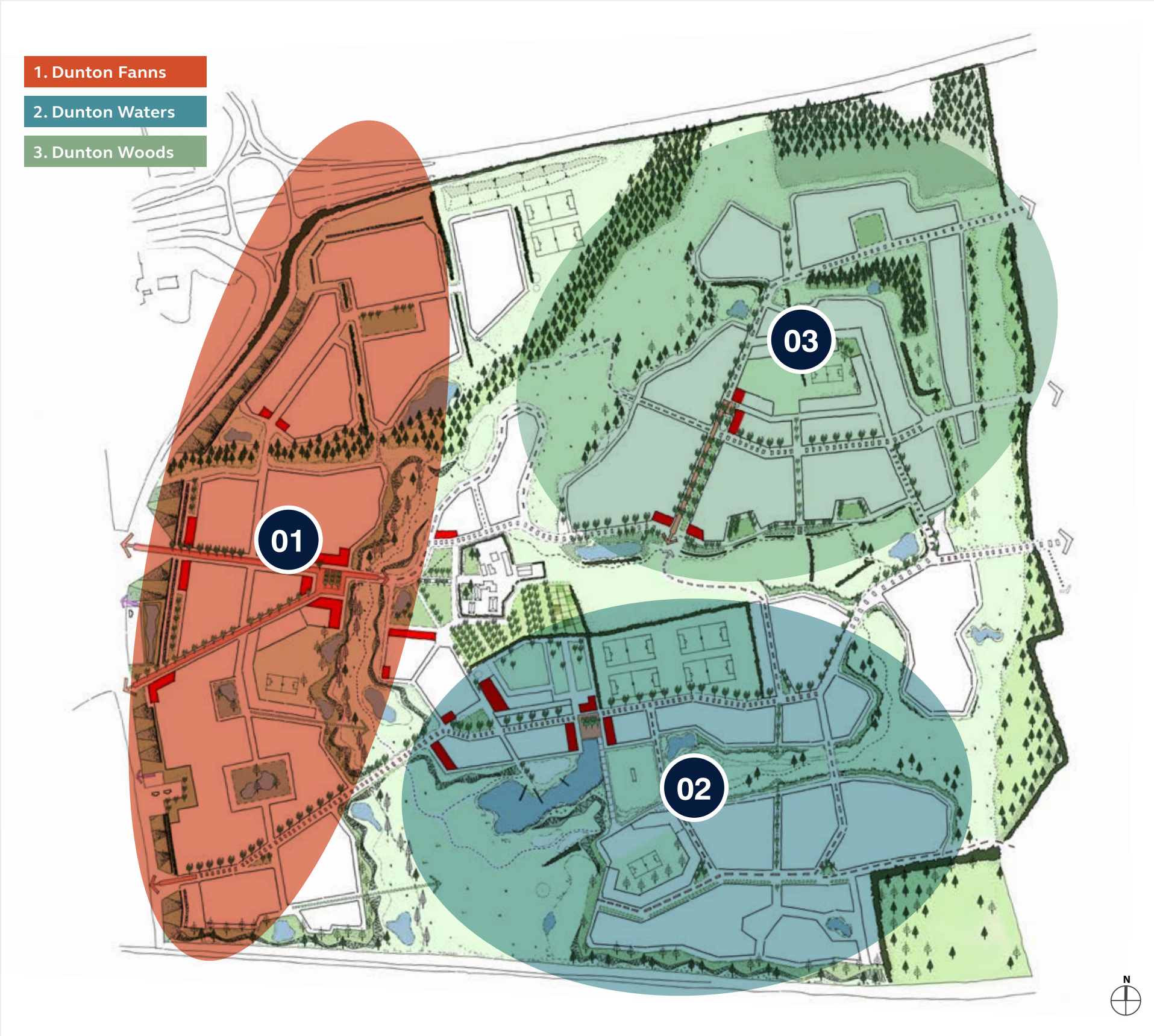
Appendix 2 sets out a further level of design information as Advisory Spatial Guidelines for the Neighbourhoods. The information was developed during the design review process to illustrate how future development could come forward, as well as justifying the approach within the Framework Masterplan.

ADVISORY SPATIAL GUIDELINES INTRODUCTION	P.188
NEIGHBOURHOOD SUB-CHARACTER AREAS	P.190
URBAN FORM - ILLUSTRATIVE MASTERPLAN	P.192
DUNTON FANNS	P.194
DUNTON WATERS	P.208
DUNTON WOODS	P.218

ADVISORY SPATIAL GUIDELINES

INTRODUCTION

Dunton Hills Garden Village will feature three interconnected neighbourhoods, as illustrated on the plan below. Whilst strong physical and visual connections link these neighbourhoods, the overall character of each will be unique and distinct, relating strongly to their existing setting and landscape.



Neighbourhoods character areas

PURPOSE OF THE ADVISORY SPATIAL GUIDELINES

The guidelines set out in this appendix give further understanding and validity to the Mandatory Spatial Principles established in Chapter 5. They are advisory, and consider Urban Form, Landscape, and Focal Spaces. Illustrative Test Fits area also set out for the Dunton Fanns Neighbourhood. It is hoped that the Advisory Spatial Guidelines will assist in stimulating a well considered and appropriate design response, ensuring that a series of unique and high quality new neighbourhoods are developed, reflective of their setting within the overall Garden Village.

The intention of the guidelines is to provide a basis for the evolution of Brentwood Borough Council’s Supplementary Planning Document for the Garden Village as well as detailed design as proposals emerge. The guidelines ensure that a coherent masterplan comes forward which is firmly grounded in the wide range of matters which have been explored in this document.

STRUCTURE OF THE NEIGHBOURHOOD GUIDELINES

SUPPORTING DESIGN INFORMATION APPENDIX A2	<div>ADVISORY SPATIAL GUIDELINES</div> <div>The Advisory Spatial Guidelines focus on each of the three character areas within the Garden Village (Dunton Fanns, Dunton Waters and Dunton Hills). They establish advisory spatial guidelines that deal with the themes outlined below.</div>	ADVISORY
	<div>NEIGHBOURHOODS SUB-CHARACTER AREAS</div> <div>Guidance on the emergence of potential sub-character areas within each of the three neighbourhoods and how they might be set out and influenced by their role and unique context.</div>	
	<div>URBAN FORM</div> <div>Diagrams and narrative setting out the urban form as well as key spatial principles relating to urban grain and built form.</div>	
	<div>LANDSCAPE</div> <div>Diagrams and narrative setting out the landscape vision for the neighbourhood along with key annotations and precedents for reference.</div>	
	<div>FOCAL SPACES</div> <div>Diagrams and narrative setting out an approach for focal spaces that may be considered and explored in the development of the neighbourhood.</div>	
	<div>ILLUSTRATIVE TEST FITS (DUNTON FANNS ONLY)</div> <div>Test fit plans showing how a number of parcels within the Dunton Fanns Neighbourhood may be delivered, following the principles and guidelines.</div>	

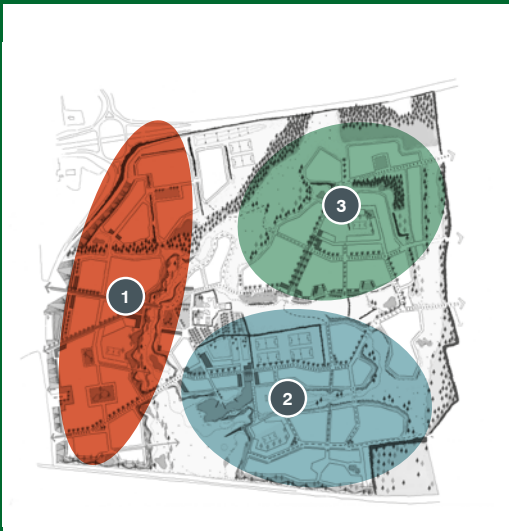
NEIGHBOURHOOD SUB CHARACTER AREAS

Within each of the neighbourhoods there are a number of sub character areas. These areas are distinct from each other but unified by a number of factors, in particular their location within the context and setting of the new Garden Village.



Neighbourhood Sub Character Areas

THE THREE NEIGHBOURHOODS



DUNTON FANNS

- 1. Village Centre
- 2. Tilbury Road
- 3. Eastlands Spring Setting
- 4. Nightingale Lane, Woodland and Hedgerows
- 5. Employment

- 1. Dunton Fanns
- 2. Dunton Waters
- 3. Dunton Woods

DUNTON WATERS

- 1. Neighbourhood Hub
- 2. Wetland Setting
- 3. Village Green Setting
- 4. Secondary School Hub

DUNTON WOODS

- 1. Neighbourhood Hub
- 2. Ridge-line Setting
- 3. Woodland Setting

DUNTON FANNS

1. VILLAGE CENTRE

The Village Centre establishes key gateways from the A128 and is envisaged as the most urban area in terms of character within the Garden Village. It could comprise a mixture of townhouses and apartments. The Village Centre also fronts the Eastlands Spring corridor and farmstead and is based around a Market Square, activated by non-residential uses.

2. TILBURY ROAD

These are highly visible areas, fronting the A128 and like the Village Centre, will announce the presence of the Garden Village. The area could be more urban in character and could feature taller buildings along its length, creating a strong, layered frontage along the Tilbury Road.

3. WETLAND SETTING

The Wetlands setting will contrast with the surrounding areas, being lower in density and more irregular in layout, as well as having an interface with the natural setting of the Eastlands Spring and the existing lake.

4. NIGHTINGALE LANE, WOODLAND AND HEDGEROWS

This area could be lower in density and more informal in character, enclosed and defined by the woodland and hedgerows.

5. EMPLOYMENT

The northern part of the Neighbourhood will comprise the Employment Hub, home to businesses within the Garden Village.

DUNTON WATERS

1. DUNTON WATERS NEIGHBOURHOOD HUB

The hub could comprise the highest densities within Dunton Waters as well as the secondary school, primary school, and waterfront plaza - which will be activated by additional non-residential uses at the ground floor. The hub straddles the east-west movement spine as well as the lake, providing contrasting edge conditions and interfaces.

2. WETLAND SETTING

These areas front onto the wetland area and could be informal and intimate in character. They will be outward looking whilst also drawing in the landscape within their built setting and celebrating the movement of water within rain gardens. Housing could generally be lower density with some taller marker buildings for emphasis and enclosure.

3. VILLAGE GREEN SETTING

This area is critical in creating a well overlooked and defined Village Green, as well as creating a positive outlook over the Eastlands Spring. Its character could reflect the sensitive heritage setting of the historic farmstead and the transition from the Village Green to the Neighbourhood Hub.

4. SECONDARY SCHOOL HUB

This long, narrow area predominantly comprises the school building and grounds. This area borders the base of the ridge and development could be formal in character, emphasising the linearity of the perimeter block morphology.

DUNTON WOODS

1. DUNTON WOODS NEIGHBOURHOOD HUB

The hub will sit at the key movement intersection and comprise a primary school as well as any supporting neighbourhood non-residential uses. The hub should define the northern end of the linear park leading south to the ridge-line and looking towards the wetlands in the south west of the site.

2. LINEAR PARK

This area could be formal in nature, reflecting its linear arrangement as a key vista to the wetlands. Building lines should be consistent, however taller buildings could create interest and variety, particularly at the southern boundary on the ridge-line itself.

3. RIDGE-LINE SETTING

A strong and outward looking frontage shall be created along the ridge-line, maximising the expansive views to the south from the elevated position. Building lines could follow the edge of the plateau and streets should be orientated to ensure views and ease of movement from the centre of the neighbourhood.

4. WOODLAND SETTING

This area will be largely defined by its contained and intimate woodland setting, enclosed by pockets of ancient woodland and woodland belts. Housing could generally be lower density with a more informal layout than along the ridge-line. Frontages should feel contained and private given their woodland enclosure.

URBAN FORM-ILLUSTRATIVE MASTERPLAN

The illustrative masterplan (right) sets out the next level of detail from the Framework Masterplan presented earlier and shows one way in which the site could be laid out. The illustrative masterplan has been drawn diagrammatically and shows built form at a finer grain of detail in terms of streets as well as landscape interfaces and key frontages.

URBAN FORM

The plan helps to illustrate the approach to the urban form across the site, with a more orthogonal and gridded structure in the west, where there are fewer site features to work with and a flatter Fanns landscape context. This area also accommodates longer distance views to the farmstead.

The urban form in the south east of the site becomes more informal and sinuous towards the southern and eastern edges whilst the urban form in the north east, and at the top of the ridge, takes on a more organic form, influenced by the woodland. The streets at the top of the ridge-line seek to maximize views across the landscape.

LANDSCAPE

The plan also helps to illustrate how the landscape connects into and through the built form and development parcels. In particular, it shows how the woodland in the north east of the site infiltrates into the development, creating a distinct character in this part of the site.



KEY

Routes - mandatory alignment

Routes - flexible alignment

Routes - flexible landscape connections

Residential

Indicative marker building

Indicative key frontage

01 Secondary School

02 Primary School

03 Employment Hub

04 Gypsy and Traveller Site

05 Market Square

Formal Open Space

Informal Open Space

Sports pitches

Allotments

Indicative SUDs basins





URBAN FORM

DUNTON FANNS NEIGHBOURHOOD

Dunton Fanns is the gateway neighbourhood, announcing the Garden Village from the A128. It comprises the western most neighbourhood within the village, bounded to the west by the A128 and to the east by Eastlands Spring. It accommodates the Village Centre, which is structured around a new Market Square, which in turn fronts the Village Green and provides a setting for the historic farmstead. It also contains a primary school and potential employment area.



GUIDING PRINCIPLES - URBAN FORM

Gateway Frontage:

Shall be designed to announce the Garden Village from Tilbury Road. Frontage here should be formal, outward looking and positive, embracing views over the surrounding landscape whilst providing a sufficient noise barrier for the Tilbury Road (A128). Care shall be taken not to create a wall of development through varying heights, breaks and building setbacks.

Wetlands Frontage:

Shall be permeable with strong eastern connections allowing the wetlands landscape to filter through and inform the character of the neighbourhood.

Grain:

Shall be varied throughout whilst adhering to an overall structure. The grain of the Village Centre is envisaged to be more orthogonal and formal around the farmstead avenue and Market Square, becoming more informal away from the centre, particularly around the wetlands edge. There is an opportunity for farmstead clusters of housing within the neighbourhood - reflecting the historic farmstead buildings.

Building Heights:

Shall be varied throughout the neighbourhood in accordance with the desired character. Taller buildings shall be considered around the Market Square, along the Mobility Corridor and along the A128 frontage.

Marker Buildings

Shall be located to define key entrance points and spaces within the neighbourhood.



DUNTON FANNS LANDSCAPE

Dunton Fanns neighbourhood presents an opportunity to provide a transitional and dynamic landscape which connects the Fanns character in the west to the Woods and Wetlands in the east. This fluid change in landscape creates a perceptive rhythm and flow to the spaces within the neighbourhood.



GUIDING PRINCIPLES

Variety of landscapes

Variety of landscaped spaces to include civic spaces, pocket parks, open amenity space, biodiversity enhancement and play opportunities. Natural play opportunities are to be explored throughout the landscape in addition to the creation of LEAPS and NEAPs.

Structural Tree Planting

Trees planted along the western edge of the Dunton Fanns should be of large stock size to create instant impact. These trees should embody the characteristic landscape features of the Fanns - open spaces with large individual tree specimens visible from a distance. Feature trees should be planted at key gateways to frame views and provide wayfinding markers. Main access route for vehicles, pedestrians and cyclists should be along tree lined avenues. A minimum 15m eco-tone buffer will be required around the ancient woodland to ensure it is sufficiently protected. This buffer will be planted with native tree species in a mixture of stock sizes to provide varied canopy heights.

Eastlands Spring

Existing vegetation along Eastlands Spring will require some clearing and planting enhancement to open up access to the stream edge and improve the edge treatment. Important Category A or Veteran trees along the stream will be protected.

Frontage to the A128

The landscape along the western boundary of the Garden Village will provide some buffer vegetation to the A128 as well as create opportunities for recreation, socialising and informal play.

Arrival Plaza and Park

The arrival plaza and park will celebrate the Fanns Character in planting and tree selection, and create an open space for recreation, socialising and interaction within a formal landscape.

Community cohesion

Landscaped areas are to be designed to promote community ownership and long-stem stewardship.

Dunton Fanns: a landscaped entry

The western approach to Dunton Fanns is characterised by a wide green landscaped buffer, providing a green integration between the A128 and the built form. This green corridor provides biodiversity links to the wider landscape setting, room for outdoor activities and embodies the Fanns landscape character such as wide open spaces and feature trees.

Neighbourhood Open Spaces

Throughout the Dunton Fanns neighbourhood a number of landscaped neighbourhood open spaces should be provided, creating opportunities for rest or play, as well as breathing spaces within the built form. Where possible the open spaces should be located around existing water bodies or feature trees.

Village Green: an active landscape

The Village Green will provide the key community and social space at the centre of existing and proposed features: the new Market Square, the existing enhanced Eastlands Spring and the heritage setting of the farmstead. The existing drive will be retained, providing a main access route east towards the Secondary School and Dunton Waters.



The Village Green should engender a sense of place and identity within the Garden Village by celebrating the aspect of the historic farmhouse, the new Market Square, and provides a space for feature artwork or sculpture.

The Eastlands Spring will be regenerated through selective clearing of vegetation and new marginal planting, allowing visitors to enjoy the water's edge.

Wetland Links

New amenity spaces and wetlands will be created alongside the length of the Eastlands Spring, providing opportunities for play, recreation, social interaction and biodiversity improvements.

The Wetland landscape to the south-eastern edge of Dunton Fanns will incorporate new SuDS elements, habitat creation and meadows for wildlife promotion and connections to nature for the residents and visitors.





FOCAL SPACE MARKET SQUARE

The Market Square should be a lively focal point, anchoring retail and community uses as well as comprising a Mobility Hub and providing a welcoming and attractive space for residents and visitors to relax and spend time.



GUIDING PRINCIPLES

Structure

- The layout of the square should respond positively to the farmhouse and maintain views out across the Village Green, complimenting the setting.
- Flexible shared surface across the highway should be used to slow traffic and emphasise pedestrian priority.

Built form response

- The character should be urban, reflecting its strategic location with an appropriate sense of enclosure achieved through the orientation of frontages and the use of taller and marker buildings.
- Marker buildings should be positioned at strategic locations to promote urban legibility and wayfinding.

Landscape

- The use of planting should be used to further demarcate the square and emphasise views.
- Soft and hard elements should be used which are flexible and designed to accommodate events.



Market square/transport hub (la Tour-de-Peilz, Switzerland).



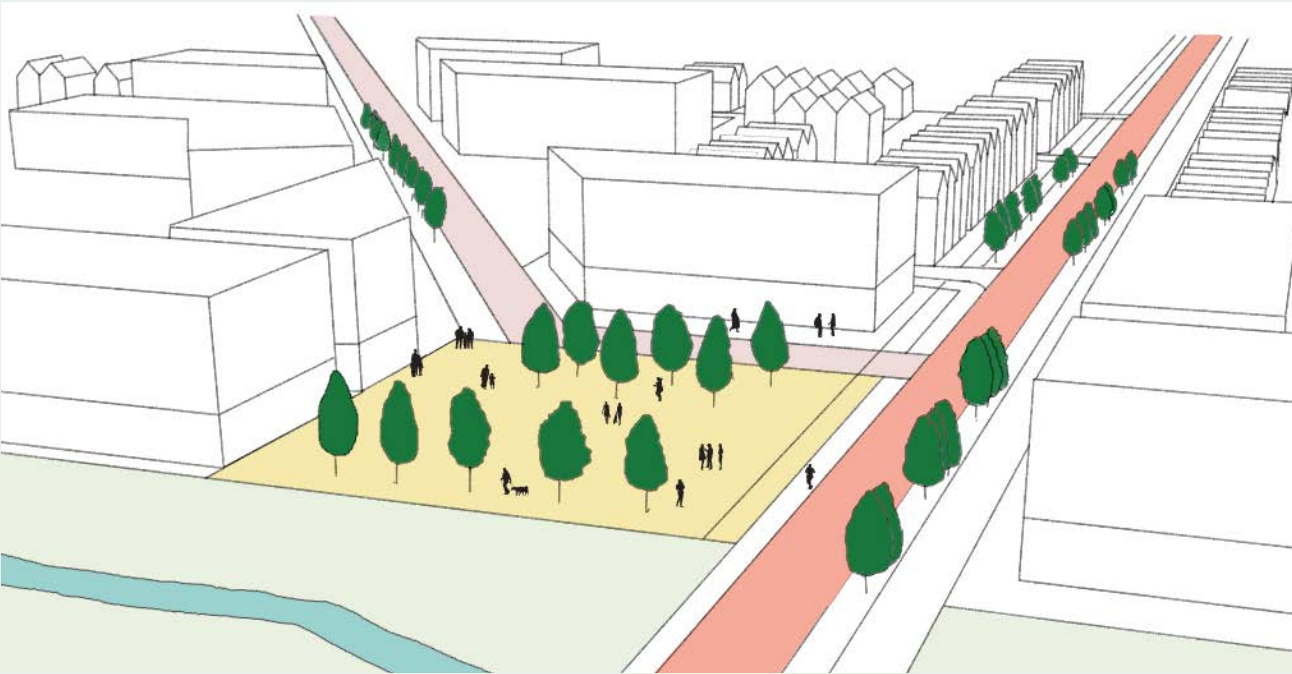
Multi-functional square (Hradec Kralove, Czech Republic).



Attractive mix of hard and soft landscaping



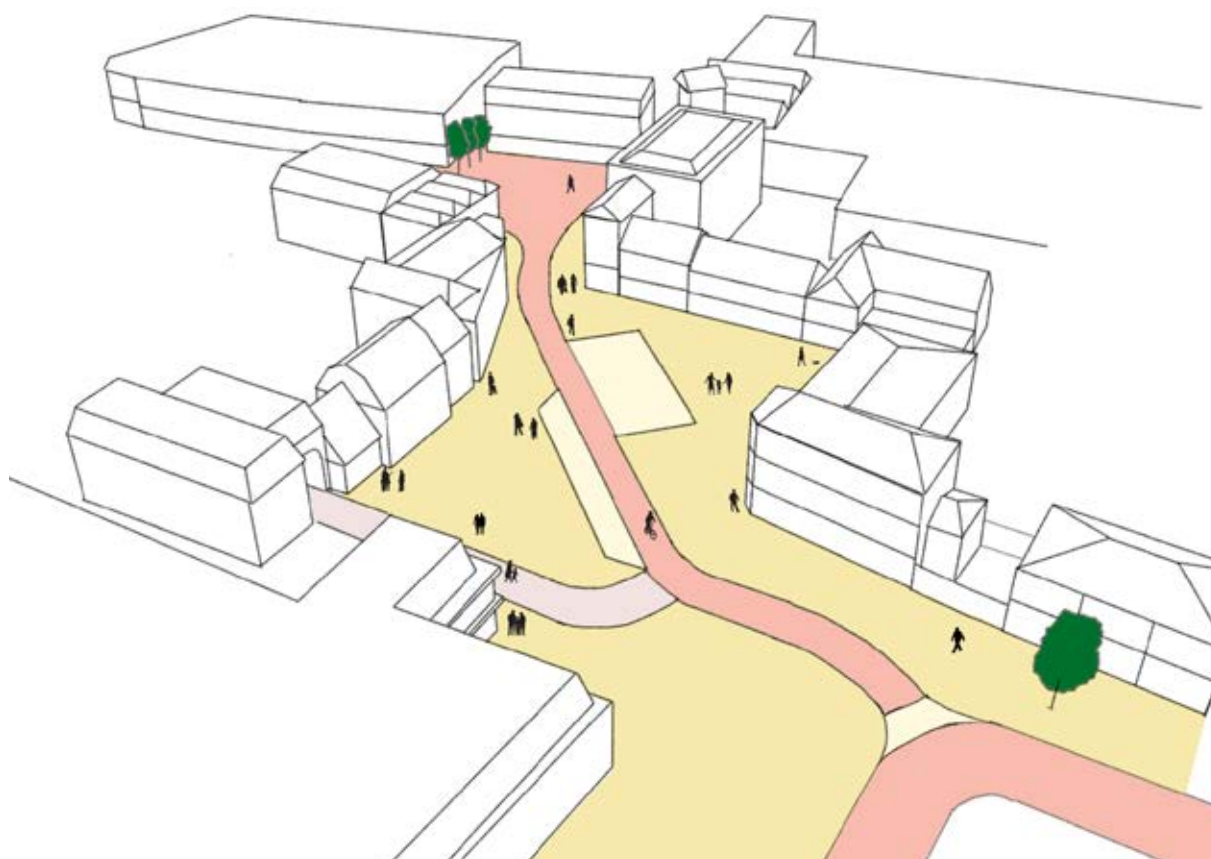
Flexible Market Square (Brotorget, Bollnas, Sweden)



Potential spatial approach to the Market Square focal space.

PRECEDENTS

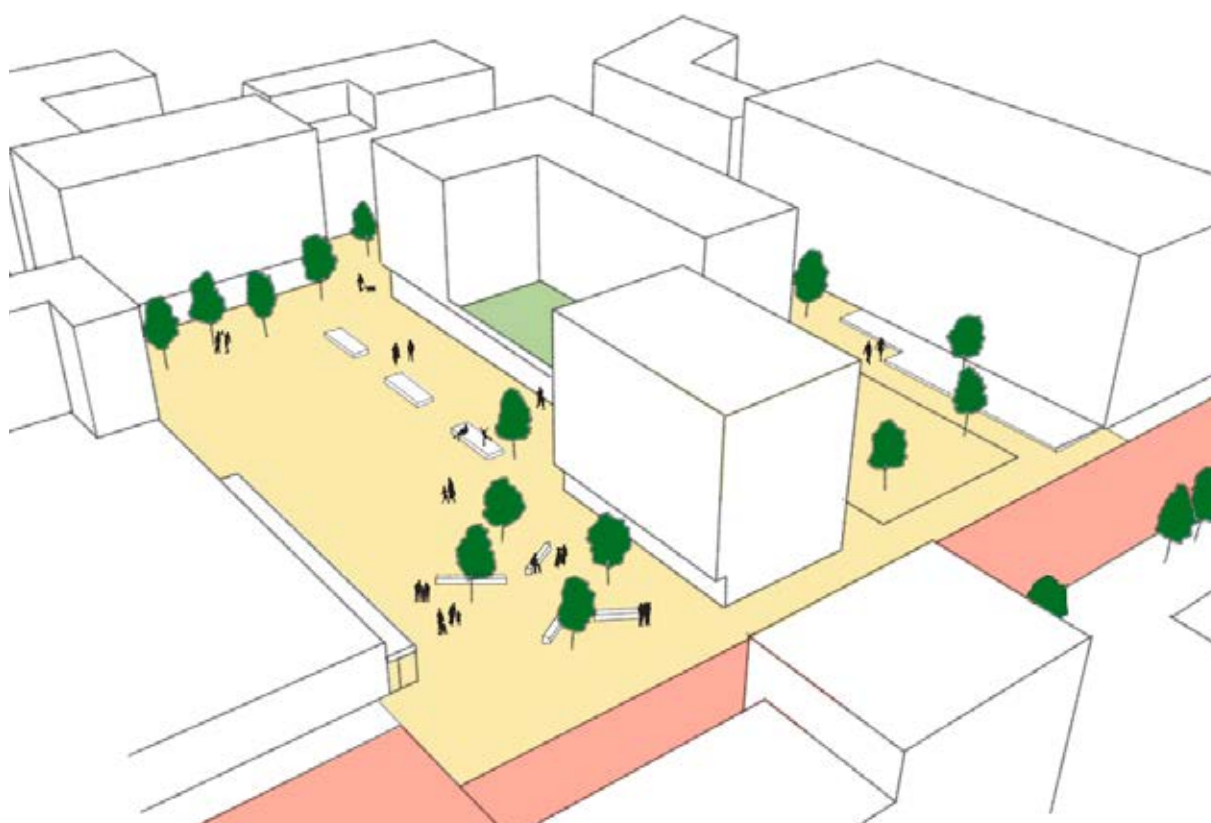
In designing the Market Square, we have studied other squares at a similar scale and with similar attributes from Essex and the wider East of England region. We have also looked to Europe for examples.



GREAT SQUARE, BRAINTREE, ESSEX

This is a local precedent of a traditional Market Square which retains its function as a key retail and social hub for the wider settlement and provides some key points for consideration:

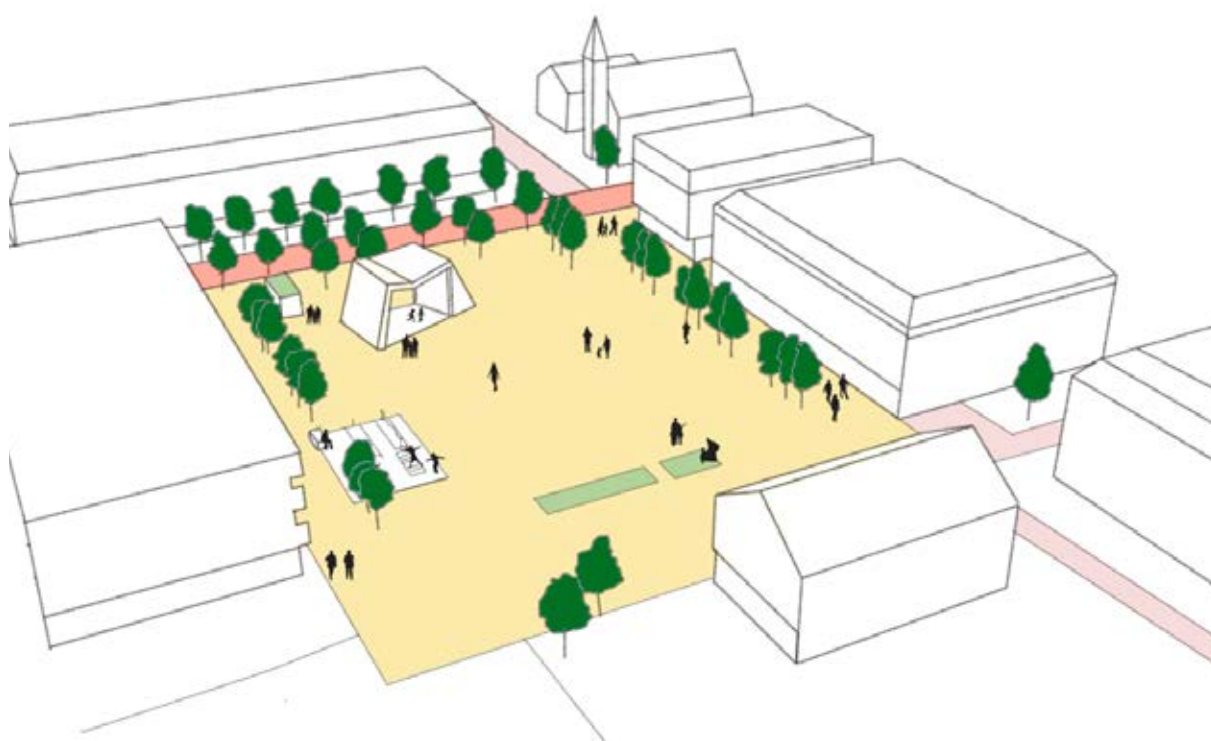
- Key vehicular route runs centrally through the square and narrow lanes extend perpendicularly from the square;
- The space is flexible enough to facilitate a range of temporary uses/market stalls;
- Built form is arranged to enclose the central open space on three sides;
- Built form is varied in height and architectural composition with taller elements positioned at corner locations;
- Parking is sensitively incorporated into the streetscape with additional parking in rear courtyards reducing the car dominance;
- The square terminates a key street corridor connecting to the railway station.



MARKET SQUARE, EDDINGTON, CAMBRIDGE

This sits at the heart of a 150 ha mixed use development and provides a central focus for adjacent commercial and residential uses. The square was completed in 2018 and is an excellent example of placemaking in a new build scheme. The key points to note are:

- The scale of built form reflects the importance of the space and enhances legibility within the development;
- The square is a flexible space playing host to festivals, community events, pop-up shops, food stores and farmer's markets;
- Ground floor retail and bleed out space successfully activates the central square;
- Platform benches provide flexible seating;
- Semi-mature trees soften the space, giving it a human scale and segregating the square from the vehicular route .

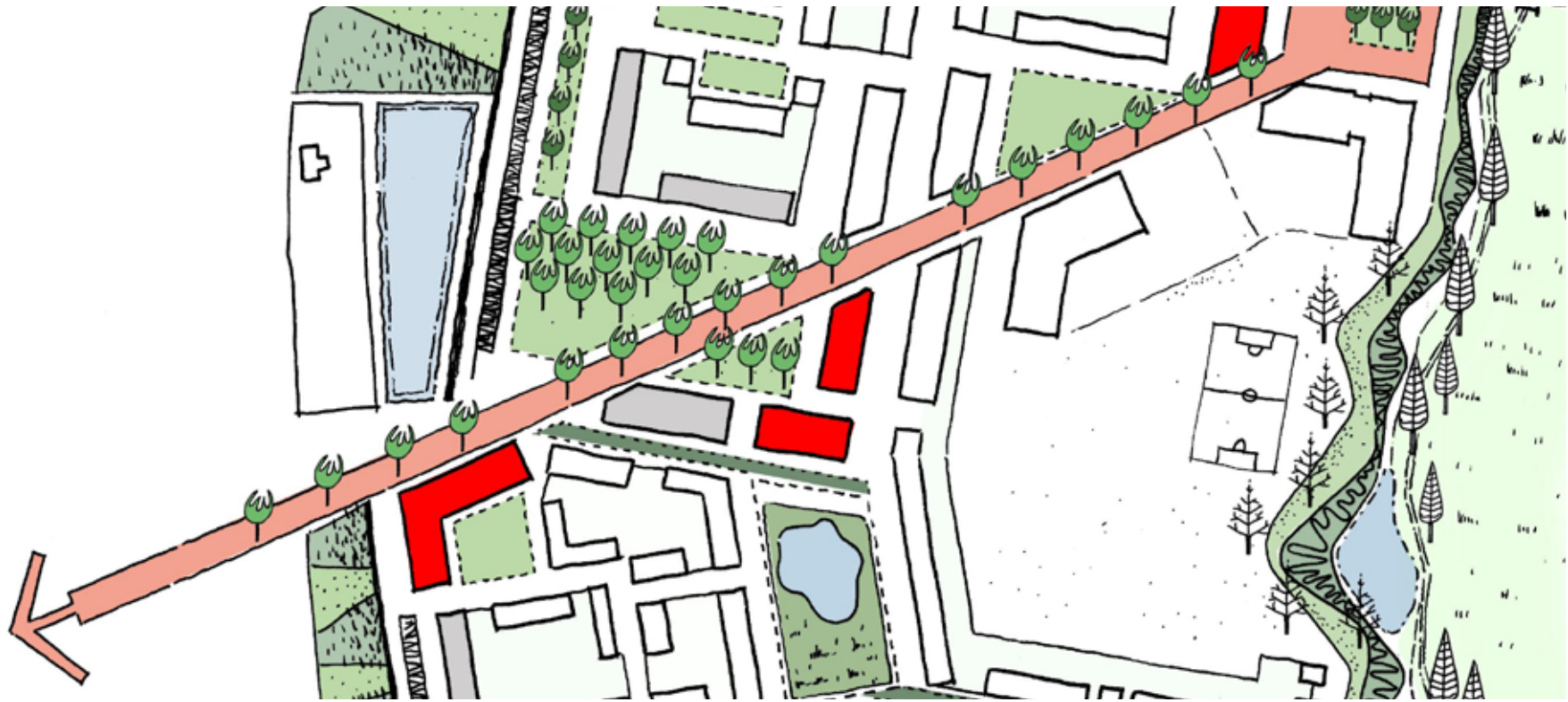
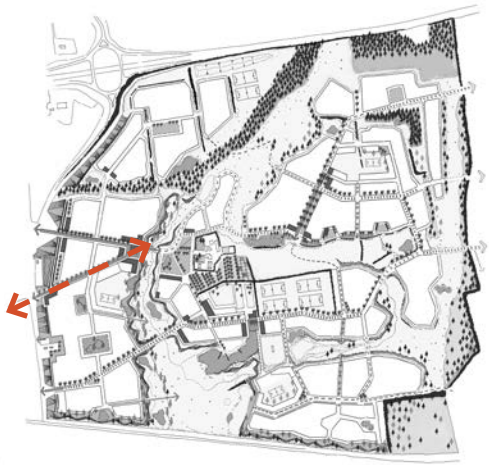


BROTORGET, BOLLNÄS, SWEDEN

This is an example (from further afield) of what an attractive meeting place in a settlement could look like. The design concept for the square was based on:

- The need to facilitate a range of activities all year round and a space which meets the holistic needs of all - including flexible seating and a playground;
- The stage providing a focal point, also reflecting the rural traditions of the surrounding area;
- Integrating a mix of urban and rural elements through hard landscaping and softer features such as trees and planting beds;
- Rows of planting used to buffer the square from passing traffic and create an intimate sense of enclosure.

FOCAL SPACE MOBILITY CORRIDOR



GUIDING PRINCIPLES

Structure

- The alignment of the corridor should be a continuation of Station Road to create a direct connection towards West Horndon Station, encouraging pedestrian and cyclists to use it.

Built form response:

- The corridor could be fronted by taller buildings with the largest elements focused at the entrance to the site to emphasise a sense of arrival;
- Built form fronting onto A128 could be formal in character to create a strong frontage;

- The rhythm of the building line along the Mobility Corridor could be varied in places to create small pockets of open space and echo structural elements seen in Brentwood and Ingatestone.

Landscape:

- The character could reflect the formal nature of the adjacent built form and be of a structured appearance;
- Potential SuDS structures could be designed as landmark features to celebrate the sense of arrival;

- The use of linear planting could be used to further emphasise the linearity of the corridor;
- Landscape surface material and street furniture to be robust and to reflect the character of the Fanns Neighbourhood;
- Formal mature tree planting along the Mobility Corridor creates an avenue to reinforce the linear nature and provides a tree canopy.



Precedent image of interactive street furniture



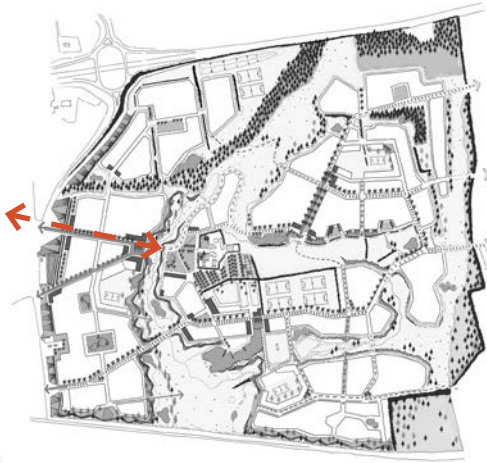
Seating should be well integrated and provide opportunities for rest and shelter



Pedestrian and cycle route with well integrated planting and seating (Burridge Gardens, St John's Hill, London).

FOCAL SPACE

FARMHOUSE VISTA



GUIDING PRINCIPLES

Structure

- The farmhouse vista entrance shall frame an uninterrupted east-west view between the Grade II listed farmhouse and the A128. It forms the main vehicular gateway into the site.

Built form response:

- The gateway around the new roundabout junction could comprise taller buildings and be and formal in character for emphasis;
- The rhythm of the building line could be continuous to frame the vista of the farmhouse and Village Green.

Landscape:

- Landscape surface materials and furniture could be sympathetic and complementary to both the heritage asset of the farmhouse and the new urban form within the Village Centre;
- Street trees could feature to emphasise formality, enclose the street and create a boulevard character.



Precedent image of attractive, hard landscape treatment (Eddington, Cambridge).



Precedent image for potential approach to architectural treatment (Abode, Cambridge).



Simplistic interpretation of vernacular architecture (Kidbrooke Village, London).

FOCAL SPACE POCKET PARK



GUIDING PRINCIPLES

Structure

- Where possible the pocket parks should be of an orthogonal nature to help create a formal character.

Built form response:

- An appropriate sense of enclosure could be achieved through the scale and alignment of built form;
- Built form to address and front the open space;
- Taller buildings could be used where appropriate such as at key junctions and corners.

Landscape:

- Pocket parks within Dunton Fanns should be planted in line with the Fanns character area;
- Both formal and informal landscape design layouts should be included within the pocket parks to provide diversity;
- Larger scale pocket parks might be considered where taller buildings create an enclosure in order to achieve a sense of breathing space for the parks.



Precedent image of green courtyard enclosed by homes (St Andrews, Bromley-by-Bow, London)



Precedent image of seating set in an attractive landscape setting



Play space for a range of age groups with naturalistic materials (St Andrews, Bromley-by-Bow, London).

VISION FOR DUNTON FANNS



Potential for farmstead cluster housing

Village Green

Market Square

Avenue establishing view corridor to listed farmhouse from A128

Taller buildings creating a strong frontage and a noise barrier along the A128

Potential for gateway open space



ILLUSTRATIVE TEST FITS FOR DUNTON FANNS

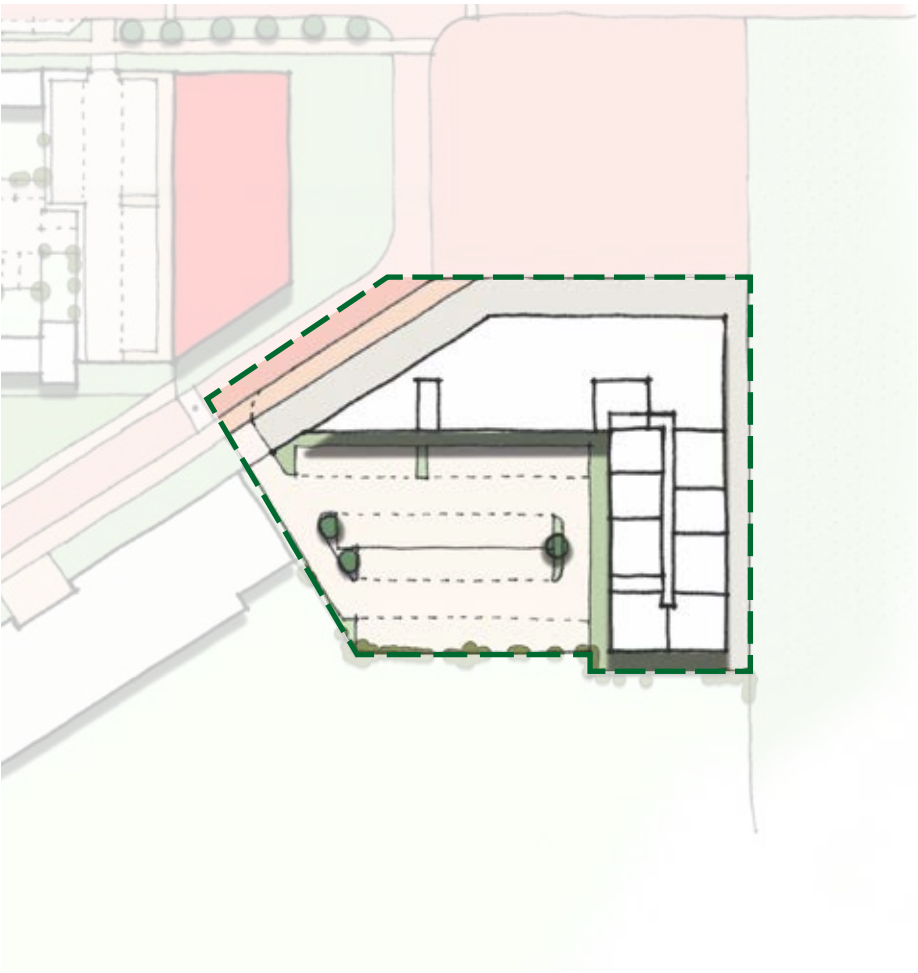
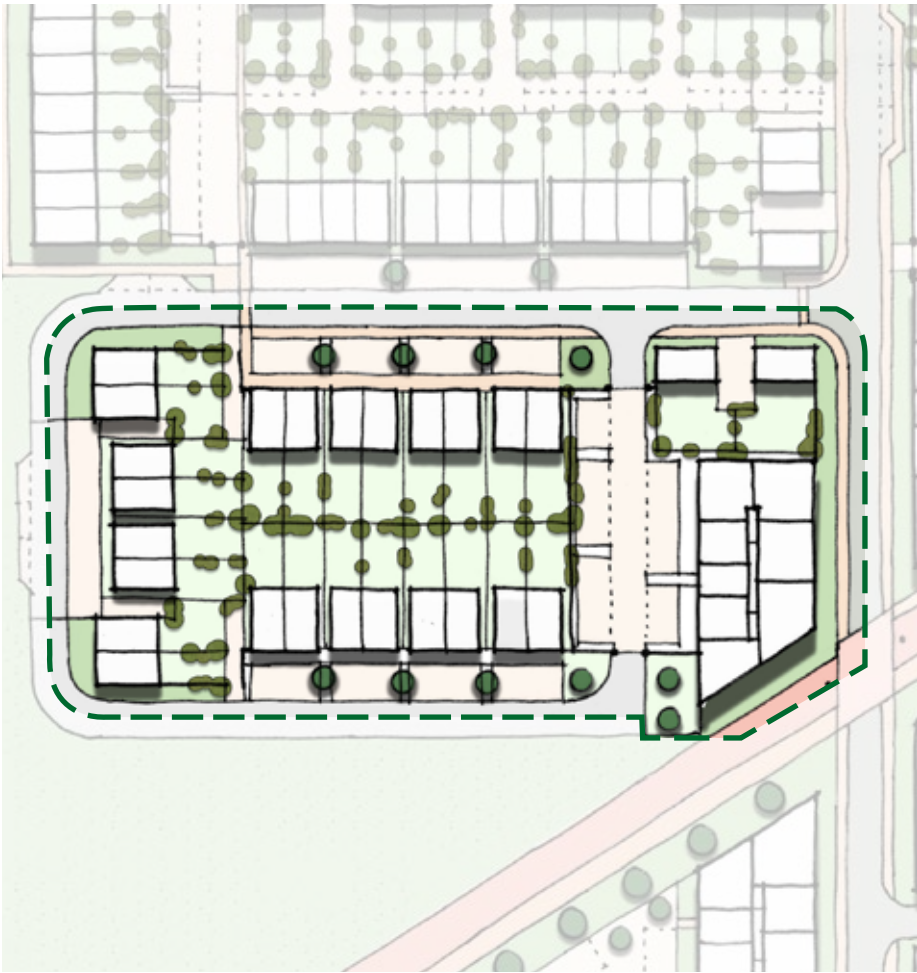


Dwelling type	No of units	Percentage within site
1 bed 2 person apartment	0	0
2 bed 3 person apartment	0	0
2 bed 4 person house	5	35.7%
3 bed 5 person house	3	21.4%
4 bed 6 person house	6	42.9%
Total	14	100%
Average density	29 dph	

Dwelling type	No of units	Percentage within site
1 bed 2 person apartment	0	0
2 bed 3 person apartment	0	0
2 bed 4 person house	11	52.4%
3 bed 5 person house	6	28.6%
4 bed 6 person house	4	19.0%
Total	21	100%
Average density	37 dph	



A number of proving layouts and detailed studies have been prepared for different parcels within the Dunton Fanns Neighbourhood. This portion of the site, containing the Village Centre, will accommodate the majority of flats and apartments due to its strategic location.



Dwelling type	No of units	Percentage within site
1 bed 2 person apartment	13	24.5%
2 bed 3 person apartment	14	26.4%
2 bed 4 person house	10	18.9%
3 bed 5 person house	8	15.1%
4 bed 6 person house	8	15.1%
Total	53	100%
Average density	62 dph	

Dwelling type	No of units	Percentage within site
1 bed 2 person apartment	39	49.4%
2 bed 3 person apartment	40	50.6%
2 bed 4 person house	0	0
3 bed 5 person house	0	0
4 bed 6 person house	0	0
Total	79	100%
Average density	168 dph	



DUNTON WATERS

URBAN FORM

Dunton Waters is located in the south east corner of the Garden Village, framed by the ridge line to the north and east and the wetlands area to the west. It has a key role within the development and accommodates a wide range of uses within its centrally located Neighbourhood Hub, including a primary and secondary school.



GUIDING PRINCIPLES	
<p>East West Avenue and Lake Plaza:</p> <p>These key areas should be designed to create a sense of place and arrival. The gateway frontage (to the west of the secondary school) is particularly unique, enabling the transition from Dunton Fanns and the Eastlands Spring corridor through to Dunton Waters. Building frontages within all of these areas should be formal, with a continuous building line wherever possible. Set backs could occur at the corner of blocks for emphasis and enclosure.</p>	<p>Grain:</p> <p>Dunton Waters, in its overall composition, is essentially two built areas, anchored by a swathe of greens pace snaking from east to west, connecting Eastlands Spring to the ridge line. As such, the character is a tale of two halves; a more formal, public facing setting to the north - which has an important interface with the historic farmstead - and an informal, more localised setting to the south. The urban grain could reflect this general difference in character, with large, rectilinear perimeter blocks to the north of the green space, generally placed on a north-south axis, and more sinuous perimeter blocks to the south.</p>
<p>Wetlands Frontage:</p> <p>Buildings here should reflect those found on the opposite side of the Wetlands Area (in Dunton Fanns) enabling the wetlands landscape to filter into the development. Buildings here should be semi-formal in nature.</p>	<p>Building Heights</p> <p>Shall be varied throughout the neighbourhood. Taller buildings are appropriate enclosing key spaces such as the Lake Plaza and Schoolyard Square. Building heights will recede to the south and east.</p>
<p>Green Corridor Frontage:</p> <p>Buildings fronting onto the green corridor to the east of the primary school should be informal and varied, with an undulating building line and good permeability.</p>	<p>Marker Buildings:</p> <p>Taller buildings for emphasis should be positioned to overlook key spaces, junctions and vistas. For example, the Lake Plaza.</p>



DUNTON WATERS LANDSCAPE

The landscape vision for Dunton Waters is to celebrate the intrinsic hydrology and aquatic elements of the site through imaginative sustainable drainage, planting and ecological enhancements. Dunton Waters provides a tangible link to nature throughout the neighbourhood bringing riparian features to the forefront of the scheme.



GUIDING PRINCIPLES	
<p>Doorstep character</p> <p>All aspects of the landscape design should embody the aquatic character of Dunton Waters. Pocket parks, public realm, streetscapes and development edges should reflect the dynamic and fluid character of water, and shall be planted sensitively with trees and vegetation to reflect this.</p> <p>Public realm spaces and streetscapes should still embody the Dunton Waters character whilst being predominantly hard-landscaped. Landscape furniture and features should be selected to echo the concept and character of Dunton Waters to create a unique genius loci for the neighbourhood spaces.</p> <p>Celebrating SuDS</p> <p>As a 21st century Garden Village, Dunton Waters shall celebrate sustainable water management through sensitive integration of these features into the landscape and public realm. ‘Surface’ elements such as swales, basins, ponds and rain gardens should be favoured over traditional attenuation tanks and culverts.</p> <p>SuDS shall also be used to provide educational and learning benefits. Young people at Dunton Hills Garden Village can be encouraged to learn about local hydrology and water management systems as part of their curriculum and education on combating climate change.</p>	<p>Development Fringes</p> <p>The confluence of the urban form and the open landscape around Dunton Waters shall be carefully considered and designed to create a soft transition between the built fabric and nature. SuDS and vegetated swathes around development parcels will create a dynamic and ever-changing transitional space that fluctuates with the seasons.</p> <p>Trees and Vegetation</p> <p>Trees, shrubs, meadows and landscape buffers should be planted with species to promote both the Dunton Waters character and biodiversity gain. Aquatic and riparian plants, wetland meadows and water tolerant tree species should be primarily used.</p> <p>Biodiversity Gain</p> <p>Dunton Waters represents a unique opportunity to enhance aquatic flora and fauna through both green and blue infrastructure links. A mosaic of habitat types shall be implemented within the neighbourhood including fenland meadows, open water, running water, lowland meadows, re-wilding woodland glades and great crested newt ponds.</p>



Dunton Waters: A Vital Blue Heart

Dunton Waters provides a vital blue heart within the proposed masterplan. A space for ecological enhancements on the doorstep of development creates a blurred line between the urban and natural landscape.

A variety of spaces for recreation, learning and play should be created within the wetlands landscape, allowing visitors to interact with natural processes such as rainfall, flooding and hydrology.

Pocket parks will reflect the character of Dunton Waters, with water features, ponds and riparian planting creating a unique sense of place within the public realm.



Ecology

The new wetlands provide a plethora of ecological enhancements. Existing ponds are enhanced with new marginal planting, creating a haven for aquatic bird species.

New ponds are provided to the southern boundary to create a translocation habitat for great crested newts. A creative SuDS system is celebrated through swales, ephemeral ditches and rain gardens, and the banks of the Eastlands Spring are rejuvenated with felling and coppicing of existing vegetation to open views.



Dunton Waters Play

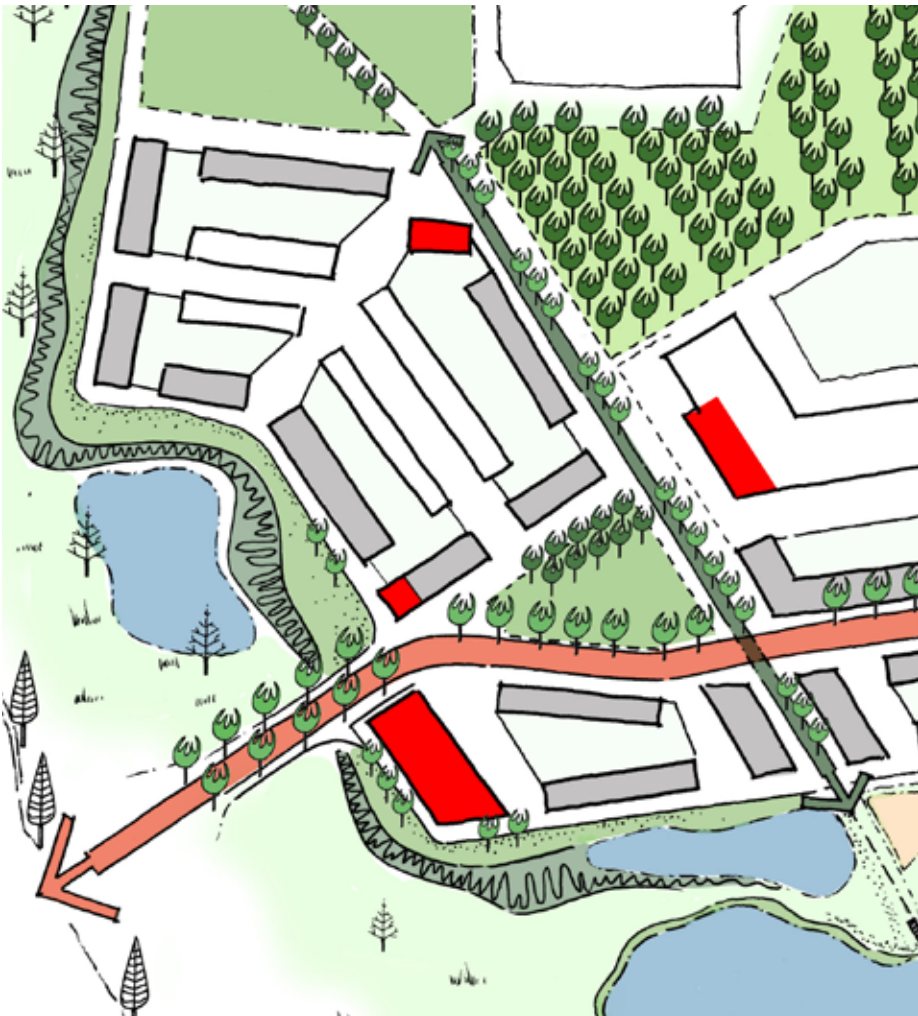
Play space, both formal and informal, should echo the character area of Dunton Waters, with water celebrated within the play spaces. Tangible connections to water should be explored by the use of aquatic play and recreation.

The wetlands are also a space for recreation. The ponds can be enjoyed from the shore, or through pond-dipping platforms and boardwalks through the reed beds. A new LEAP sits adjacent between the school and the wetlands, celebrating water and natural play. A variety of walking, jogging and cycling paths meander through the wetlands, providing glimpses and access into each pocket of green space for residents and visitors to enjoy.



FOCAL SPACE

SCHOOLYARD SQUARE



GUIDING PRINCIPLES

- Structure:**
- Schoolyard Square is key arrival space into the neighbourhood from the west. It should be formal in character, as well as pedestrian and cycle friendly;
 - It is a unique space as it sits at the a key nodal point, connecting into a number of key desire lines towards the Village Centre, Village Green and Lake Plaza.
- Built form response:**
- Building frontages within this square should be formal, with a continuous building line;
 - The square should have an appropriate sense of enclosure which could be achieved through the use of taller buildings, with corners emphasised by a lift in storey height or a steeper roof pitch.
- Landscape:**
- The space should include hard and soft landscape and should include provision for rest, such as benches;
 - The use of trees and planting should be used to define and enclose the soft landscaped area and to soften the appearance of the streets;
 - Calming measures should be designed to keep vehicular speed down through this area;
 - Informal play on the way elements can be introduced into this space to celebrate the journey to and from school.

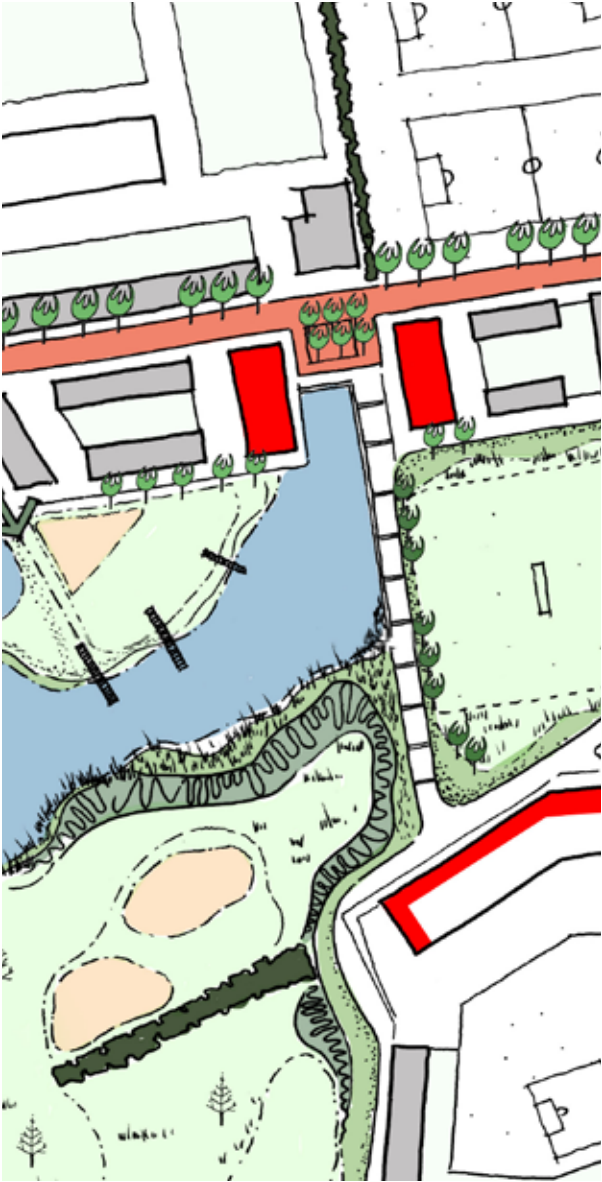


An example open space overlooked/enclosed by taller built elements (Accordia, Cambridge).



Vibrant, multi-purpose market square (Eddington, Cambridge).

FOCAL SPACE LAKE PLAZA



Focal square and green space enclosed by regular arrangement of built form, emphasising formal character (Aura, Cambridge).



Formal arrangement of homes with views over pond (Ninewells, Cambridge).

GUIDING PRINCIPLES

Structure

- The plaza is a focal space to the south of the secondary school. It overlooks the lake and cricket pitch further to the south. Together, these form the Neighbourhood Hub;

Built form response:

- The character of the square could be urban (i.e. predominately hard landscaping) to reflect its location at the heart of the Neighbourhood Hub;
- The square should be well enclosed from the north, east and west and should be kept open to the south to capture views towards the lake;
- Building scales should be taller to enclose and emphasise the space.

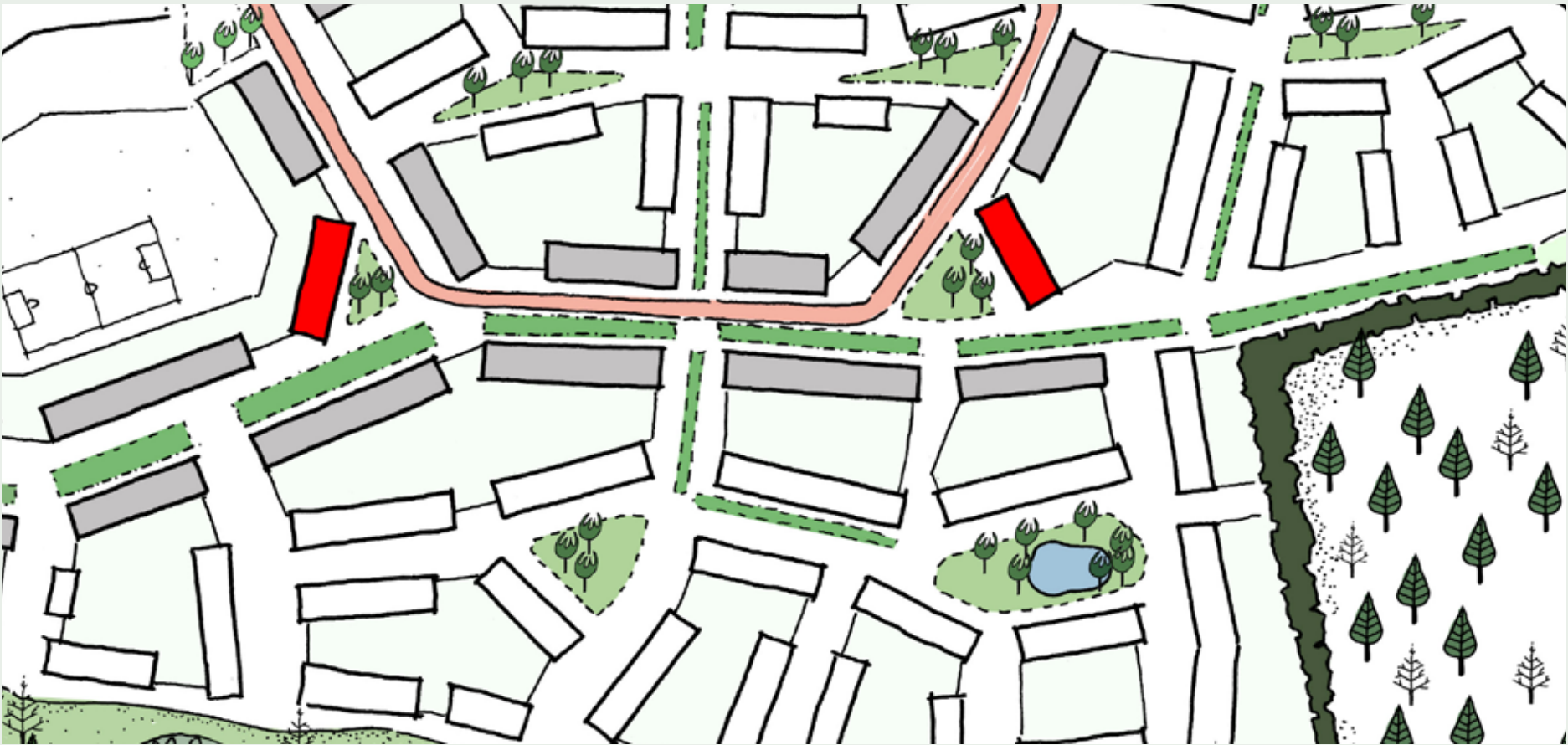
Landscape:

- The plaza has fantastic views south towards the lake, so landscaping should be minimal within the plaza, to frame and celebrate views south;
- Low level planting would work well in the plaza itself, along with seating areas arranged to maximise views across the lake towards the wetlands.



Well integrated Swales (Ninewells, Cambridge)

FOCAL SPACE POCKET PARK



GUIDING PRINCIPLES

Structure

- Where possible the pocket parks should be of an orthogonal nature to help create a formal character.

Built form response:

- An appropriate sense of enclosure could be achieved through the scale and alignment of built form;
- Built form should address open space;
- Taller buildings could be used where appropriate such as at key junctions and corners.

Landscape:

- Pocket parks within Dunton Waters will reflect the ephemeral character of water through layout, planting and trees. Aquatic features such as existing ponds, new water elements, rain gardens and swales can be incorporated into pocket parks;
- Playing with water and creating a tangible connection to water will be promoted in the pocket parks;
- Pocket parks can be located along street edges to combine with a network of rain gardens. These green ‘breakout spaces’ can be smaller in scale to provide a greater number of green spaces within the neighbourhood.



Sensitively integrating water features into design provides new opportunities for residents to interact with nature.



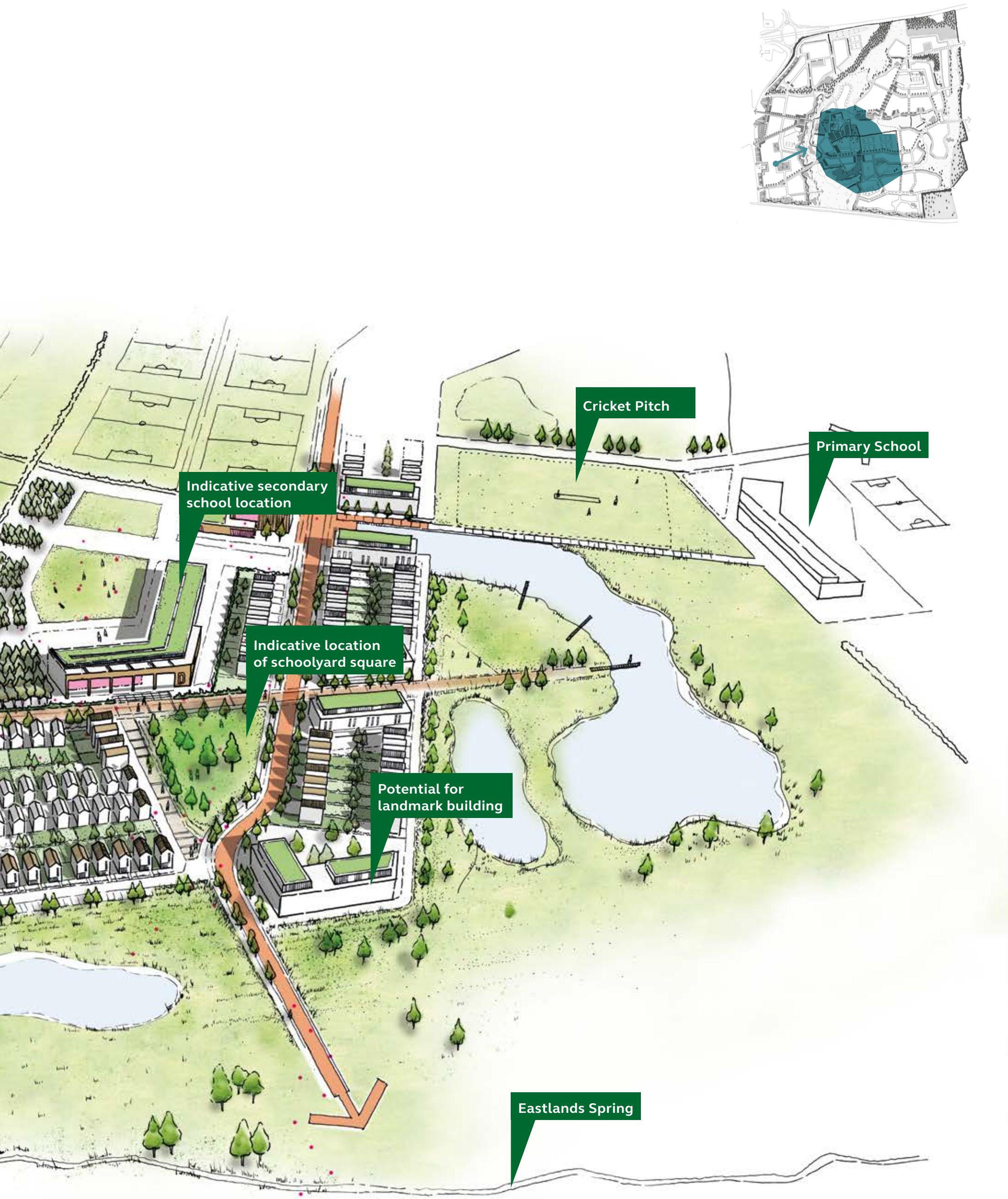
Blue/green infrastructure and rain gardens could contain more formal elements (Birmingham Botanical Gardens) or naturalistic treatments (Boardwalk Park, Brooklyn).



Green 'breakout spaces' should integrate a mix of soft and hard features.

VISION FOR DUNTON WATERS





DUNTON WOODS

URBAN FORM



Dunton Woods sits proudly on an elevated position within the Garden Village, benefiting from fantastic views to the south and west, anchoring it in its wider setting. This neighbourhood has a wooded character and overlooks the ridge-line park. It embraces its unique topography and integrates and enhances its woodland setting.

GUIDING PRINCIPLES

Ridge-line Frontage:

A strong frontage along the ridge-line shall be created to maximise the expansive views from its elevated position. As such, frontages should be high quality and sit proudly in the landscape.

The perimeter blocks are orientated north-south along the main streets and block frontages are narrow along the ridge edge. Therefore, building lines along the ridge edge should be consistent to create a sense of arrival and continuity. These buildings should have a formal frontage.

Ridge-line Boulevard Frontage:

The buildings along the Ridge-line Boulevard shall be formal in nature to reflect the linear arrangement of this key link/axis. Building lines should be consistent, but given the wide perimeter block frontage, there could be some variation in the roofline to create interest and variety in the streetscape.

Woodland Frontage:

The frontages along the north and east are in contrast to the Ridge-line and Ridge-line Boulevard frontages. These frontages are contained by a generous cluster of woodland to the north and woodland belt to the east. As such, this frontage will be enclosed and feel contained and private. The building line should, therefore, respond to this with variety in the roofline and set backs, creating an informal and undulating appearance.

Grain:

Shall be varied throughout, comprising two contrasting areas. The urban grain along the main street, southern edge and core of the neighbourhood is rectilinear and formal, whilst the grain along the western, northern and eastern edges should be meandering and informal.

Building Heights:

Building heights across the neighbourhood will generally be lower than in Dunton Fanns and Dunton Waters. The exception to this is along the Ridge-line Boulevard where taller buildings may be appropriate and indeed necessary in order to help frame the space and create a sense of formality, importance and enclosure. Taller buildings shall also be suitable in the Neighbourhood Hub, to accommodate non-residential uses at ground floor.

Marker Buildings:

Marker buildings within this neighbourhood should be positioned around the Neighbourhood Hub as this is an important node within the area and on a key intersection between north-south and east-west routes.



DUNTON WOODS LANDSCAPE

Dunton Woods takes its inspiration from the existing woodland pockets to the north, and draws upon them for the landscape vision. Trees are a vital part of the urban fabric for all of Dunton Hills Garden Village, and here they are highlighted, celebrated and fully integrated in the public realm.



GUIDING PRINCIPLES

Interface with Ridge-line

The interface between the development edge and the Ridge-line should be designed to maximise views out to the west and south. Landscaped pockets at the end of each access route into the development should highlight the vistas and create an informal destination at the end of each street where it meets the Ridge. Trees planted between buildings and alongside landscape pockets will frame outward views, soften the built edge and reflect the wooded character of the hills.

The top of the Ridge shall be designed to include a Ridge-line walk; a long path that runs along the top of the ridge within the landscape. This walk should follow the higher contours of the Ridge and meet the landscaped pockets along the way for spaces to rest and enjoy the views.

Arboricultural Emphasis

Within Dunton Woods trees and woodland planting help to reinforce the character of the area. Trees should be planted in a variety of layouts, such as copses, groups, individual specimens, rows and avenues, to provide a rich green canopy to the development. These trees form green infrastructure links from the ancient woodland and existing broadleaved plantation south through the development and into the wider landscape.

Trees should be primarily native to strengthen the connection with species of local provenance, with exotic species providing focal points and features.

Green Streets

A network of wider green streets permeates the Dunton Woods neighbourhood, providing linear green spaces that connect pocket parks and the wider landscape area around the urban form. These green streets create destination places as well as providing transitional access, with opportunities for socialisation and recreation along the way.

Pocket Parks

A series of pocket parks at a variety of scales should be distributed throughout Dunton Woods to provide the residents and visitors with a network of open green space that is accessible to all. These pocket parks will echo the character of Dunton Woods and also provide space for play, recreation, exercise, social interaction and leisure.

A pocket park shall be created around the existing historic OS Trig Point in the west of the neighbourhood.

Trees for Education

Mass tree planting is fast becoming a simple way to combat climate change and air quality through carbon capture and reduction of the urban heat island effect. Tree nurseries and tree labs could be explored within Dunton Woods, and provide educational and learning benefits for the local schools.



Dunton Woods: A Green Canopy

Tree planting will be implemented throughout Dunton Hills Garden Village but it is within the neighbourhood of Dunton Woods where the humble tree will be celebrated for all of its strengths.

Feature trees on key road interfaces will provide wayfinding capabilities, whilst streets can be defined and characterised by the tree species along them. Trees planted within the pocket parks will provide opportunities for biodiversity, informal play and education and can be used to define views, provide shade or structure within the public realm.



Living at the Top

Dunton Woods sits at the top of the Ridge in Dunton Hills and affords wide vistas and ranging views over the rest of the Garden Village and to the landscape beyond.

Landscape features and interventions should celebrate these views in a number of ways. Both landscape and urban form can be used to shield views or narrow the field of vision until the Ridge-line, where impressive views open up at the end of streets. Restful spaces to sit and contemplate the vistas should be implemented along the way where the sights can be most enjoyed. Artwork and sculpture can emphasise and complement views and interact with weather and seasons, creating focal points within the neighbourhood. A viewing platform could be created to provide visitors with a destination along the Ridge. This should be located at the end of the Ridge-line Boulevard.



Ecological Enhancement

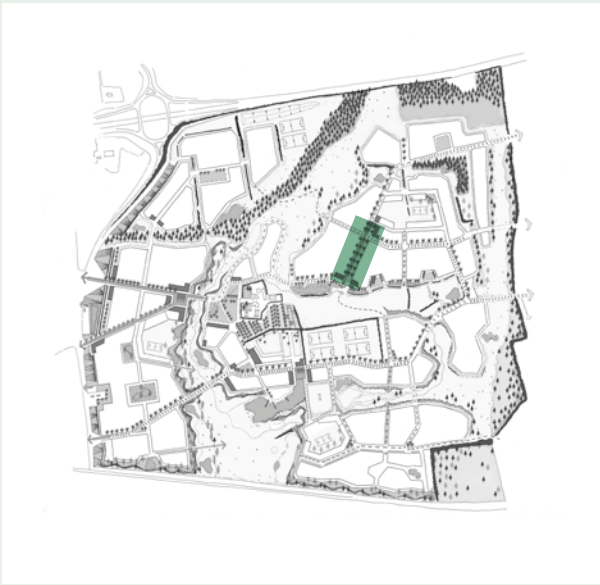
Dunton Woods creates vital green infrastructure links from broadleaved woodlands and Sites of Special Scientific Interest to the north, east and west through into the development. Opportunities exist within the woodland management and creation of new arboricultural areas to promote and enhance local flora and fauna.

In particular, the opportunity exists for translocation of the rare *Dianthus armeria* (Deptford Pink) flower from the Langdon Ridge SSSI into existing managed woodlands near Dunton Woods and for new tree copses around the neighbourhood to support a variety of bats, birds and invertebrates.



FOCAL SPACE

RIDGE-LINE BOULEVARD



GUIDING PRINCIPLES

Structure

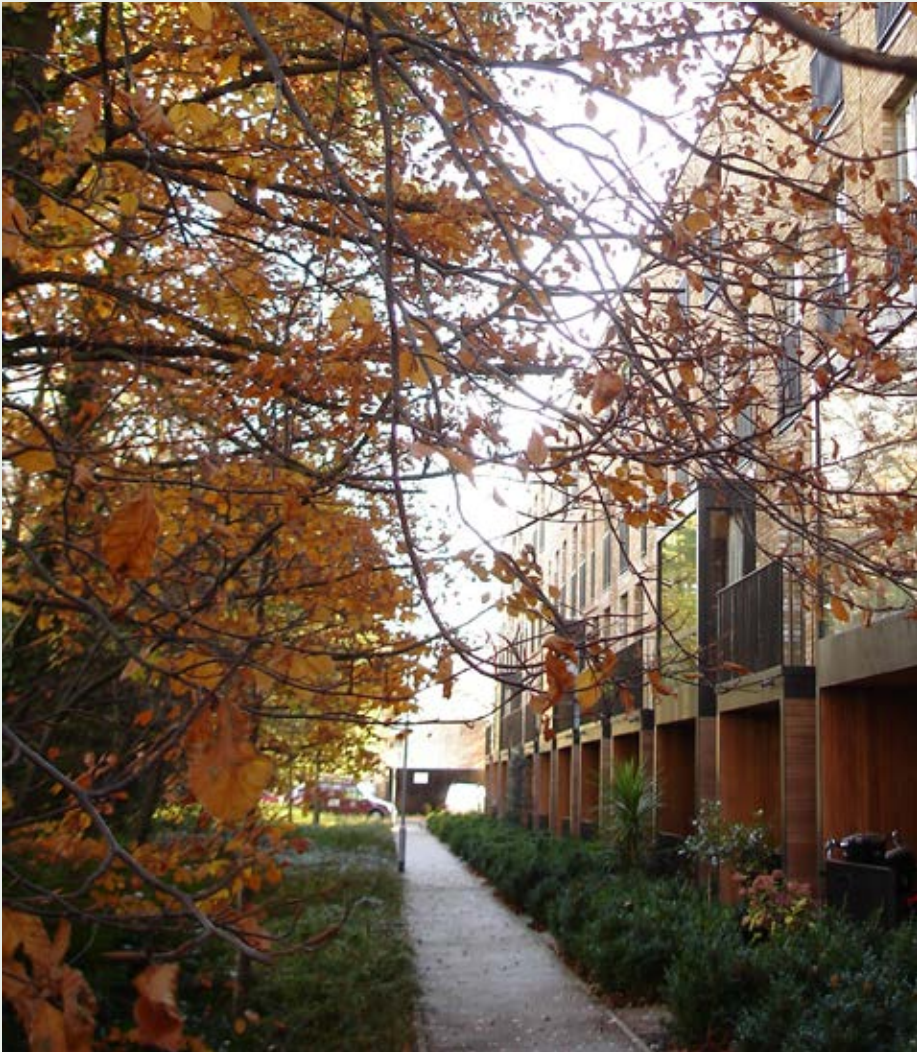
- The axis and alignment of the Ridge-line Boulevard is important and shall align with a key view corridor from the ridge-line, down to Lake Plaza in Dunton Waters and to the lake beyond.

Built form response:

- Building frontage along this linear axis should be formal in nature;
- Building lines should be consistent, but given the wide perimeter blocks, there could be some variation in the roofline to create interest and variety in the streetscape;
- The corridor could rise in scale towards the south and north to emphasise a sense of arrival around the Ridge-line Plaza and the Neighbourhood Hub.

Landscape:

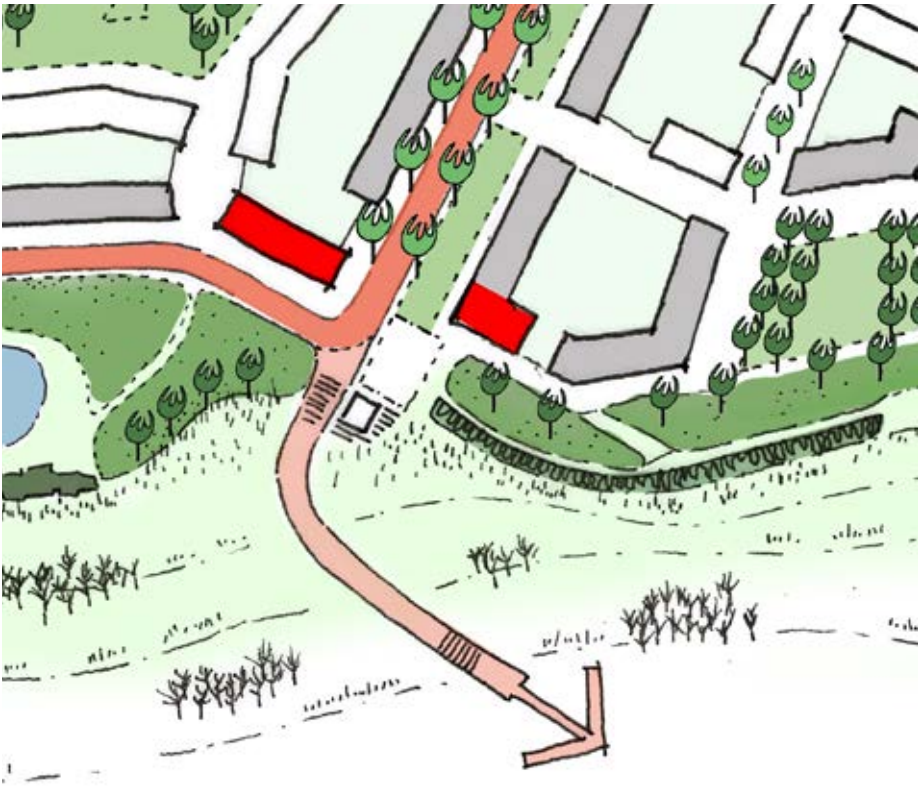
- There should be a corridor of central open green space in between the roads;
- The entire boulevard should be tree lined for enclosure and formality;
- Tree planting to be grouped into dense copses within the central green space to reflect the wooded character of the neighbourhood;
- Informal natural play to be explored within the central green corridor with plenty of seating opportunities.



Dunton Woods should positively integrate green elements with built form.

FOCAL SPACE

RIDGE-LINE PLAZA



GUIDING PRINCIPLES

Structure

- The plaza is a viewing area. It should be modest in size and could include a look-out tower platform to capture the wonderful views out across the development.

Built form response:

- The building line around the plaza doesn't need to be continuous, however, frontages should be orientated to frame views. Double fronted buildings on corners would be appropriate.

Landscape:

- The plaza shall provide seating to encourage people to stay in this area and enjoy the wonderful surroundings;
- Landscape surface materials and street furniture should aesthetically complement the surrounding Ridge-line in colour and form so as to blend in within the context.



Precedent image of viewing tower



The ridge line park should have a naturalistic and open character and celebrate key views.



Built form along the ridgeline should be oriented to frame key views out towards the surrounding landscape (Horsted Park, Chatham)

FOCAL SPACE POCKET PARK



GUIDING PRINCIPLES

Structure

- Where possible the pocket parks should be of an orthogonal nature to help create a formal character.

Built form response:

- An appropriate sense of enclosure could be achieved through the scale and alignment of built form;
- Built form should address open space;
- Taller elements could be used where appropriate such as at key junctions and corners.

Landscape:

- The pocket parks within Dunton Woods shall embody the arboricultural character of the neighbourhood, using trees to create gateways, wayfinding routes, provide focal features, create shade and to create structure;
- Pocket parks will include spaces for informal play, including LAPs, doorstep and natural play space to encourage interaction with nature and the natural world;
- Pocket parks should be provided both within the neighbourhood and at the fringes to provide a step change in scale from urban to landscape spaces.

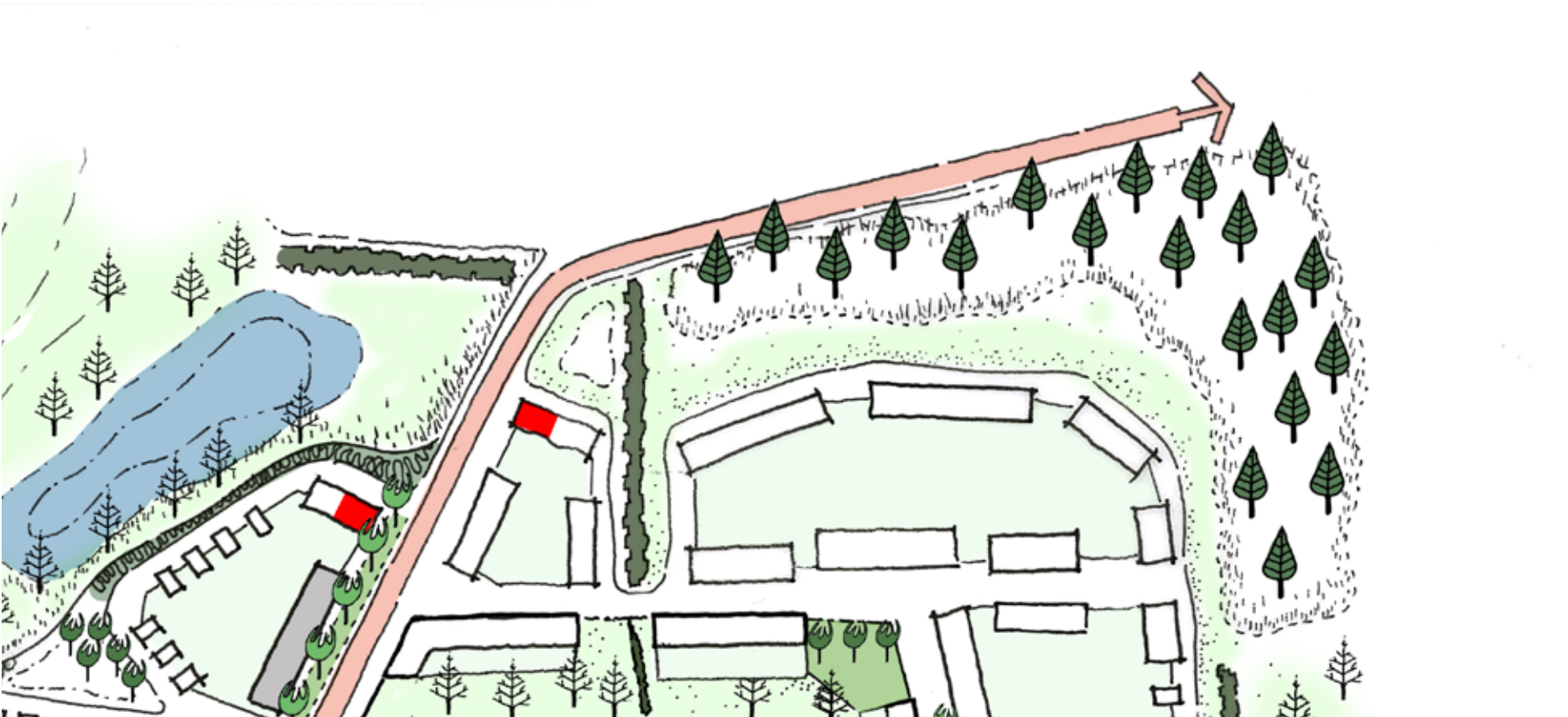


Trees could be used as focal features within pocket parks.



Pocket parks within Dunton Woods could have a more formal nature which sensitively integrates softer element along with small shelters and seating to ensure the comfort and safety of all users.

FOCAL SPACE WOODLAND FRONTAGE



GUIDING PRINCIPLES

Structure

- The structure of this area is informal and undulating, to respond to the vegetated edge of the woodland.

Built form response:

- The frontages along the north and east are in contrast to the Ridge-line and Boulevard frontages. They will be contained and private;
- Built form fronting onto the woodland should be informal in character to create a rural setting;
- The rhythm of the building line should be undulating and varied.

Landscape:

- These frontages are contained by a generous cluster of woodland to the north and woodland belt to the east;
- Any new tree or shrub planting should be randomly placed to emphasise the character of this key space.



Layouts here could be of a more informal, rural nature to echo their woodland setting (Abode, Cambridge).



IMAGE CREDITS

Page	Author	Year	Licence	URL
30	Peter Skuce	2014	CC BY-SA 4.0	https://upload.wikimedia.org/wikipedia/commons/a/ac/357206_Upminster.jpg
30	Ruud Morijn	2015		Shutterstock.com
30	Soroush Karimi	2016	CC BY-SA 2.0	https://unsplash.com/photos/igHY7CFa-dI
32	Robin Lucas	2007	CC BY-SA 2.0	https://upload.wikimedia.org/wikipedia/commons/2/29/Gnarled_treetrunk%2C_Thorndon_Country_Park%2C_Brentwood_-_geograph.org.uk_-_420846.jpg
32	Malc McDonald	2017	CC BY-SA 2.0	https://www.geograph.org.uk/photo/5582532
38	Malc McDonald	2015	CC BY-SA 2.0	https://www.geograph.org.uk/photo/4481827
50	Mike	2016		https://www.pexels.com/photo/alternative-auto-automobile-battery-110844/
50	Kate Trysh	2017		https://unsplash.com/photos/s8u1Gv2uF3o
50	CoWomen	2019		https://www.pexels.com/photo/three-woman-sitting-on-white-chair-in-front-of-table-2041627/
51	SanAntonio Government	2018		https://www.sanantonio.gov/Portals/o/Files/Parks/pdf/Presentation%202%208-16-18.pdf?ver=2018-08-20-154053-507
51	Cycling Weekly	2019		https://www.cyclingweekly.com/news/product-news/dockless-electric-bike-sharing-launched-london-425440
62	Fabrik	2010		https://www.fabrikuk.com/projects/project/items/watercolour-village-surrey/
62	Fabrik	2010		https://www.fabrikuk.com/projects/project/items/watercolour-village-surrey/
63	Urban Design London	2018		file:///C:/Users/payiatissg/Downloads/UDL_Rain_Gardens_for_web_ovwx1Ls.pdf
68	Google Street View	2020		https://www.google.com/maps/@51.4392993,-0.3149149,3a,71.4y,151.84h,89.97t/data=!3m6!1e1!3m4!1si3UrD1TMJlLKPyTazoWBdQ!2e0!7i16384!8i8192?hl=en
70	Miles Davies	2017		https://assets.sussexwildlifetrust.org.uk/Blog%20images/il034162-w800h600.jpg
72	Martin Addison	2010	CC BY-SA 2.0	https://s0.geograph.org.uk/geophotos/01/79/63/1796311_20436eba.jpg
72	Liana Mikah	2017	CC BY-SA 2.0	https://images.unsplash.com/photo-1503040421714-b569d90342cb?ixlib=rb-1.2.1&ixid=eyJhchHBfaWQiOjEyMDd9&auto=format&fit=crop&w=1350&q=80
78	Guildford Dragon News	2016		https://www.guildford-dragon.com/2016/09/23/set-opening-exciting-new-play-area-onslow-village/
79	Allen Pyke Associates		CC BY 2.0	http://allenpyke.co.uk/project/brickhill-bedford/
79	Allen Pyke Associates		CC BY 2.0	http://allenpyke.co.uk/project/brickhill-bedford/
88	PXgere		CCo 1.0	https://pxhere.com/da/photo/225022
92	Silverbay		CC BY 2.0	https://silverbay.co.uk/blog/latest-news/silver-bay-welcomes-brand-new-muga/
102	Sustrans		CC BY 2.0	https://www.sustrans.org.uk/find-a-route-on-the-national-cycle-network/route-56/
107	Soroush Karimi	2016	CC BY-SA 2.0	https://unsplash.com/photos/igHY7CFa-dI
110	Robin Ashley	2015	CC BY-SA 2.0	https://s3.geograph.org.uk/geophotos/04/44/73/4447347_b1b92aef_1024x1024.jpg
111	The Land Trust	2017		https://thelandtrust.org.uk/news/land-trust-annual-review-our-service-charge-model/beaulieu-2017-summer-the-chase-edit/?doing_wp_cron=1581346043.2930080890655517578125
113	Ivy Cottage Industries	2015		https://www.youtube.com/watch?v=Obs2JV6Flfo
114	Architzer.com	2010		https://www.pinterest.com/pin/369506344413847068/
116	Neenah Lunch	2015		https://www.pinterest.ca/pin/376543218827348839/
117	Brooke Cagle	2018	CC BY-SA 2.0	https://idealmagazine.co.uk/wp-content/uploads/2019/03/brooke-cagle-195777-unsplash.jpg
142	Google Street View	2019		https://www.google.com/maps/@51.8781469,0.5524858,3a,75y,16.91h,94.92t/data=!3m7!1e1!3m5!1sRabouhyt3M0-pR9D7wrVA!2e0!6s%2F%2Fgeo2.ggpht.com%2Fcbk%3Fpanoid%3DRabouhyt3M0-pR9D7wrVA%26output%3Dthumbnail%26cb_client%3Dmaps_sv.tactile

Page	Author	Year	Licence	URL
165	PXgere		CCo 1.0	https://pxhere.com/da/photo/225022
165	Gillespies	2018		https://www.gillespies.co.uk/projects/holland-park-villas
197	Landezine	2016		http://landezine.com/index.php/2016/06/st-andrews-bromley-by-bow-by-townshend-landscape-architects/18-courtyard-townshend-landscape-architects/
197	Ham Village Green	2014		https://swlen.org.uk/local-groups/friends-of-ham-village-green/
197	Citywharf	2020		https://mr3.homeflow-assets.co.uk/files/photo/image/16383/8211/685x_/HF29053_RS0352_IMG_00.jpg
198	Landezine	2016		http://landezine.com/index.php/2016/06/place-des-anciens-fosses-by-huusler-associes/town-square-park-landscape-architecture-00/
198	Landezine	2014		https://www.pinterest.se/pin/443463894539061835/
198	Landezine	2010		http://landezine.com/index.php/2010/06/fountain-square/20100629-fountain-square-by-labics/
198	Landezine	2016		https://www.pinterest.ca/pin/249035054380790952/
200	WebUrbanist	2016	CC BY-SA 2.0	https://weburbanist.com/wp-content/uploads/2016/08/city-furniture-cloud-city-1-644x429.jpg
200	Even Bakken	2015		https://landskapsarkitekt.tumblr.com/image/134415403173
200	Landezine	2016		https://landezine-award.com/st-johns-hill-burridge-gardens-phase-01/
201	Lds-uk	2012		https://www.pinterest.co.uk/pin/305892999689264387/
202	Townsend Landscape Architects / Landezine	2016		http://landezine.com/index.php/2016/06/st-andrews-bromley-by-bow-by-townshend-landscape-architects/
203	Landezine	2018		http://landezine.com/index.php/2018/09/the-towers-at-merriman-square-by-square-one-landscape-architects/
203	Townsend Landscape Architects / Landezine	2016		http://landezine.com/wp-content/uploads/2016/06/11-Reeves-Park-play-area-copyright-Townshend-Landscape-Architects.jpg
210	Miles Davis		CC BY-SA 2.0	https://assets.sussexwildlifetrust.org.uk/ponddip1-w640.jpg
212	NW Cambridge Development	2018		https://www.nwcambridge.co.uk/news/double-win-eddington-rics-east-award
215	Turenscape / Landezine	2011		http://landezine.com/index.php/2011/03/tianjin-qiaoyuan-park-by-turenscape-landscape-architecture/30-turenscape-landscape-architecture-bridge-park/
216	Patrick Bingham-Hall via houblon	2015		https://66.media.tumblr.com/e8158066df02a959372c6b6412ac1f4b/tumblr_nch6ufJBdW1qb69yyo7_1280.jpg
216	Debra Fleming			https://nl.pinterest.com/pin/377739487481556860/?lp=true
216	Landscape Institute	2016		https://www.landscapeinstitute.org/news/enter-big-suds-survey/
220	David Ross		CC BY-SA 2.0	https://www.britainexpress.com/photos.htm?attraction=2963
220	World of Flowering Plants			https://www.pinterest.co.uk/pin/407083253813489484/
223	FttereZ	2017		https://pixabay.com/photos/pannonhalma-happy-moorish-lookout-2132538/
223	David Ross			https://www.britainexpress.com/photos.htm?attraction=2963
223	Architizer	2014		https://architizer.com/idea/983396/
224	Tim Crocker	2017		https://www.architecture.com/awards-and-competitions-landing-page/awards/riba-regional-awards/riba-yorkshire-award-winners/2017/derwenthorpe-phase-one
225	Wolf Leeb / Landezine	2018		http://landezine.com/index.php/2019/04/josef-strauss-park-by-dnd-landschaftsplanung/?fbclid=IwAR2yCtNcwJ8XvQNCxliuorK3kSNOkLv3XO3FmgpaM5xBtJc_4A1AoleFOr4



ceg:

BroadwayMalyan^{BM}