1001_Land to the north of the Grange (LG1)

Strategic Masterplan Framework Report

Version 3
5 June 2024

The aim of the report is to provide a strategic masterplan framework in relation to the Land north of the Grange (LG1), addressing current and emerging issues whilst supporting Letchworth's well-loved character; in accordance with The Foundation's adopted vision, local plan policies and the characteristics of context and identity supported through the National Design Guide.

The outcome of this report includes framework plans and supporting illustrative drawings and narrative to support a coordinated high-quality design development process for the next stages of work. It demonstrates conformity with Policy SP9 (Design and Sustainability), Policy (SP15 Site LG1 – North of Letchworth Garden City) and Appendix 5 (Letchworth Garden City Design Principles) of the North Hertfordshire Local Plan (2011-2031).

Prepared by

EcoResponsive Environments

Prepared on behalf of

Letchworth Garden City Heritage Foundation

Contents

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Introduction

1. Introduction

Executive summary

1.1 This strategic masterplan framework report has been prepared on behalf of the Letchworth Garden City Heritage Foundation (LGCHF) and is in accordance with the provisions of Policy SP9 of the adopted North Hertfordshire Local Plan 2011-2031[1]. It is in support of proposals for the development of Land to the north of the Grange (referred to as Site LG1) located on the northern boundary of Letchworth Garden City. This strategic 45 ha (112 acre) housing site is allocated in the Local Plan for a new neighbourhood of approx. 900 homes and the planning objectives are described in Policy SP15.

1.2 This report, accompanying plans and technical evidence base provides documentation aligned with North Herts Council's (NHC) requirements for a strategic masterplan framework in relation LG1. It demonstrates conformity with Policy SP9 (Design and Sustainability), Policy SP15, Appendix 5 (Letchworth Garden City Design Principles) of the NHC Local Plan and the characteristics of context and identity supported through the National Design Guide.

1.3 It will create a high-level framework that will inform future planning applications for the development of this site, once LGCHF has appointed a partner to bring forward the development.

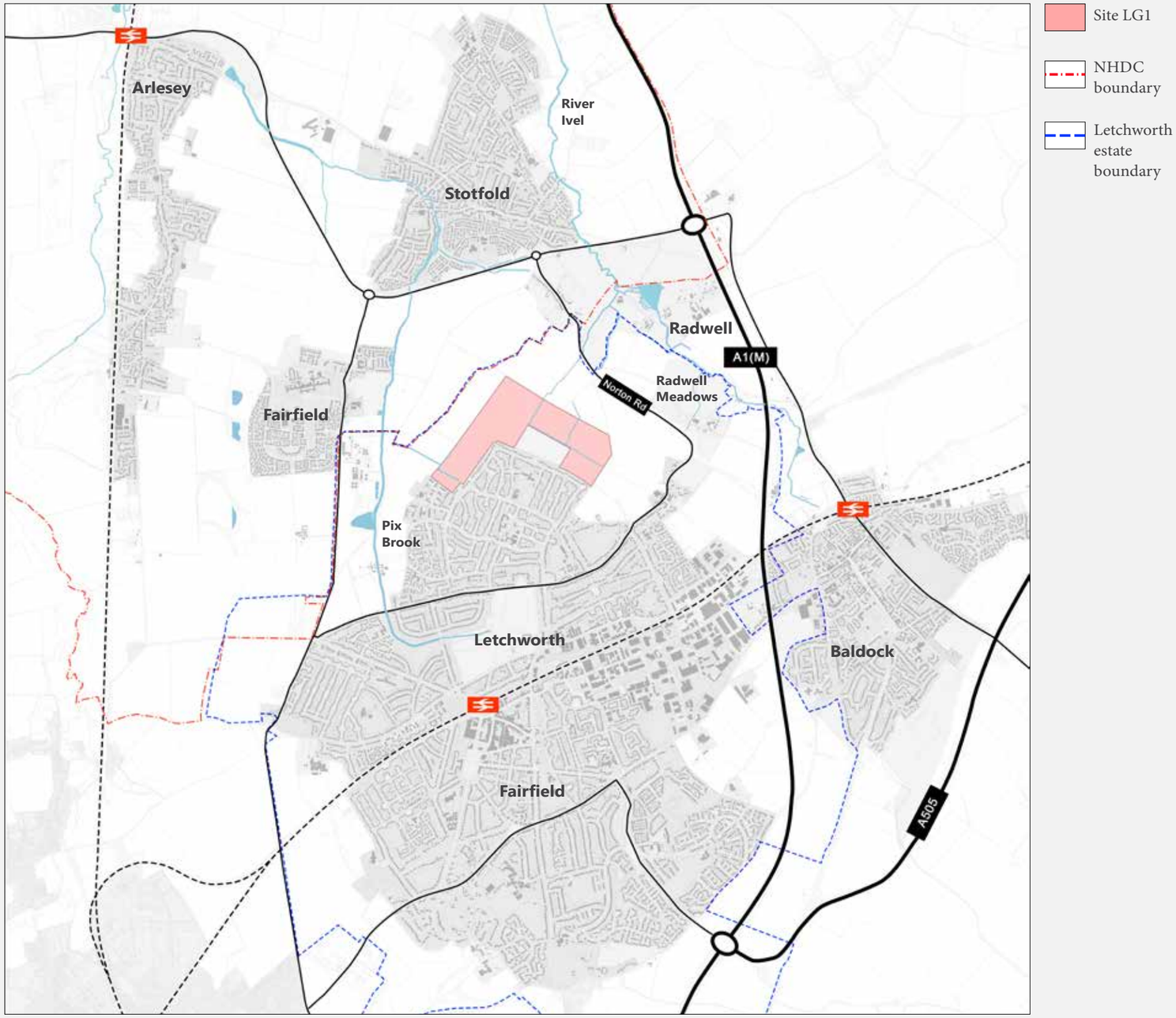


Fig. 1.1: Site location and study area boundary

References:

1. NHC (2022) Local Plan 2011-2031, adopted 8 November 2022. See: https://www.north-herts.gov.uk/sites/default/files/2022-12/North%20Hertfordshire%20Local%20Plan%202011-2031.pdf

Site location

1.3 LG1 is located close to the northern boundary of NHC and Central Bedfordshire Council (CBC). The study area for the strategic masterplanning process has encompassed the immediate and wider context (Fig. 1.1).

Re-imagining the Garden City

1.4 The LG1 development is a greenfield extension masterplan and a once in a generation expansion of the world's first Garden City: Letchworth. Designing to 'balance the most energetic and active town life, with all the beauty and delight of the country', Garden City pioneers had transformed the lives of people attracted to towns in search of work, as technology eroded agricultural employment in early 1900s. In terms of masterplanning, it's long-lasting success stems from the pioneer designers' embrace of complexity; weaving together natural landscape, public space, plots and buildings across multiple scales of space and time, underpinned by land value capture for reinvestment into the local community. The LG1 strategic masterplan re-imagines this multi-layered approach in the context of the current and emerging challenges of 21st century living.

1.5 Unlike the original garden city, however, this is expanding an existing place. The Garden City ethos seeks for each layer of the new place to support the existing resident's interests. To this end, the project has been underpinned by extensive community and stakeholder engagement over many years, from site allocation to the development of the strategic masterplan framework. Refer to the Statement of Community Involvement (SCI) for further details (May 2024, Appendix C).

1.6 In addition to the input of our project team, we have also worked in close collaboration with NHC, Hyas and Hertfordshire County Council (HCC) to develop the strategic masterplan framework. This was undertaken through regular meetings and wider Project Working Group workshops at key stages of the project aligned with the PPA process.

How to read the document

1.7 LG1's Strategic Masterplan Framework Report (SMFR) is structured as outlined below. The various sections should be read in relation to each other, aligned with the hierarchy of design documentation undertaken so far for LG1 (Fig. 1.2, overleaf) and the included appendices.

Part 2: Understanding the place

1.8 Drawing from baseline reports, it summarises LG1's contextual analysis, site constraints and opportunities.

Part 3: Vision and placemaking objectives

1.9 Outlines the design vision for LG1, the placemaking objectives that further inform design principles and the masterplan options development summary, concluding in the proposed strategic masterplan.

Part 4: Landscape and GI framework

1.10 Provides an overview of LG1's existing landscape structure, outlines the proposed green infrastructure framework and public open space provision for LG1.

Part 5: Habitat and biodiversity framework

1.11 Outlines the ecological opportunities and constraints for the site and the Biodiversity Net Gain baseline calculations for the proposed strategic masterplan.

Part 6: Movement framework

1.12 Summarises the transport infrastructure context for LG1 and the key design aspects of the proposed movement framework, including street typologies.

Part 7: Land use framework

1.13 Outlines the policy context, the proposed amount and distribution for the LG1 masterplan and main informants of its neighbourhood-level local centre.

Part 8: Urban design framework

1.14 Outlines the urban design characteristics and placemaking qualities that embody Garden City design and underpin LG1's strategic masterplan framework.

Part 9: Character Areas

1.15 Summarises five key character areas of the LG1 masterplan, what makes them special and the design principles that will underpin its further development.

Part 10: Sustainability

1.16 Sets out a high-level holistic approach for LG1's sustainable development, including a wide range of determinants: water, landscape, active travel, community wellbeing, energy, air quality, materials and waste.

Part 11: Housing need and diversification

1.17 Summarises the need for housing across tenures to meet existing and emerging need, both in North Herts and more specifically Letchworth, and the approach taken for the LG1 masterplan.

Part 12: Infrastructure Delivery Plan

1.18 Sets out an initial overview of how LG1 may be delivered and the key principles that underpin its phasing strategy.

Appendices

1.19 The report must be read in conjunction with the following Appendices, as submitted with this report:

- App. A – Baseline Report (Feb 2024)
- App. B – Urban Design study (Feb 2024)
- App. C – SCI (May 2024)
- App. D – Landscape Character Study (Feb 2024)
- App. E – Green Infrastructure Audit (Jul 2023)
- App. F – Ecological Desk Study (Aug 2023)
- App. G – PEA report (Dec 2023)
- App. H – Hedgerow Assessment (Dec 2023)
- App. I – Feasibility Stage BNG Report (Dec 2023)
- App. J – Tree Constraints Report (Aug 2023)
- App. K – Transport and Accessibility study (Mar 2024)
- App. L - Flood Risk Assessment (Jan 2023)
- App. M –Housing Needs Assessment (May 2022)
- App. N –Housing Needs Survey (March 2019)
- App. O – LG1 Strategic Masterplan Framework Plans

Fig. 1.2: Hierarchy of design documentation for LG1: the highlighted aspects have been covered in this SMF report.

	Document	Description	Status	Part of strategic masterplan
1	LGCHF Vision	Provides high level framework setting out LGCHF's aspirations for the LG1's development.	Adopted	Y
2	LGCHF Transport Vision	Provides vision and principles supporting LGCHF's approach to transport and modal shift for LG1.	Adopted	N
3	LGCHF GI Vision	Provides vision and principles supporting LGCHF's green infrastructure strategy for LG1.	Adopted	N
4	Placemaking objectives	Provides 8 core design values agreed by both LGCHF and the NHC, setting out the initial approach in terms of design outcomes.	Agreed	Y
5	Strategic masterplan framework	Provides key framework plans supporting the proposed strategic masterplan for the development of LG1.	Draft for NHC comments	Y
6	Character Areas	Sets out areas with distinct, recognisable characters within the proposed LG1 strategic masterplan, how they relate and interact with each other and the wider context.	Agreed	Y
7	Design Principles	Sets out a design approach for developing each of LG1's character areas in further detail.	Draft for NHC comments	Y
8	Sustainability strategy	Sets out high level principles on the approach to sustainability for the development of LG1.	Draft for NHC comments	Y
9	Development Brief	It will set out LGCHF's aspirations that will underpin the agreement with a developer partner.	Not started	N
10	Design Code	It will be a joint document between LGCHF and the appointed development partner, setting out the detailed design requirements and approach across the LG1 development. It will be used to consider future planning applications and detailed design proposals.	Not started	N

1.20 The purpose of this report is to set out a comprehesive and robust strategic design framework that will inform future planning applications for the development of this site, once LGCHF has appointed a partner to bring forward the development. To this end, the main contents of the the highlighted design documentation items on the table alongside (Fig. 1.2) have been summarised and included in this report. This will serve as the basis for the project's next stages which will be undertaken in coordination with NHC, HCC, CBC and other relevant stakeholders, including consultation with the local community.

1.21 Please note that aligned with the strategic nature of this document, a range of design aspects including but not limited to landscape character, offsite improvements, parking strategy, open space character, block configurations and massing modulations, phasing and implementation will require further exploration, discussions and development as part of the project's next stages. These have been highlighted, where relevant, across the various sections of the report, aligned with the feedback received from NHC dated 23rd May.

2

Understanding the place

2. Understanding the place

Historical development

Introduction

2.1 The purpose of historical analysis is to understand Letchworth's past evolution, in order to inform the future development of LG1 (Fig. 2.1, 2.2). We therefore focus on understanding the reasons why Letchworth's character has changed over time, as well as identifying the more constant factors which give the place the historical continuity that underlies its townscape identity.

2.2 In response to changing political-economic issues, Letchworth has inevitably evolved a range of forms over time; generating distinct character areas that together constitute a unique but constantly-developing overall identity.

2.3 Through the following sequence of time-periods, structured around key events (refer p.8), we analyse this evolution for Letchworth (Fig. 2.3, 2,4) and its surrounding settlements; focusing on the layers of landscape, public routes and spaces, land uses and buildings that cumulatively create the settings for everyday life and local place identity. For more details on the historical analysis please refer to the Urban design analysis, townscape assessment and characterisation study.[1]

2.4 We conclude by identifying character areas (Fig. 2.5) from each time-period that offer lessons for addressing current and emerging issues in ways that best support Letchworth's identity and a future for LG1 that is rooted but not stuck in the past. This is analysed in further detail in the Urban design analysis, townscape assessment and characterisation study.[2]

Fig. 2.1: Aerial view of LG1
Source: LGCHF

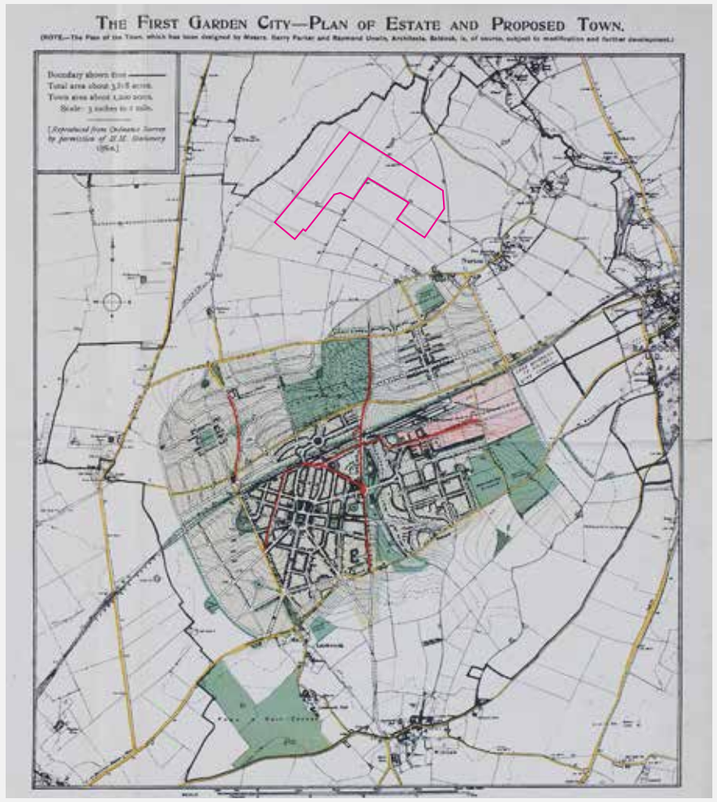


Fig. 2.2: Parker and Unwin's Proposed First Plan of Letchworth
Source: Garden City Collection

The purpose of historical analysis is to understand Letchworth's past evolution, in order to inform the future development of LG1 through the master planning process. We focus on understanding the reasons why Letchworth's character has changed over time, as well as identifying the more constant factors which give the place the historical continuity that underlies its townscape identity.

References:

1. EcoResponsive Environments (February, 2024; v3.0) Urban design, townscape assessment and characterisation study, p.14-50.

2. EcoResponsive Environments (February, 2024; v3.0) Urban design, townscape assessment and characterisation study, p.96-132.

Key events summary

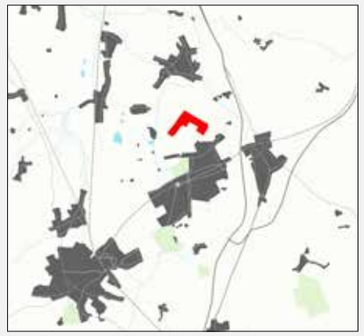
Pre-1800

- Valleys of River Ivel and Pix Brook produced evidence of prehistoric settlements such as Norton village, dominated by agrarian economy
- lcknield Way established in prehistoric times
- c.1086 Domesday survey lists Letchworth with 15 households
- c.1086 Domesday survey lists village of Norton
- c.1100 St. Nicholas Church in Norton, surviving today
- c.1130-40s Baldock and Great North Road established

1800-1905

- 1825 - Enclosure Act
- 1901 - Letchworth's population was 96
- Great Northern Railways established
- 1856-60 - Fairfield Hospital built
- 1898 - Howard's Garden City vision published
- 1903 Howard set up First Garden City Ltd.
- 3,800 acres of land purchased to develop Letchworth

1905-1920



- 1905 - Letchworth station gained full passenger service
- 1905-1907 - Cheap cottages exhibition
- 1914-1918 - World War 1
- 1912-1920 - Spirella building constructed
- Letchworth well under construction by 1918
- Letchworth Urban Design Council (LUDC) formed in 1919.

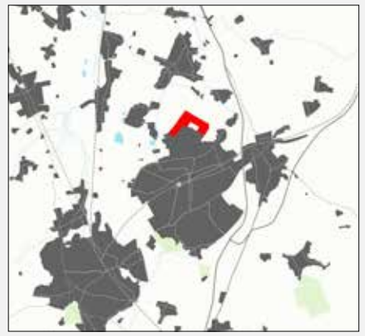
1920-1946

- 'Homes fit for heroes' campaign after World War 1
- 1929-31 - Great Depression
- 1931 - Low interest rates, Letchworth expands
- State-of-art industrial premises with electricity attracting businesses
- 1939 - Letchworth's total population 17,400
- 1939-1945 - World War 2

1946-1974

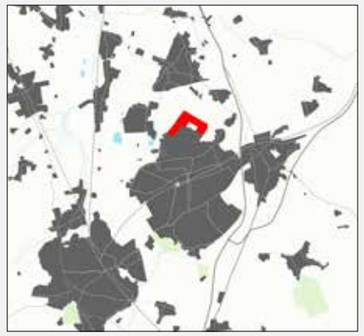
- 1947 - Town & Country Planning Act
- LUDC gains CPO powers post WWII in the TCPA 1947
- Housing delivery led by public sector
- Grange, Jackman and Lordship estates constructed
- 1963 - Letchworth Garden City Corporation formed, in debt till 1974
- 1967 - A1 junctions 8-10 opened

1974-2000



- 1980s - Several key community facilities are built in Letchworth.
- Letchworth expands west of Grange Estate; small-scale infill sites developed
- Surrounding settlements expand
- National politics context: Out-of-town retail, Right to Buy policies
- 1995 - LGCHF formed

2000-present



- Housing crisis
- Climate change crisis
- 2003 - Garden City Greenway opened
- 2008-2020 - Several small-scale infill sites developed in Letchworth
- Development of Fairfield Park with approximately 2000 homes, and other extension developments in Stotfold

Historical development summary

2.5 The plan below outlines the growth of Letchworth over time in relation to LG1 and the surrounding settlements. For detailed analytical narrative, refer to the 'Urban design analysis, townscape assessment and characterisation study' p.14-50.

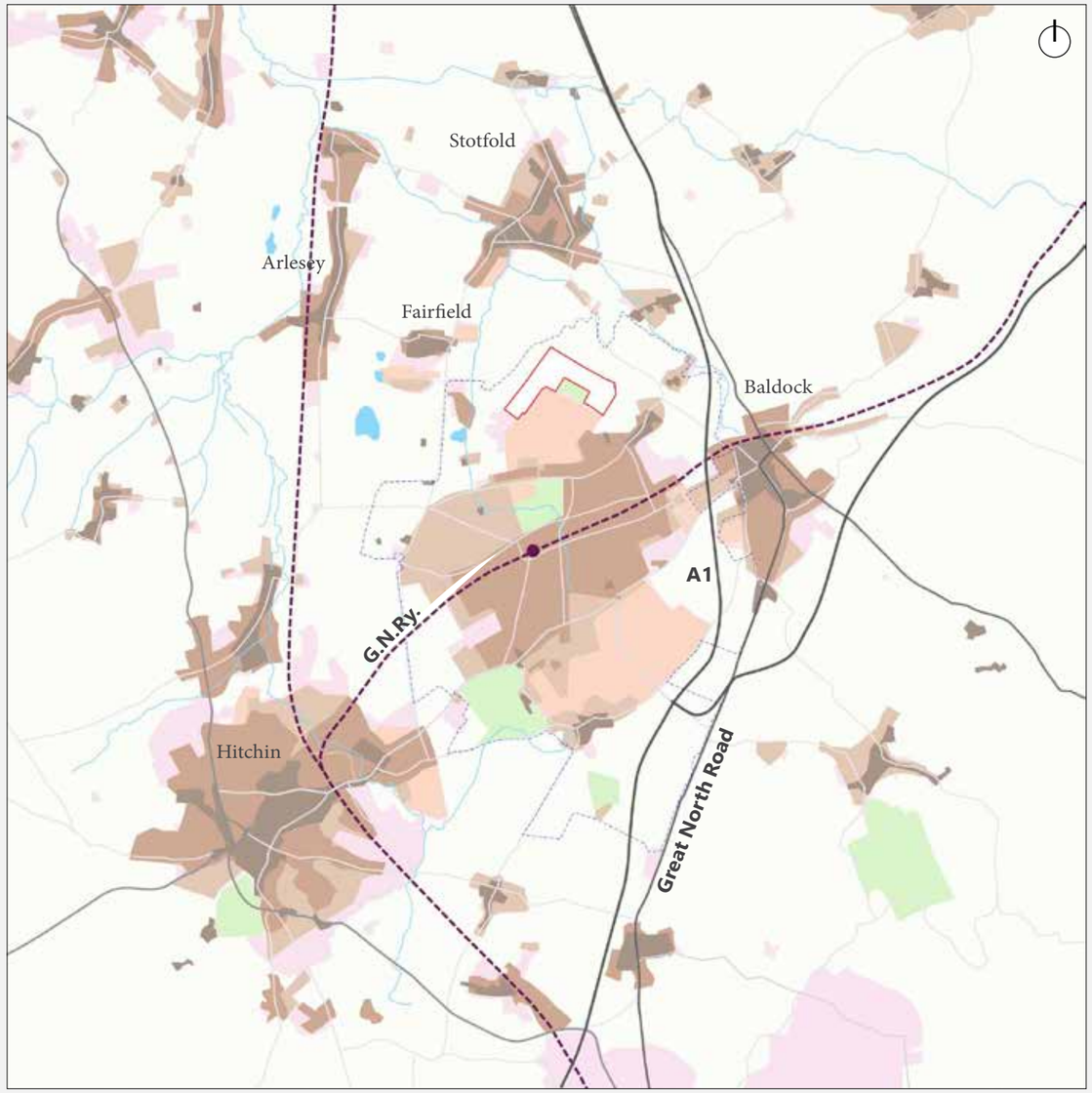


Fig. 2.3: LG1 in relation to the wider context, 1974-2000

Key green spaces
1800-1900
1900-1920
1920-1946
1946-1974
1975-2000

2.6 The detailed evolution of LG1's local context over time is illustrated below. For detailed analytical narrative, refer to the 'Urban design analysis, townscape assessment and characterisation study' p.14-50.

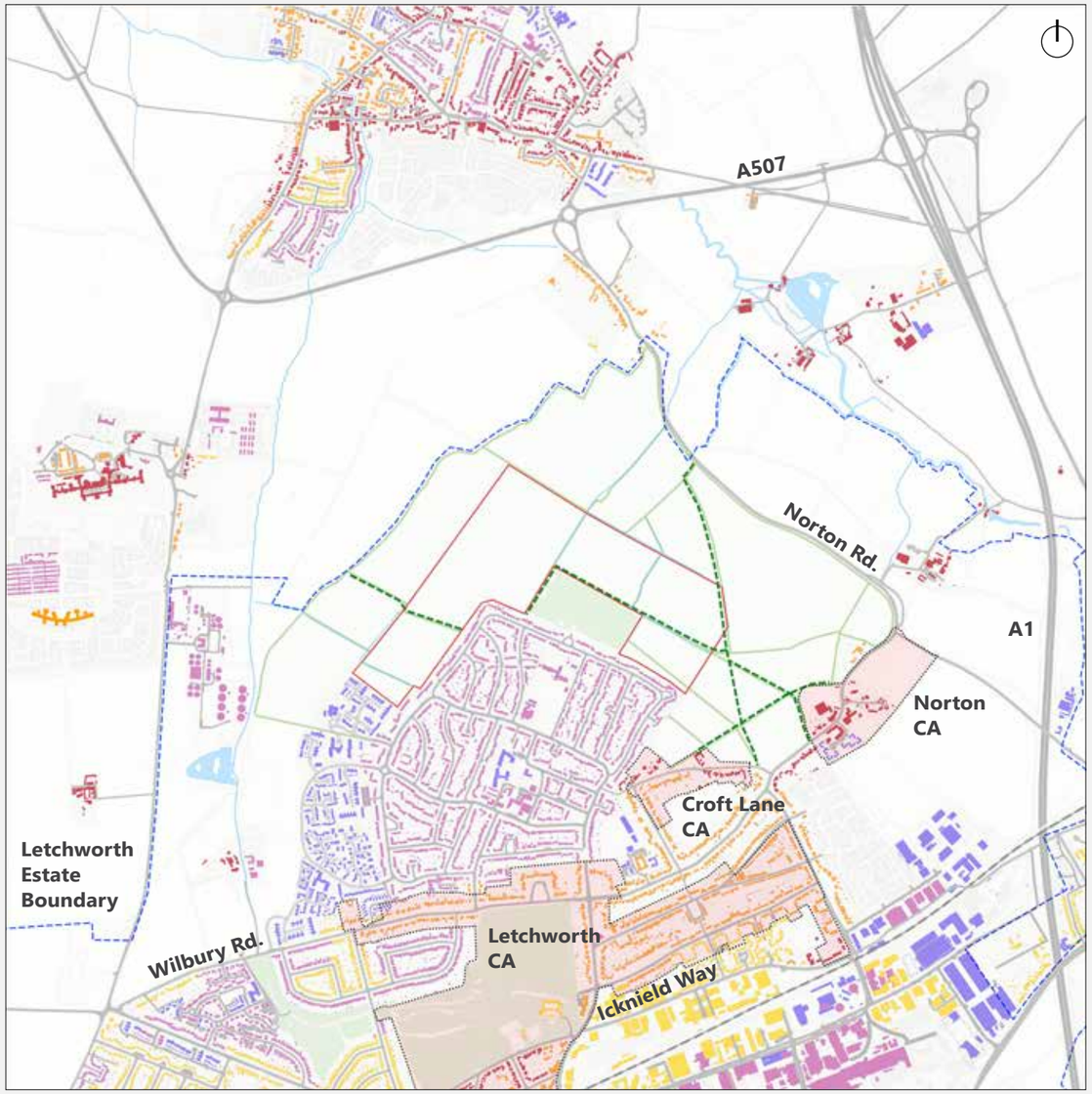


Fig. 2.4: LG1 in relation to the local context, 1974-2000

Key green spaces
1800-1900
1900-1920
1920-1946
1946-1974
1974-2000
Footpath
Field boundaries
LG1
Conservation area (CA)

Key conclusions

2.7 The Letchworth Garden City Estate was previously formed of three parishes, Letchworth, Willian and Norton. Of most relevance to the LG1 site – located at the interface between urbanity and countryside – is the historic village of Norton, offering lessons with regarding rustic country streetscapes, urban grain and housing typologies that underlie its distinctive rural charm. The pre-1905 period also highlights historic buildings such as the Fairfield Hospital with current intervisibility of the culpae of the hospital/spire of the church from LG1.

2.8 Character areas of Letchworth from 1905-1946 establishes and reinforces the fundamental principles of the original Garden City ethos in terms of form, layout and town planning. It provides the foundation for masterplanning LG1's urban design and townscape character as a modern-day Garden City.

2.9 The period from 1946-1974 focuses on two major public sector led expansions of Letchworth, namely Grange Estate and Jackmans Estate, and the private development of Lordship Estate. The Grange Estate offers urban design and townscape lessons in relation to the sensitive integration of LG1's masterplan with its adjacent context, whilst Jackmans Estate, reflects a radical departure from key original Garden City principles in terms of its street layout, block and plot configuration.

2.10 Developments post-1980s focus on a number of smaller in-fill and extension sites within Letchworth e.g. developments along Cade Close, Kristiansand Way, Manor Park and more recent schemes such as Hartington Place, Maddon Gardens, Wissen Drive and Lindsell Avenue. In general, they represent continued exploration of integrating modern-day needs with garden city principles. Hartington Place, in particular, offers lessons on how a contemporary scheme can fit well into the Garden City story, whilst addressing issues related to parking, refuse, energy efficiency and lifetime homes.

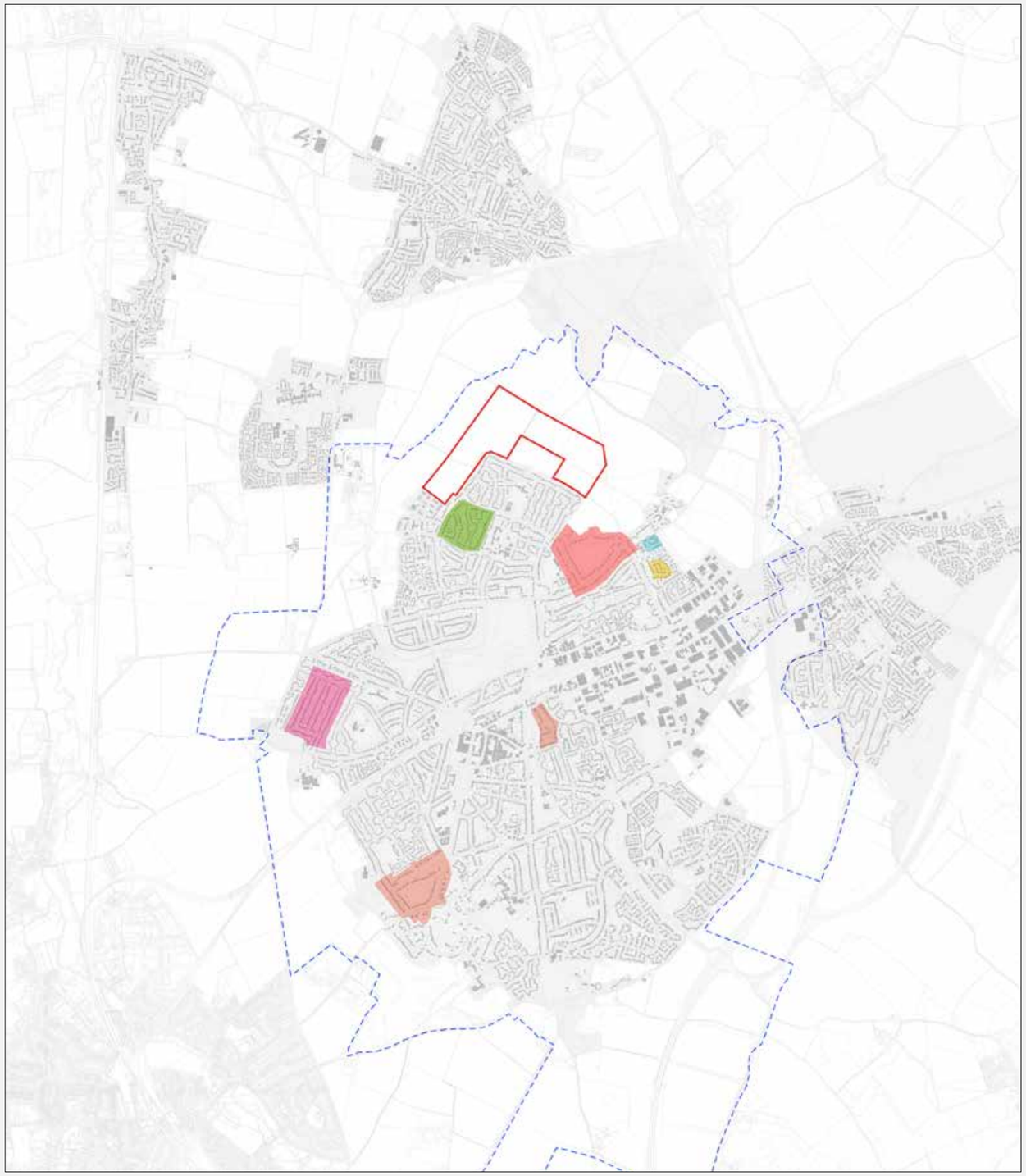


Fig. 2.5: Selected character areas that encapsulate the evolution of Letchworth's character, helping identify the more constant factors which give the place the historical continuity that underlies its townscape identity.
Source: Based on Ordnance Map data received from LGCHF

Contextual analysis

2.11 A detailed character and contextual analysis of LG1 in relation to its local and wider context has been undertaken as part of the Baseline Stage[3,4]. Drawing from various baseline reports, a clear distillation of the urban design and townscape implications of the site's local characteristics are summarised here (refer p.14-19). This encompasses design implications for landscape and environmental character; transport, landuse and urban structure; and built form and architecture that should be considered in the development of LG1's strategic masterplan framework.

Landscape and environmental character

2.12 The landscape and environmental character analysis includes a review of the strategic green infrastructure of the wider context (Fig. 2.9) and LG1's local landscape structure (Fig. 2.10) including topography, hydrology and geology, views and visibility, footpaths, rights of way (Fig. 2.6) and access to recreational facilities, ecology and habitat (Fig. 2.7), to inform design implications for LG1's landscape infrastructure. Refer p.14-15.

Transport, landuse and urban structure

2.13 Transport and landuse analysis includes review of the urban structure of LG1's context and review of the land use and social infrastructure needs, aligned with Local Plan policy requirements (Fig. 2.13-2.15). Informed by the Garden City principles, it concludes design implications for LG1 in terms of countryside integration, facilitating multi-modal access to facilities, and achieving legible (Fig. 2.8) and active street scenes that support resilience through urban form. Refer p.17-20.

Built form and architecture

2.14 Built form and architectural analysis draws from the historical evolution of Letchworth's architectural characteristics (Fig. 2.18) to inform design implications for LG1's built form as a contemporary interpretation of the Garden City principles. Refer p.21-22.

Fig. 2.6: Letchworth Garden City Greenway
Source: Peter Neal

Fig. 2.7: Mature oaks along northern boundary of LG1
Source: EcoResponsive Environments

Fig. 2.8: Open views west to Fairfield Park from LG1
Source: Peter Neal

A detailed contextual analysis of the site's local characteristics in relation to its wider context undertaken in the Baseline Stage resulted in a clear distillation of urban design and townscape implications for LG1; this included landscape and environmental character, transport, landuse and urban structure, built form and architecture.

Cumulatively, this sets a foundation for the creative reinterpretation of the original Garden City principles for 21st century as part of LG1's strategic masterplan development process.

References:

3. EcoResponsive Environments (February, 2024; v3.0) Baseline Report: Constraints, opportunities, design vision and placemaking objectives.

4. EcoResponsive Environments (February, 2024; v3.0) Urban design, townscape assessment and characterisation study.

Landscape and environmental character: Key analysis maps

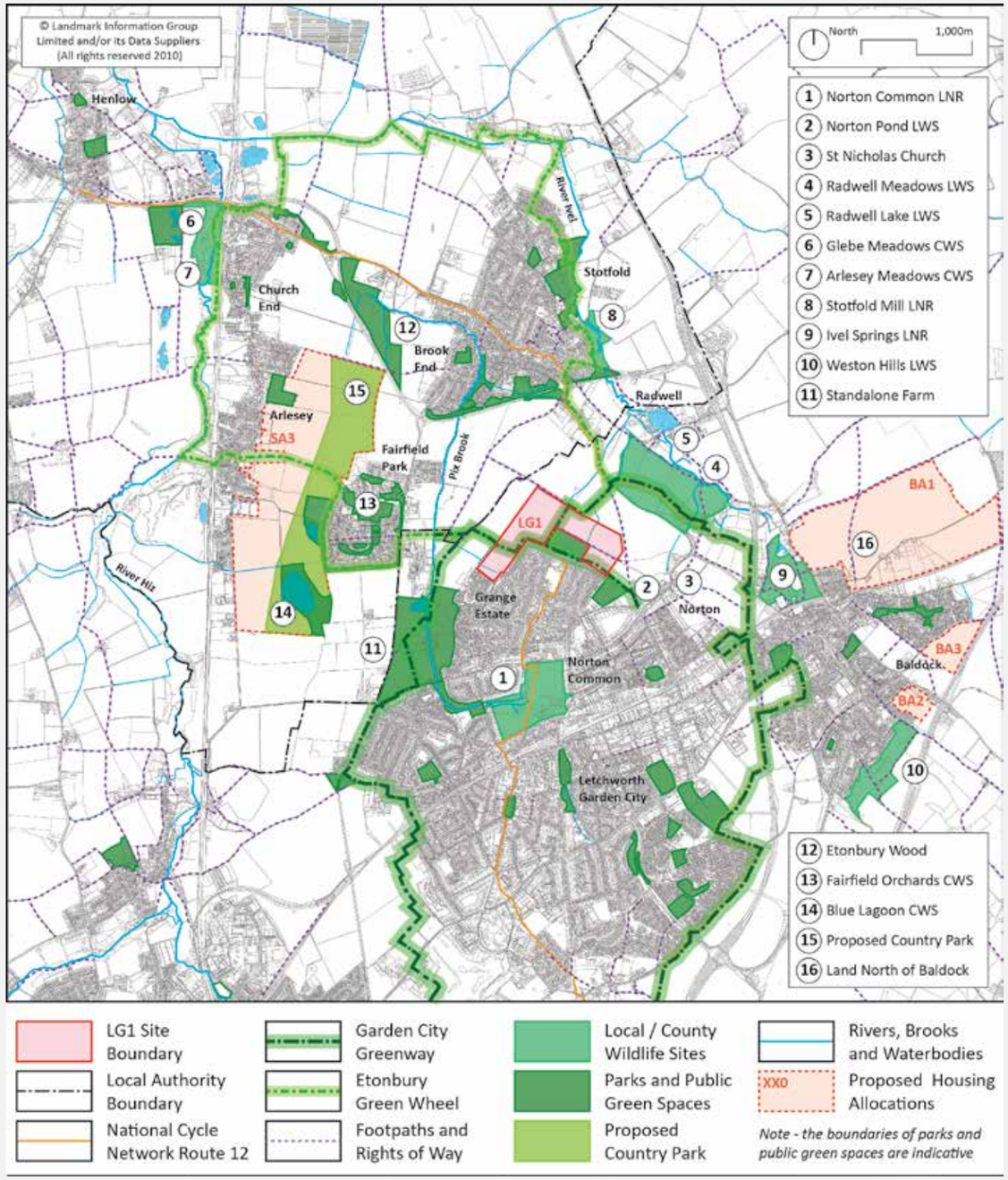


Fig. 2.9: Strategic green infrastructure network
Landscape Character and Sensitivity Study, February 2024, p.18

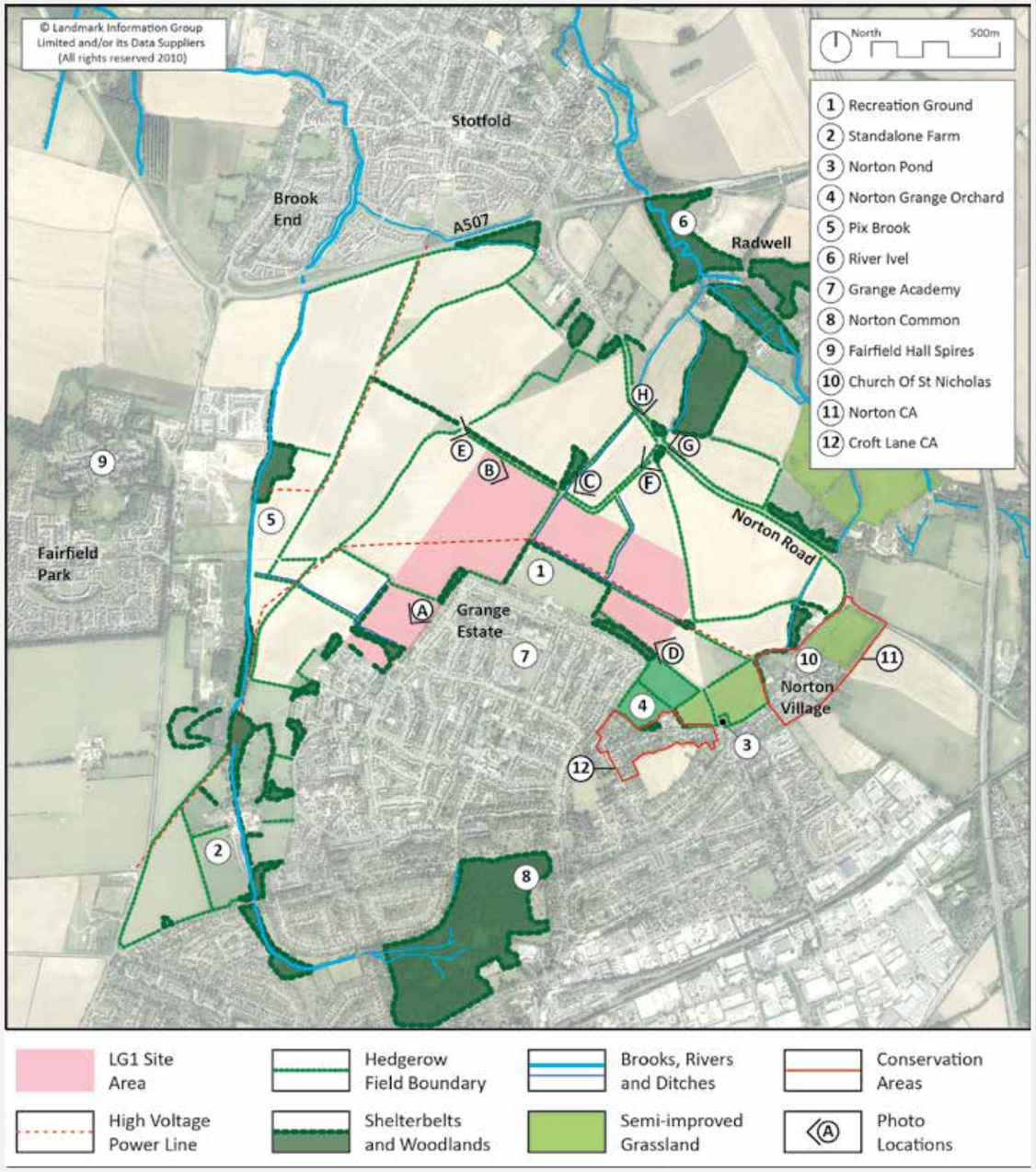


Fig. 2.10: LG1 existing landscape framework
Landscape Character and Sensitivity Study, February 2024, p.32

Landscape and environmental character: Design implications[5,6]

❶	Embrace Garden City Principles in the landscape masterplan. This should include a generous landscape setting and promoting additional tree planting within green spaces and streets contributing to a comprehensive GI framework, creating a clear sense of place integrated with its surrounding landscape.
❷	Strengthen existing landscape buffers. A long-term, active and productive peripheral landscape buffer and defensible Green Belt Boundary should be established immediately to the west, north and east of LG1 and new planting should be used to strengthen existing vegetated screening and protect existing views, particularly towards the western and eastern boundaries from adjacent settlements.
❸	Protect and enhance the Garden City Greenway, and where feasible enhance to establish a linear park to support dwell activities, enlarging the network of walking and cycling routes including maintaining and increasing connectivity with the Etonbury Green Wheel and other recreational destinations.
❹	Expand recreational facilities and resources. Enhance current provision and recreational offer of the Grange Recreation Ground through S106, where feasible, particularly for children and young adults (Fig. 2.11).
❺	Strengthen ecological networks and increase habitat diversity to meet the statutory requirement to deliver biodiversity net gain (BNG) as well as emerging policy for establishing local nature recovery networks.
❻	Protect, maintain and enhance the existing hedgerow network and existing mature trees. They make an important contribution to landscape character and connectivity, articulating views, providing screening and defining visual envelopes within the site.
❼	Integrate sustainable drainage within existing drainage pattern. The relatively flat or gently sloping topography provides limited constraint on development and access within the site. In this respect, careful attention should be paid to drainage and surface water management.
❽	The site naturally drains to the north and to the west through an existing network of ditches (Fig. 2.12) aligned with field boundaries. This pattern should inform the introduction of a gravity-fed sustainable drainage strategy, improving climate-resilience.
❾	Extend the diversity of habitats and provide additional amenity and ecological value with swales, wetlands and areas of open water as part of the Sustainable Urban Drainage strategy. This may include semi-naturalised habitats, including permanent areas of water, native aquatic and marginal planting and varying bank grading, providing breeding habitat for amphibians.
❿	Explore viability of sustainable drainage interventions at a plot and building scale that contribute to further slowing of surface water runoff e.g. through permeable paving, rain gardens and/or rainwater harvesting.
⓫	Consider existing drainage issues on the Grange Recreation Ground when planning for environmental improvements and an enhanced recreational offer.
⓬	Introduce grasslands and wildflower meadows that include opportunities to protect, create and enhance chalk grasslands, where feasible, to reflect prevailing National and North Hertfordshire landscape character profiles and objectives.
⓭	Create new areas of species-rich wildflower meadow, native woodland and native scrub on-site to complement and strengthen these existing habitats.
⓮	Incorporate additional man-made habitat features including hibernacula, log piles, bat, bird and invertebrate boxes within the development proposals to improve refuge opportunities for a range of species.
⓯	Respect views towards locally prominent landmarks.
⓰	Strengthen the Pix Brook corridor, beyond the site boundary, that contributes to an important ecological network by maintaining and extending connectivity with hedgerows, shelterbelts and woodland copses.

Fig. 2.11: Play and fitness equipment, Grange Recreation Ground
Source: Peter Neal

Fig. 2.12: Existing drainage ditches along field boundaries
Source: EcoResponsive Environments

References:

5. EcoResponsive Environments (February, 2024; v3.0) Baseline Report: Constraints, opportunities, design vision and placemaking objectives, p.9-23.

6. EcoResponsive Environments (February, 2024; v3.0) Urban design, townscape assessment and characterisation study, p.51-69.

Transport infrastructure and local destinations: Key analysis map

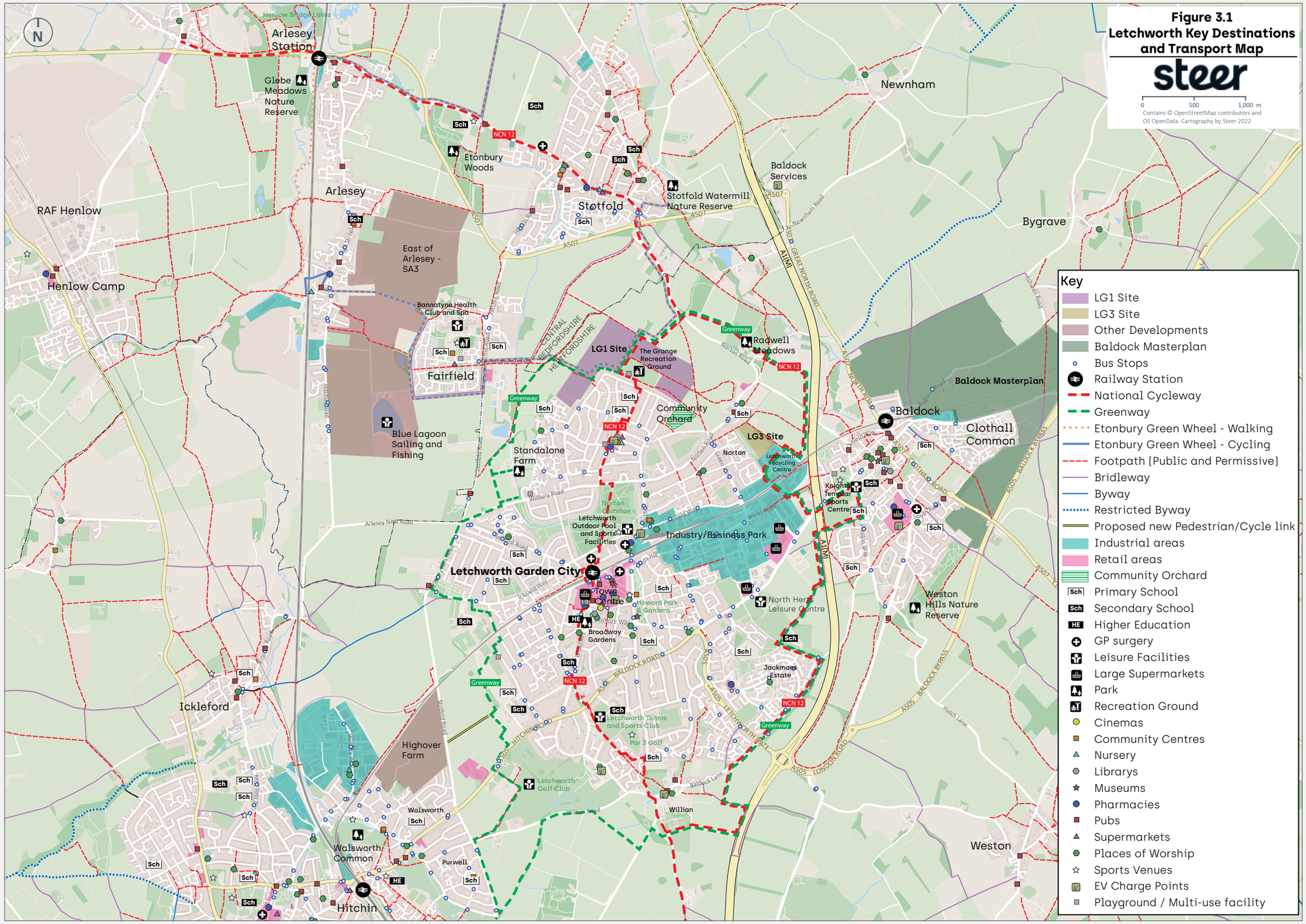


Fig. 2.13: Key Destinations and Transport Map
Transport & Accessibility report, June 2023, p.17

Existing routes to key destinations: Key analysis map

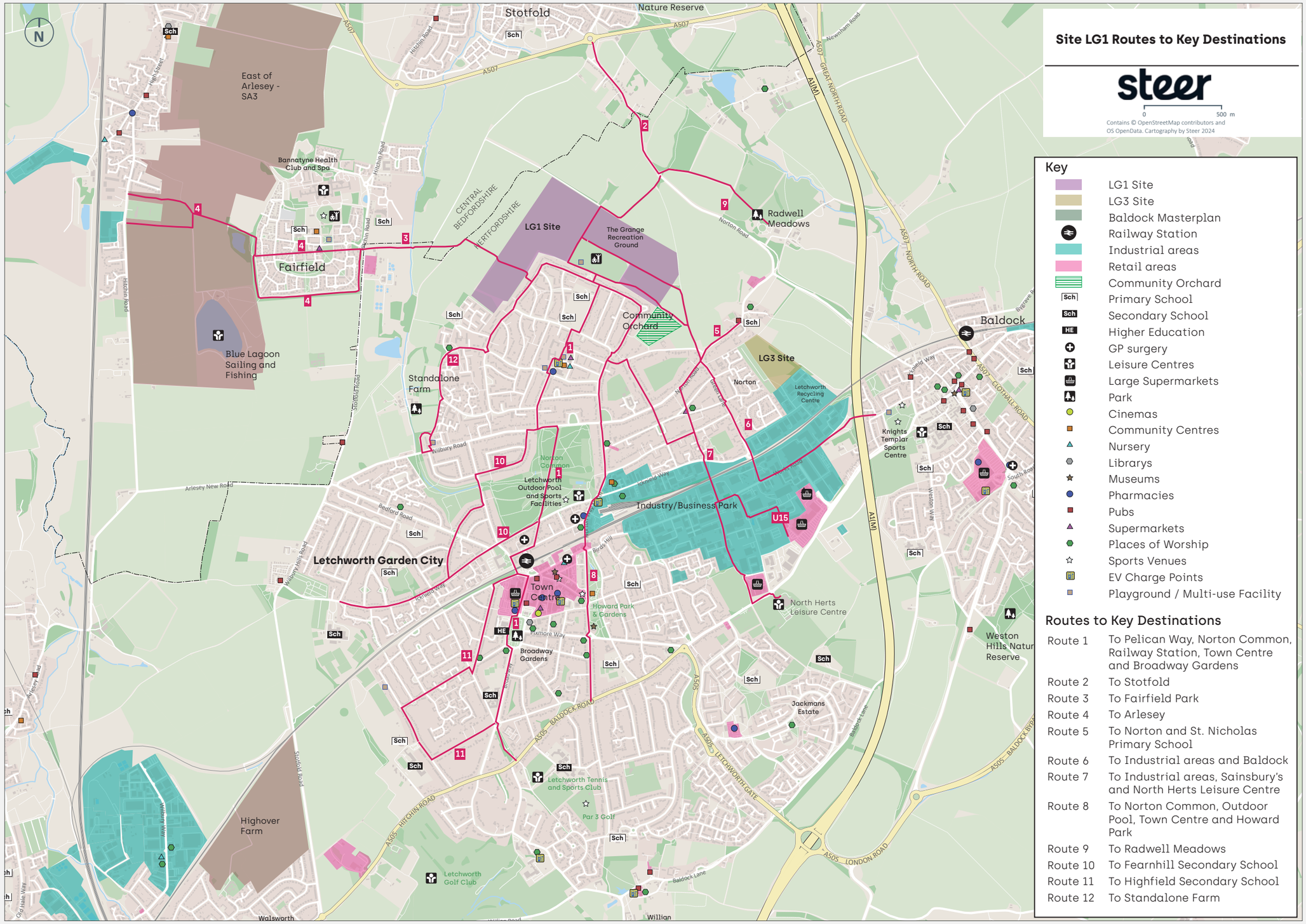
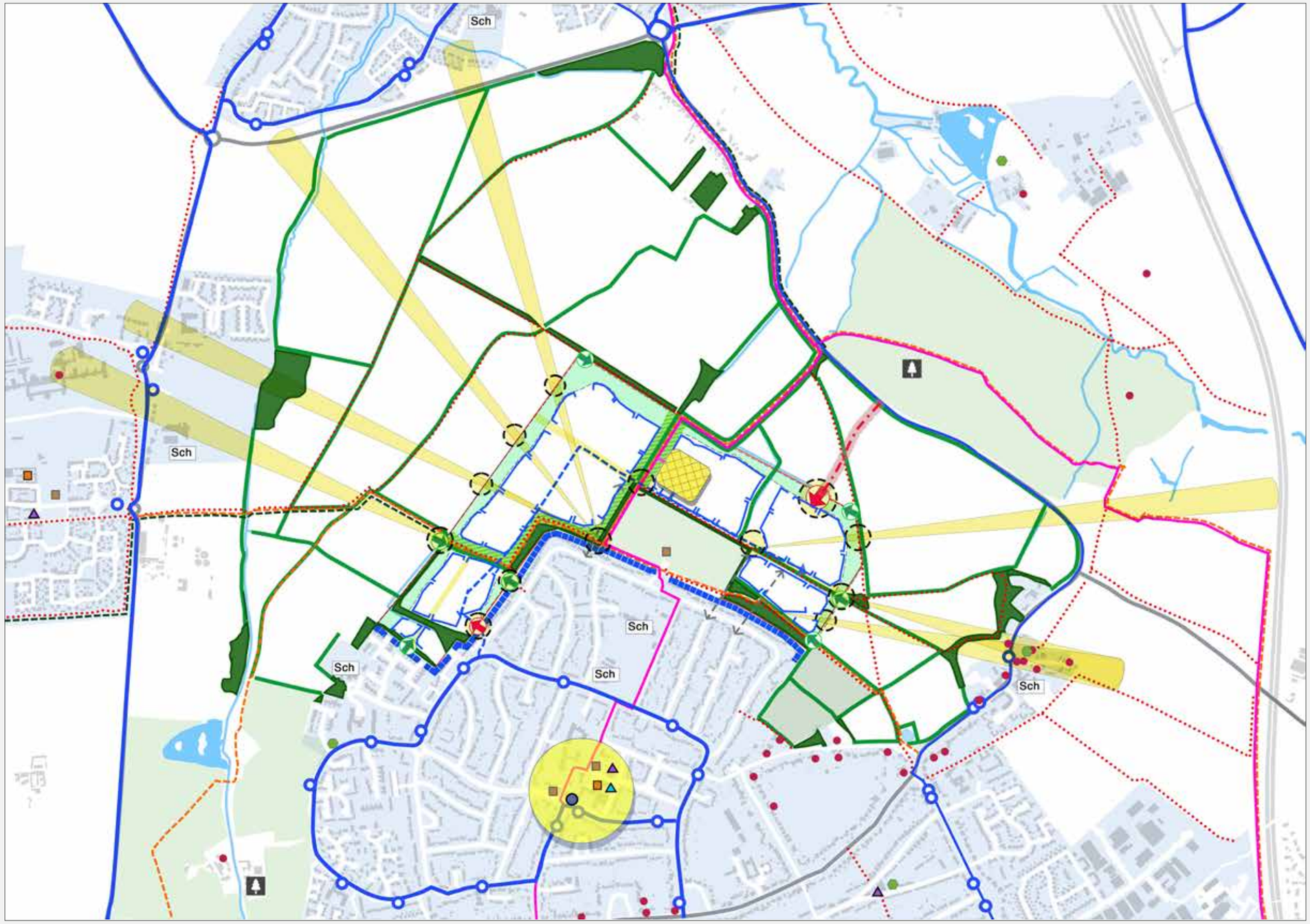


Fig. 2.14: Existing routes to key destinations.
Source: Steer

Land use, social infrastructure and urban structure: Key analysis map



	Site boundary
	Garden City Greenway
	National Cycle Network Route 12
	Etonbury Greenwheel
	Footpaths and Right of Ways
	Key nodes and gateways
	Long distant views
	Backs of adjacent plots
	Potential active edges
	Vehicular access point
	Pedestrian/ cycle access point
	Listed structures
	Bus route and stops
	Pelican way local centre
	Potential LG1 neighbourhood centre/ hub to be aligned with the Local Plan (Policy SP15) in relation to the land use and social infrastructure needs. Key elements include a new 2FE primary school and neighbourhood-level retail/ community facilities providing 900sqm (net) floorspace.
	Grange Recreation Ground
	Greenway Linear Park
	Proposed peripheral landscape buffer
	Existing shelterbelts/copses/ hedgerows

Fig. 2.15: Consolidated urban design analysis including LG1's landuse and social infrastructure needs and its contextual sensitivities in relation the Grange Estate.
Urban design, townscape assessment and characterisation study, February 2024, p.93

Transport, land use and urban structure: Design implications[7,8]

❶	Adopt an integrated multi-modal approach to LG1's movement and transport networks stitched into the wider context (Fig. 2.13), providing a sustainable extension to Letchworth that facilitates opportunities for active travel, healthy lifestyles and 10% modal shift.
❷	Create a mobility hub on LG1 for facilitating opportunities for easy interchange between sustainable modes of travel.
❸	Protect and enhance the public rights of way network (Fig. 2.16) through and around the site and consider opportunities for the creation of safe, direct and legible walking and cycling routes to/from The Grange, Norton, Fairfield Park, local primary and secondary schools, Letchworth station and town centre (Fig. 2.14).
❹	Develop a sustainable public transport strategy for the site that also benefits the adjacent Grange Estate and connectivity to and from the Letchworth town centre.
❺	Create a connected, landscape-integrated, multi-modal street network that prioritises active travel, whilst incorporating appropriate design measures to mitigate rat-running of vehicles through Grange Estate.
❻	Consider issues associated with parking overspill near the Grange Recreation Ground (on match days) and wider Grange Estate.
❼	Adopt a coordinated approach to a Sustainable Travel Plan with Settle (main landowner in the Grange) and North Herts Council, in relation to upgrading the local cycling and pedestrian networks, through the allocation of S106 contributions.
❽	Co-locate retail, community centre, mobility hub and school in the most accessible location to create a vibrant local centre (Fig. 2.15). Take a coordinated approach with Settle aligned with Pelican Way regeneration strategy.
❾	Maintain and frame key views towards locally prominent landmarks (Fig. 2.15).
❿	Provide opportunities for an improved understanding of cultural assets discovered from archaeological investigations through interpretation using art and heritage trails anchored around new public realm. Consider implications of the archaeology that is relatively shallow, in terms of the nature of landscaping and character of the proposed attenuation basins.
⓫	Establish a sense of gateway to/from LG1 from Norton Road, Western Way and Grange Rec with a hierarchy of nodes along LG1's street and public space networks for easy way-finding (Fig. 2.15).
⓬	Create character variation rooted in the Garden City planning principles of 'vista, closure, grouping and accent', for a gradual transition to the rural countryside with a mix of formal and informal settings.
⓭	Support safety of public outdoor spaces by maximising LG1's street and public space networks (including the Grange Rec, Greenway linear park and the peripheral green belt) to have active frontage through built form.
⓮	Place key community and civic facilities foregrounded as landmarks of appropriate relative significance and enhance memorability of street intersections through corner buildings designed as minor landmarks and distinguish street typologies through building elements and tree species.
⓯	Maintain the privacy of existing Grange Estate properties that back onto the site boundaries (Fig. 2.17) by protecting and extending the existing shelterbelts adjacent to Grange Estate and ensuring appropriate privacy distances between existing and new dwellings.
⓰	Locate residential uses/typologies to capitalise and maximise on green views.
⓱	Future open space provision should meet or exceed FIT planning standards for amenity green space, natural spaces, play areas and parkland to provide a set of connected and multifunctional spaces supporting recreation, active travel and biodiversity.

Fig. 2.16: Greenway path along southern boundary
Source: Peter Neal

Fig. 2.17: Field edge adjacent to Grange Estate
Source: Peter Neal

References:

7. EcoResponsive Environments (February, 2024; v3.0) Baseline Report: Constraints, opportunities, design vision and placemaking objectives, p.24-41.

8. EcoResponsive Environments (February, 2024; v3.0) Urban design, townscape assessment and characterisation study, p.70-95.

Built form and architecture: Key analysis maps

Fig. 2.18: Built form and architectural analysis draws from the historical evolution of Letchworth's architectural characteristics to inform design implications for LG1's built form as a contemporary interpretation of the Garden City principles.

1
(1800-1905)

2
(1905-1920)

3
(1905-1920)

4
(1920-1946)

5
(1946-1974)

6
(2000-present)

Built form and architecture: Design implications[9,10]

❶	Create blocks that support walkability, with entrances fronting the street, in particular, along LG1's southern boundary where existing residential properties back onto it.
❷	Explore design, viability and stewardship models for not only providing front green spaces with grouped building layouts, but also, secure communal spaces within blocks, where relevant and/or possible, to offer safe play spaces, local food production and socialisation potentials.
❸	Create a variety of well-crafted, human-scale block configurations with built edges that follow the line of roads (with slight fluctuations), and capitalises on the site's landscape assets, building setbacks and grouped layouts around attractive greens spaces to create vistas and accents, achieving coherence despite variety in built form.
❹	Create corner plots that relate to streets in terms of frontage, natural surveillance, enhancing local legibility and wayfinding, aligned with Letchworth Garden City's town planning principles.
❺	Design the scale of houses to complement the size and location of the plot with adequate space between terraces and/or larger dwellings to create visual gaps offering views of landscape.
❻	Integrate existing and new landscape within LG1's streets and plots using green verges, trees-lined streets and hedgerows, where possible, to ensure that landscape remains integral to LG1's townscape.
❼	Develop a design approach that integrates modern day functional needs such as car and cycle parking and refuse storage within landscaped-integrated streets and plots, so as to not visually clutter LG1's 'street pictures'.
❽	Design individual house types to reflect the key Garden City architectural principles such as maximising privacy, sunlight and airspace and create functional design devoid of unnecessary ornamentation through use of simple geometric forms and harmonious materials.
❾	Use Garden City architectural features (Fig. 2.19 - asymmetrical forms, dominant roofs with overhanging eaves and chimneys, rectangular forms with prominent gabled and/or hipped red tiled roofs, enlivened with dormers, bays windows and gabled projections) to create a balance between unity and variation within LG1's built form.
❿	Focus LG1's architecture on key characteristics that people notice about buildings and street scenes (Fig. 2.20 - skylines, vertical and horizontal subdivisions of building facades, window types and groupings, entrances, colours and textures of materials, ground level details including 'soft' plot boundaries, substantial green space within front gardens and street details such as trees, lights, refuse bins, seats and signs) and use contemporary materials and detailing to achieve the multi-scale richness that underpins Unwin's 'street pictures' for a modern day Garden City.
⓫	Establish sustinable building stock which require limited energy to heat or cool, and external environments which are comfortable and resilient in extreme weather.
⓬	For LG1's architecture to meet today's needs of high-quality, adaptable and climate-efficient homes, the sustainability targets and specific delivery requirements should be agreed with LGCHF and development partner, and incorporated into the design principles and design code for this development.

Fig. 2.19: Westholm, Letchworth
Source: Garden City Collection

Fig. 2.20: Buildings and hedges reinforcing the line of the roads at Pixmore Way, Letchworth. Source: EcoResponsive Environments

References:

9. EcoResponsive Environments (February, 2024; v3.0) Baseline Report: Constraints, opportunities, design vision and placemaking objectives, p.40-41.

10. EcoResponsive Environments (February, 2024; v3.0) Urban design, townscape assessment and characterisation study, p.96-132.

Site constraints

2.15 The key site constraints for LG1 are summarised below and illustrated in plan (Fig. 2.21, overleaf). We creatively engage with the site constraints in coordination with the wider design team to transform them into design opportunities that support a sustainable masterplan framework for LG1.

Site constraints are creatively engaged with through a trans-disciplinary design process to transform them into design opportunities for LG1.

Land form and hydrology

2.16 The site is located on high ground to the north of Letchworth and falls gently to the north and west. It drains via existing ditches towards the river corridors of the Pix Brook and River Ivel. Future development should take account of the objectives of the ResillienTogether flood management project along the Pix Brook (www.resilientogether.org.uk). It should also respect the prominent setting and these natural drainage patterns informing the location of the proposed attenuation basins. The Drainage and Flood Risk assessment presents the site as sustainable in terms of flood risk and compliant with the criteria set out in the NPPF.

Existing hedgerows, trees and shelterbelts

2.17 The field boundaries are marked by mature hedgerows, trees and shelterbelts. Several hedgerows are considered important in relation to the Hedgerow Regulations as they mark historic field boundaries and have ecological interest. Future development should respect these natural features and accommodate them wherever possible, minimising the loss of hedgerows, Cat A and Cat B trees together with their Root Protection Zones.

Strategic pathways and cycle routes

2.18 The site is bisected and surrounded by a network of footpaths and cycleways providing access to surrounding areas and a well-used recreation resource. The route of the Garden City Greenway should be protected in the future masterplan along with access to the Etonbury Green Wheel and the National Cycling Network Route 12.

Prominent views and visual sensitivity

2.19 The site provides elevated views to the west of Fairfield Park and the spires of Fairfield Hall. To the east the tower of the Church of St Nicholas is visible and framed by surrounding mature vegetation. The north western boundary of the site is visually sensitive to middle distance views from the settlements of Stotfold, Fairfield, the Hitchin Road and the A507 and the southern boundary is lined with backs of existing residential properties of the Grange Estate. Future development should respect these prominent view and their wider settings.

Access

2.20 Access points from Norton Road and Western Way are the location we are currently working to as indicated in the Transport & Accessibility Report. This however, is subject to agreement with NHC and HCC. Further discussions will be held with the NHC, HCC and Central Bedfordshire Council to ensure that the strategic masterplan is well integrated with the surrounding area and future development sites in terms of access.

2.21 Key constraints to inform the final choice of the Norton Road access point (from a wider area of search) considers traffic safety and visibility splays, sensitivities associated with the existing landscape and ecological assets, existing land form and drainage implications, and existing pathways and cycle routes. This is currently being investigated in further detail by the consultant team in coordination with NHC and HCC.

Archaeologically sensitive zones

2.22 In terms of site's archaeology, consultant advice is that the findings are not of such significance that HCC will require any preservation in-situ as an absolute constraint. Due to its shallow nature, however, open-area excavation as mitigation might be required by condition on planning consent. Opportunities associated with the site's archaeology are discussed in the following section.

Utility pipelines and associated infrastructure

2.23 Gas, water, electricity and telephone/internet statutory undertakers were consulted using the likely scope of development in accordance with the SP15 policy in the Local Plan. This exercise indicated that there is capacity in the network to serve the development, subject to standard interventions as part of the development. Investigations confirmed that both the gas pipeline and OHL can be relocated/ buried but would be subject of an additional cost as part of the development. Currently we are working on the basis that the gas pipeline remains where it is, whilst the OHL will be buried along the proposed street layout. This will, however, need to be tested for commercial viability.

Initial noise assessment implications

2.24 The noise assessment found that the risk of noise to the proposed dwellings would be negligible in the greater proportion of the site and low for a small proportion of the site closest to the motorway close to the north east boundary. This has implications such as not locating the school in the North Eastern zone of the site. With the adoption of a 'Good Acoustic Design Process', however, noise standards can be comfortably met.

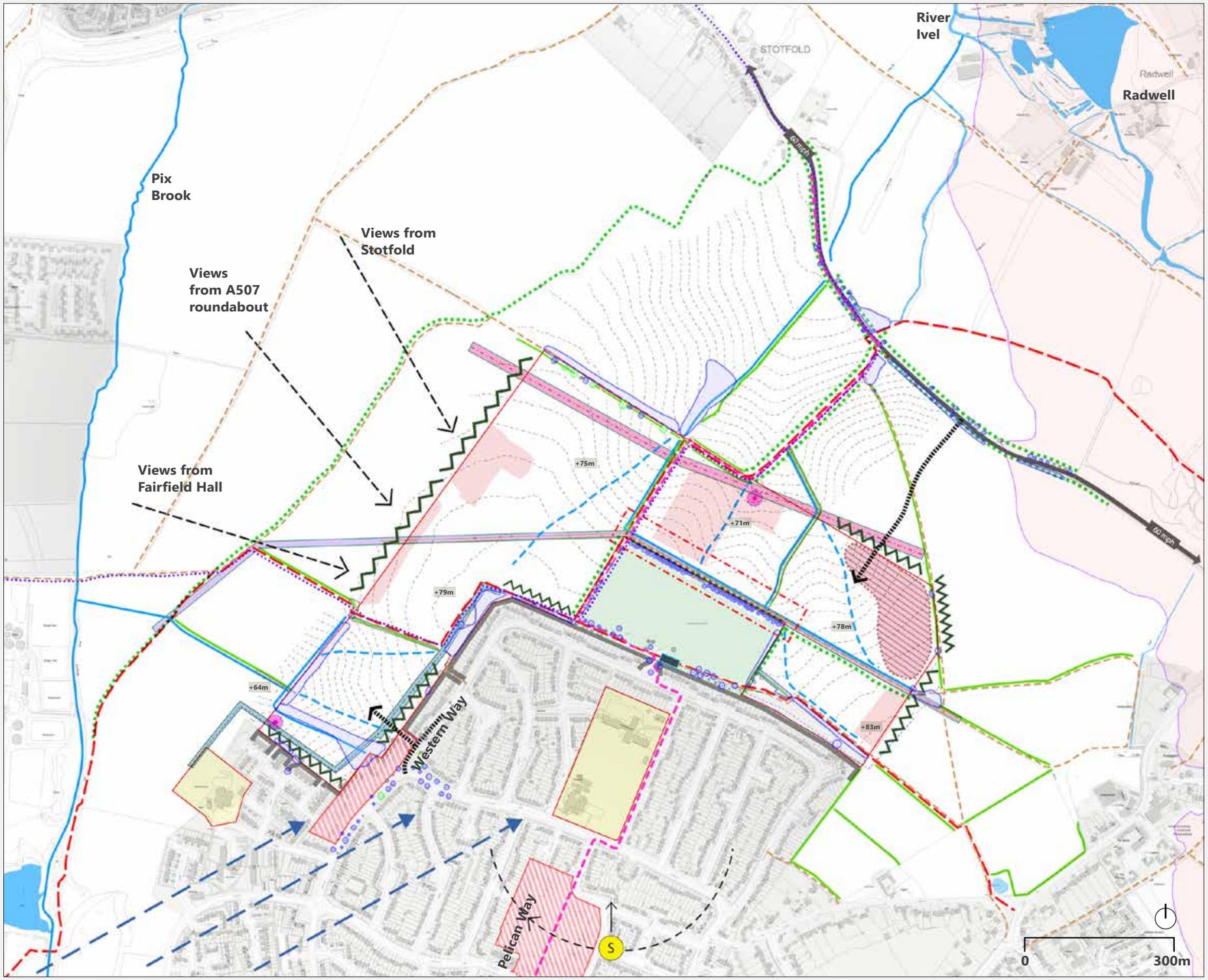
Dominant wind direction and sun path

2.25 Lastly, the masterplan framework should consider the direction of the wind, in particular winter winds and the site's solar orientation to optimize the alignment of the streets, plots and buildings in a balanced approach with the other site constraints.

Fig. 2.21 The key site constraints are summarised in the plan diagram.

Key

	Site boundary
	Contour lines
	Existing hedgerows with 12m protection buffer
	'Important' hedgerows (Hedgerow Regulations 1997) with 12m protection buffer
	Category A (high quality) trees
	Category B (moderate quality) trees
	Category C (low quality) trees
	Prominent views towards LG1
	Dominant winter wind direction
	Visually sensitive boundary
	Brooks, rivers and ditches
	Existing surface runoff
	Garden City Greenway
	Etonbury Green Wheel
	Other footpaths
	National Cycle Network Route 12
	Norton Road (60 mph and ped/cycle paths on one side)
	Adjacent residential edge
	Gas easement (6m either side)
	OHL easement (3m either side)
	Zone for OHL retention (TBC)
	Sewer easement (3m either side)
	Indicative foul water pump with 15m cordon sanitare
	Vehicular entrances to site
	Archaeologically sensitive zones
	Adjacent settlements
	Road traffic noise impact from A1
	Indicative exclusion zone for school
	Recreation ground car parking
	Western Way and Pelican Way development site boundaries (TBC)



Site opportunities

2.26 The key design opportunities for LG1 are summarised below and illustrated in plan (Fig. 2.22, overleaf). These are rooted in a deep understanding of LG1's character and contextual analysis to support a sustainable masterplan framework.

Site opportunities are rooted in a deep understanding of the site's character and contextual analysis, to support a sustainable strategic resilient masterplan framework for LG1.

Strengthening boundaries and green buffers

2.27 Several site boundaries are screened by existing shelter belts, mature trees and hedgerows. Additional structural landscape and planting of native species along the northern, western and eastern boundaries should provide a strong green buffer to the site integrated with ecological and recreational potentials of sustainable urban drainage systems following the natural drainage pattern of the land form. Further discussions on drainage sensitivities and green buffers to existing shelterbelts will need to be undertaken in the next stages of design development. Planting along boundaries with the Grange Estate should be strengthened and where there are gaps within the existing edges of the site, these should be filled in with native planting fronted by new public space/ housing or align with 'new' back gardens to ensure that future development does not undermine privacy of existing residents. In discussions with NHC, the SMF establishes a 6m buffer on either side of existing hedgerows/shelterbelts. This is measured from the centre line of the hedgerows and shelterbelts. In many locations the width of this 6m buffer is exceeded.

Protecting and extending hedgerows and trees

2.28 A key characteristic of the site is its natural hedgerows, shelterbelts and mature trees that can directly contribute to the placemaking. These assets should be protected and enhanced with additional tree and hedgerow planting where possible, considering opportunities to reinstate hedgerows that have been lost in the past. Additional tree planting, particularly along the western boundary will help develop a sense of enclosure and mitigate risks associated with coalescence.

Creating ecological networks and BNG

2.29 The site and its surrounding context have a varied mosaic of habitats including broad-leaved woodland, dense scrub, and semi-improved grassland. Much of the existing agricultural and arable land has limited ecological interest. Additional native planting and particularly new drainage features and wetlands can make a significant contribution to climate resilience and adaptation whilst improving ecological corridors and biodiversity net-gain (BNG).

Enhancing the Greenway

2.30 The existing footpath network provides an important recreational resource and there is clear potential to strengthen and extend the route of Garden City Greenway, connecting this to surrounding footpaths and cycleways. Where this passes through development it may potentially form part of an enhanced linear park with improved seating, play and recreational features.

Creating landscape-integrated gateways

2.31 Learning from Barry Parker's Parkway concept there is an opportunity to create a parkway-inspired multi-modal 'gateway' access route into LG1 and wider Letchworth from Norton Road. The link from Western Way, however, should be designed to minimise any sense of exclusion from the Grange Estate: the masterplan should seek a seamless transition between Grange Estate and LG1 through built form and landscape; requiring a wider coordinated approach with Settle, the main landowner in the Grange.

Creating green streets within LG1

2.32 Street tree planting with distinct landscape features and SUDs where appropriate should be a key feature of the future street network. This will draw on the precedents and historic characteristics of the original Letchworth Garden City to development modern-day streets typologies that encourage walking, cycling, other forms of sustainable travel modes, socialisation potentials and accommodating children's play where appropriate, whilst being rooted in Letchworth's DNA.

Celebrating archaeological and historic value

2.33 Although, any preservation in-situ is not required for the archaeological areas of significance identified through survey as an absolute constraint, there is an opportunity to celebrate the site's history and archaeological value through interpretation as an integrated part of the existing and future public realm network.

Creating a vibrant neighbourhood centre

2.34 Key local facilities such as a new 2FE primary school, neighbourhood-level retail and community facilities of around 900sqm (aligned with the Policy SP15 of the North Hertfordshire Local Plan) and a sustainable mobility hub can be to create a vibrant neighbourhood centre, in ways that makes productive social participation more attractive and fosters a greater sense of community. This would, however, need to complement (not compete) with the renewed local centre of the Grange Estate as part of Settle's redevelopment plans for the Pelican Way site.

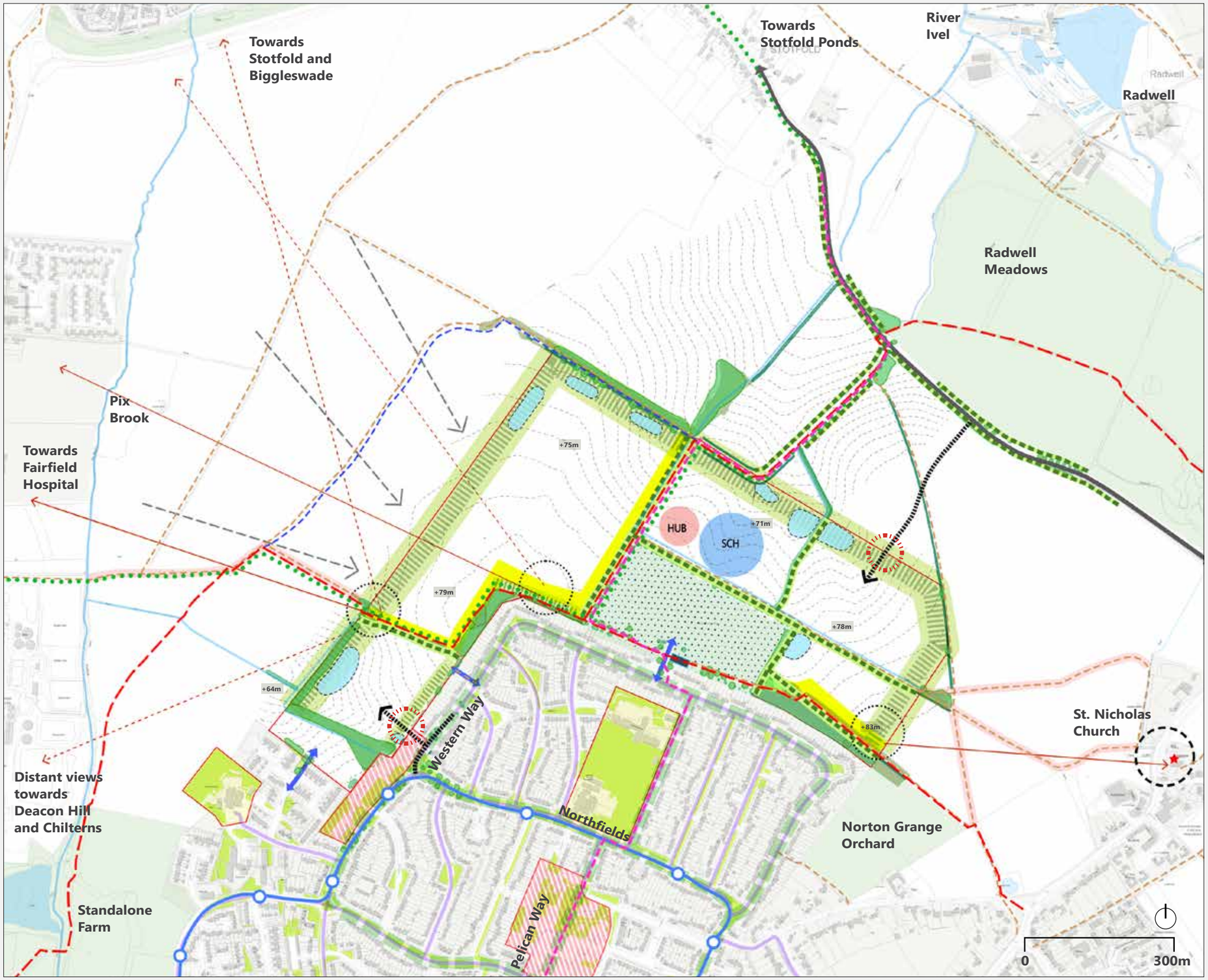
Enabling Grange Estate environmental and public realm improvements

2.35 Lastly, the connections between the new and the existing communities can be strengthened with additional landscape areas, attractive planting and public realm improvements as noted in the Accessibility Audit of existing streets. Potential new and/or improved ped/ cycle links with Avocet, Western Way, Grange Rec and Norton Grange Orchard all seek to integrate the new neighbourhood with the Grange Estate, providing more choice for local walking and cycling. To minimise a sense of exclusion between the two areas, all existing links are connected with. There are also clear opportunities to enhance the recreational provision and visual appeal of the Grange Recreation Ground, as required under S106, enabling this to become a central public park and open space benefiting both existing and new residents over time.

Fig. 2.22 The key site opportunities are summarised in the plan diagram.

Key

	Site boundary
	Contour lines
	Green buffer with additional tree and hedgerow planting
	Protect and enhance existing hedgerows
	Protect and enhance existing trees and/or shelterbelts
	Grange Recreation Ground improvement opportunities
	Brooks, rivers and ditches
	Potential location of open spaces with key views out
	Indicative attenuation basins
	Potential alignment of vehicular, walking and cycling access
	Public realm improvement of existing streets (Steer/2022, fig 5.2)
	Potential environmental improvement of existing streets
	Potential and improved pedestrian and cycle links only
	Garden City Greenway
	Potential Greenway extension
	Linear park along Greenway
	Etonbury Green Wheel
	Other footpaths
	National Cycle Network Route 12
	Potential location of Sustainable Mobility Hub, Bus Interchange and Neighbourhood Centre
	Potential location of School (TBC)
	Recreation Ground car parking
	Western Way and Pelican Way development site boundaries (TBC)



Approach to community consultation

2.36 Public consultation is a vital element of the planning and development process. Good pre-application engagement offers local communities the opportunity to get involved and help shape proposals so that the subsequent planning application takes into consideration, where appropriate and possible, their opinions. LGCHF is committed to work with the local community (Fig. 2.23), not only through the planning stages, but through the detailed design and construction phases.

2.37 LGCHF commenced its community engagement on this site in 2013. This was a town wide debate about whether Letchworth should have more housing, undertaken in partnership with the University of Herts. The results of this were considered by Governors and Trustees, before the LGCHF Board agreed to support the potential Local Plan allocation of the LG1 site by NHC.

2.38 NHC undertook the statutory stages of consultation related to the Local Plan process from 2013 to 2017, with the associated Public Examination commencing in 2017. It was felt that LGCHF's consultation should seek as far as practicable to not prevent any clash or confusion with the Local Plan processes.

2.39 LGCHF subsequently re-commenced its own consultation programme in 2018, which sought to understand the important attributes that future development in Letchworth should exhibit. This included a Young Designer competition and a national design competition, in partnership with the RIBA. The following year the next stage of consultation took place, which focussed more on the LG1 and LG3 sites and included comments and votes on the shortlisted entries to the RIBA design competition with the winner being the preferred shortlisted entry by the local community. This also led to ERE team being appointed as lead master planner.

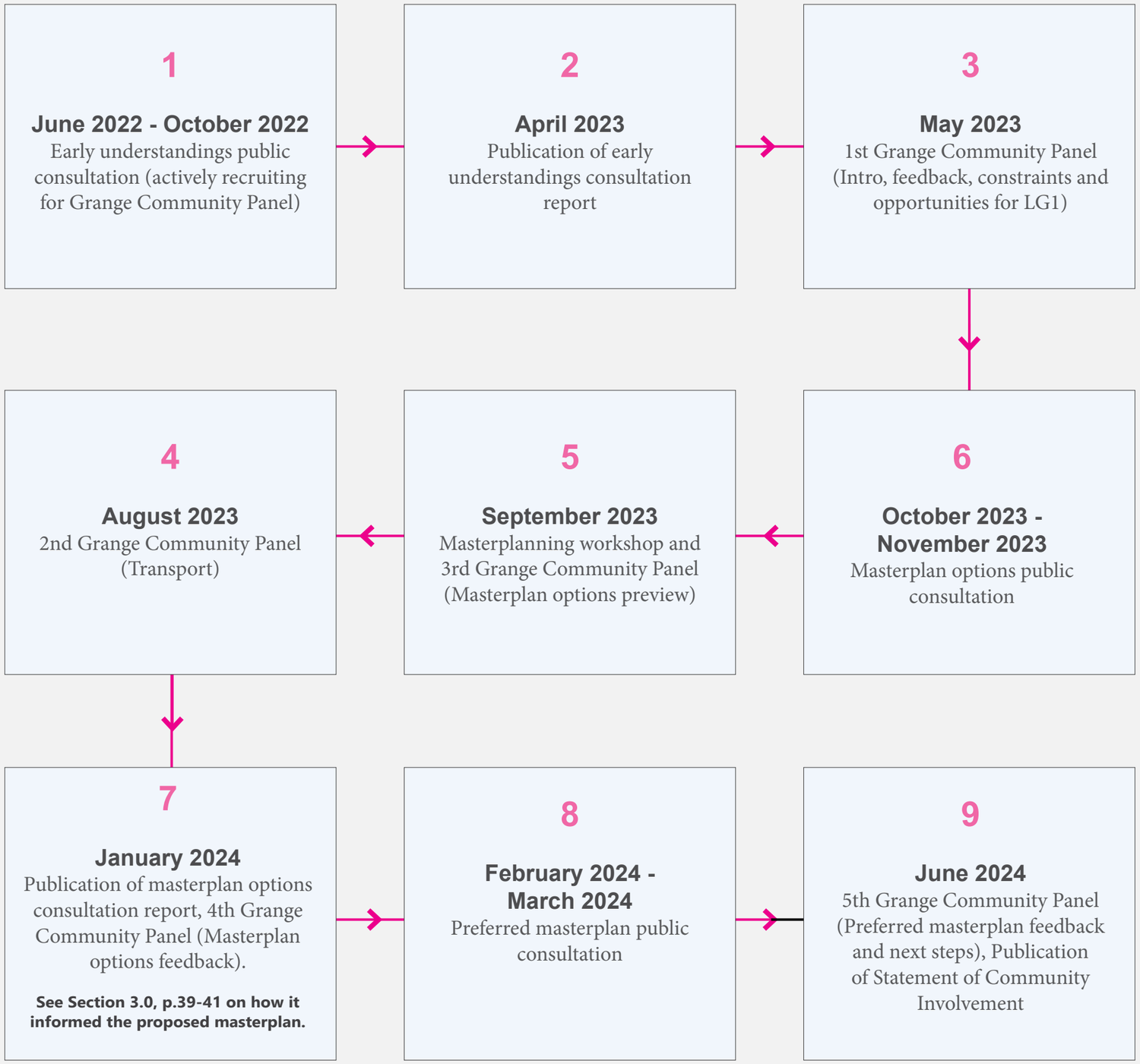
Fig. 2.23 (clockwise from top left photo): Grange Community Panel sessions and masterplanning workshop. Source: Kanda Consulting

2.40 Consultation to support the strategic master planning process commenced in 2022 (Fig 2.24). This sought to engage members of the local community in order to make a positive contribution to the master planning process. LGCHF believes that the best development will happen with input from local stakeholders and those who understand the local area best. The programme of stakeholder engagement and public consultation has provided interested stakeholders and local residents with an opportunity for constructive engagement with leading members of the development team.

2.41 Over the course of each consultation - early understandings, masterplan options (see, Section 3.0, p.39-41) and preferred masterplan, we engaged extensively with key stakeholders and members of the local community (including those who live on the Grange Estate and elsewhere in Letchworth). This also occurred in between defined consultation periods through the Grange Community Panel and other website blog posts on key updates. These panels, and other engagement, enabled LGCHF to carry out continuous engagement to constantly be a transparent and prominent presence in the community and answer any questions at any time about the proposals for LG1 Engagement was carried out both online and in-person to enable as far wide a reach as possible to local people and stakeholders about the LG1 masterplan. Refer the SCI for further details.

2.42 This exercise enabled the design team to embed some core values and principles and to have a greater understanding of what should and shouldn't be included in the master plan. An example of this was early feedback about vehicular access, highlighted as a major concern by local residents, ensuring that the option with a new access road to Norton Road is incorporated. Other matters such as the importance of the Greenway, the Grange Rec, open and green space, mixed tenure and opportunities for local people also consistently featured strongly, along with a desire for a high quality development that reflects Garden City design principles and values.' See p.39-44 for details.

Fig. 2.24 Consultation timeline summary. See SCI (Appendix C/ May 2024) for further details.



3

Vision and placemaking objectives

3. Vision and placemaking objectives

Design vision

3.1 The proposed vision for LG1(Fig. 3.1, overleaf) is in accordance with The Letchworth Garden City Heritage Foundation's adopted vision for the site, framed by the local plan policies (NHC's adopted Local Plan 2011-2031) and the characteristics of context and identity supported through the National Design Guide.

LGCHF's adopted vision

3.2 The Foundation's Board of Trustees adopted the following vision that forms the basis of the development of LG1:

'To create a new landscape-led residential development of land north of Letchworth Garden City (LG1) to help address the housing needs of the town's population and drive sustainable economic growth, whilst achieving substantial community benefit and a net gain in biodiversity.

In consultation with and shaped by the needs of the local community, LG1 will deliver imaginatively and well designed flexible living space for all ages and stages of life together with a primary school, community and cultural facilities and substantial new open spaces for the benefit of all residents, applying a modern interpretation of Garden City design.

With new jobs, training and apprenticeships and an emphasis on walking, cycling and improved sustainable transport linking the whole of the Grange with the rest of the town. LG1 will create opportunities for local people within a vibrant and connected neighbourhood.

Innovative design solutions will be showcased such as modern sustainable construction methods, including self build and community house building to meet a range of housing needs, with at least 40% to be affordable (rent, shared ownership or community land trust).

Land value will be captured and re invested for the benefit of the wider community , creating a legacy for future generations in line with Garden City principles.'

3.3 This adopted vision is supplemented by LGCHF's Green Infrastructure and Transport Infrastructure vision statements[1,2] and core principles, as set out in 2021, to support and guide the evolution of LG1's strategic masterplan in collaboration with NHC, HCC, the local community and other stakeholders.

'To create a new landscape-led residential development of land north of Letchworth Garden City (LG1) to help address the housing needs of the town's population and drive sustainable economic growth, whilst achieving substantial community benefit and a net gain in biodiversity.'

National Design Guidance

3.4 The National Planning Policy Framework (NPPF) (MHCLG/2021)[3] and National Design Guide (NDG) (MHCLG/ 2021)[4] provides the current national planning framework and design guidance for LG1. Aligned with the NPPF, as part of the Government's documentation of planning practice guidance, the NDG outlines the priorities for well-designed places in the form of ten characteristics.

Local Planning Context

3.5 The NHC adopted Local Plan 2011-2031[5], and in particular, Policy SP9 on Design and Sustainability, Policy SP15 on LG1, and Appendix 5 on Letchworth's Garden City design principles provide the current local planning context for LG1's strategic masterplan. The latter is of particular significance for the site, it being a once in a generation expansion of the world's first Garden City.

References:

1. LGCHF (2022) Green Infrastructure Workshop Feedback paper, based on a workshop held in August 2021 with LGCHF's Housing Development Committee.

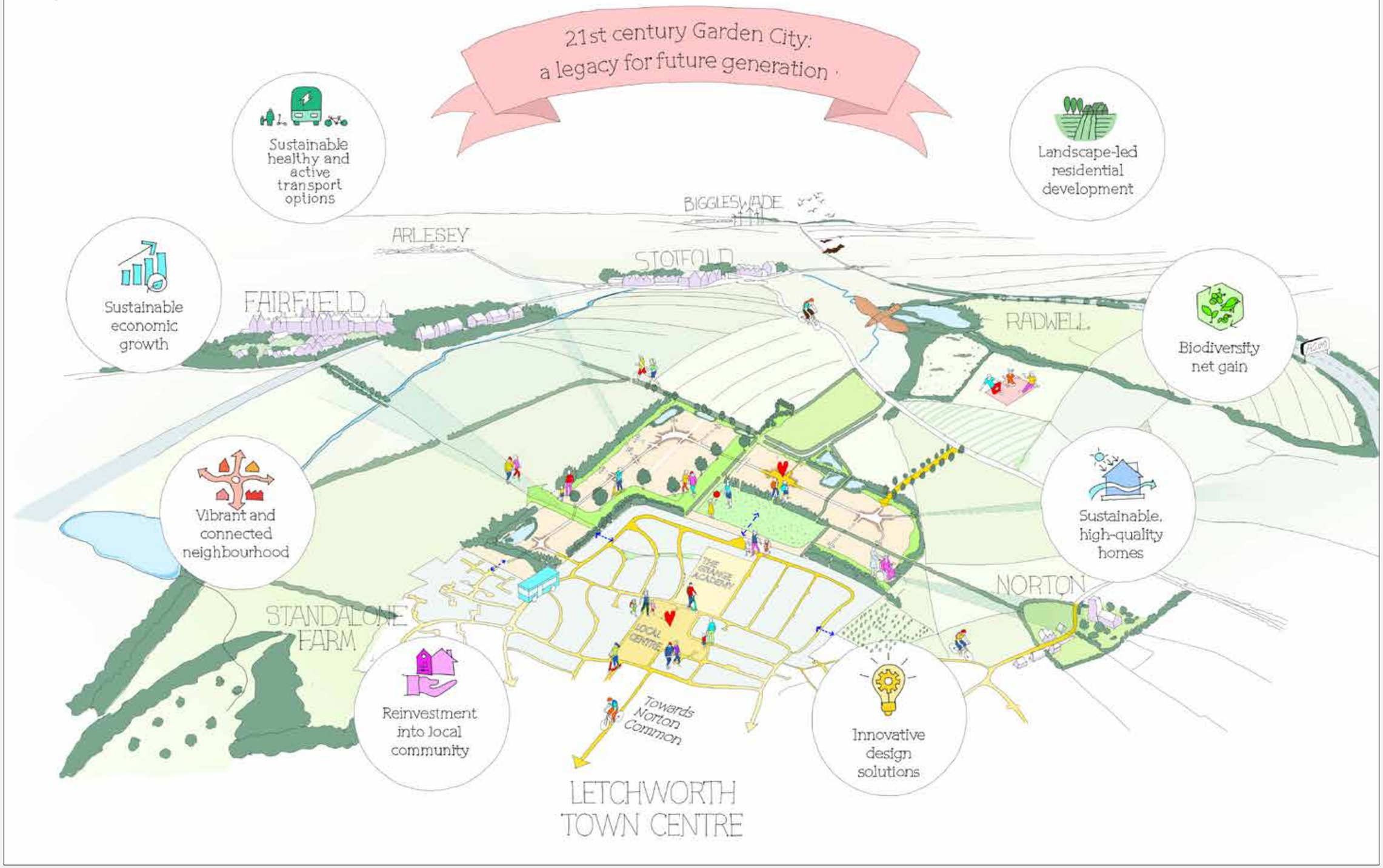
2. LGCHF (2022) Transport Infrastructure Workshop Feedback paper, based on a workshop held in November 2021 with LGCHF's Housing Development Committee.

3. MHCLG (2021) NPPF, September 2023, Department for Levelling Up, Housing and Communities. See: https://webarchive.nationalarchives.gov.uk/ukgwa/20230929144819/https://www.gov.uk/government/publications/national-planning-policy-framework--2.

4. MHCLG (2021) National Design Guide, January 2021, Department for Levelling Up, Housing and Communities. See: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/962113/National_design_guide.pdf

5. NHC (2022) Local Plan 2011-2031, adopted 8 November 2022. See: https://www.north-herts.gov.uk/sites/default/files/2022-12/North%20Hertfordshire%20Local%20Plan%202011-2031.pdf

Fig. 3.1: Illustrative design vision for LG1's strategic masterplan framework



Placemaking objectives

3.6 To achieve the proposed vision for a landscape-led development of LG1 as a 21st century Garden City, eight Placemaking Objectives (POs) are proposed to support a holistic design approach for the development of a strategic masterplan (Fig. 3.2). Each objective carries equal weightage and integrates the principles of sustainable and climate-resilient design relevant to that theme, within the overall scheme viability for the development. For details, see Baseline Report (Appendix A/ February 2024).

3.7 These objectives form part of the strategic master plan documents for LG1, as required by the North Herts Council and will be adopted through its Project Board. These are not only tailored to the site's unique constraints and opportunities, but also aligns with the local planning policy context and best practice design guidance as outlined in the National Design Guide, relating in particular to the themes of Context and Identity.

3.8 Cumulatively, the POs set out a high-level design framework; an overall approach to the design of the streets and buildings and the type and form of LG1's strategic masterplan. Its purpose is to be a creative springboard for the project team and a future development partner, as well as a consistent point of reference that guides further development of LG1's masterplan as a modern-day Garden City.

3.9 LGCHF will be developing further design guidance to support the evolution of the development. This will be within the framework of the POs and site-wide Design Principles (DPs) outlined in the following page. Outside of the strategic master planning process, LGCHF will develop its thinking around the design of the scheme in discussion with the NHC team, which will inform the brief used to help find a suitable partner. As part of an outline or hybrid planning application it is expected that a joint design code will be formulated by the appointed developer partner and LGCHF for consideration.

Fig. 3.2: LG1's placemaking objectives integrate the principles of sustainable design within the overall scheme viability for the development.

Site-wide design principles

3.10 The Design Principles (DPs) add further substance to LG1's Placemaking Objectives (PO), aligned with LGCHF's general design guidance for new housing. It's design implications will relate to the specifics of each character area (See Section 9.0).

PO1

Protecting and enhancing landscape and biodiversity

DP1: Use the existing landscape assets to inform the position and layout of streets, spaces and development.

DP2: Protect and expand the existing hedgerow network, tree lines and shelterbelts to support biodiversity value.

DP3: Establish a strong green perimeter strip around the outer edge of the site to provide ecological and amenity value, manage visual impact and to support the transition to wider countryside.

PO2

Integrating sustainable urban drainage

DP4: Integrate surface water management into the green infrastructure and street network to support sustainable drainage and ecological benefits. This can be provide opportunities for placemaking and play-on-the-way.

PO3

Supporting modal shift

PO4

Creating healthy and active streets and open space networks

PO7

Fostering inclusive communities

DP5: Design the movement network, streets and spaces to embed pedestrian priority and support active travel, helping to deliver a minimum 10% modal shift.

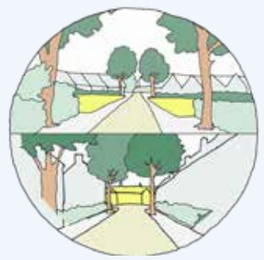
DP6: Establish the main street/ avenue as the focus for public transport and as a place for people and social interaction.

DP7: Embed recreational activities and amenity value across the green infrastructure network and create focal points aligned with intersecting routes, children's play and local community facilities.

DP8: Provide parking as a mix of on-plot, on-street and off-plot typologies which can be repurposed if needed. On-street parking to be in clusters integrated with planting. Off-plot parking, where required, to be in parking courts designed for safe use.

DP9: Integrate convenient cycle parking in garages or dedicated cycle storage units next to front doors, or for apartments, in secure communal cycle parking areas within or adjacent to apartment buildings in convenient locations.

PO5



Enhancing legibility and local distinctiveness

PO6

Creating a vibrant neighbourhood

PO8

Creating climate-efficient, resilient buildings as a modern interpretation of the 'Letchworth look'

DP10: Integrate key views out to existing landmarks into the layout and create attractive vistas within the development to underpin a Garden City sense of place.

DP11: Create well-crafted, collective compositions with vistas, closure, accents and attractive common spaces as a contemporary interpretation of Garden City design.

DP12: Establish variety in terms of density, heights and housing typologies with active frontage and features reflective of Garden City design e.g. soft hedged plot boundaries. There will be height variance in the street scene, in particular, where taller buildings are included.

DP13: Establish exemplar buildings which require limited energy to heat or cool, and external environments which are comfortable and resilient in extreme weather.

DP14: Provide structured space for bins storage (on-plot/communal) to mitigate visual clutter on streetscape.

Options development summary

Design and evaluation framework

3.11 To inform the design development of the strategic masterplan options for LG1 aligned with the baseline analysis, LGCHF's adopted vision, placemaking objectives and NHC's Local Plan (2011-2031) the following design and evaluation framework was adopted.

Natural infrastructure criteria	
N1	Establish peripheral green belt and landscape buffer incorporating sustainable drainage features to improve climate-resilience including attenuation basins, wetlands and ponds providing amenity, recreational and ecological benefit. Connect the peripheral buffer attenuation ponds to swales in areas of high drainage sensitivities and existing overland flows, aligned with the site's natural drainage patterns.
N2	Protect mature trees (Category A) and strengthen hedgerows as ecological networks incorporating 6m buffer zones.
N3	Create a Linear Park along greenway, incorporating additional recreational facilities including seating, picnic areas and interpretation, supporting various activity programmes.
N4	Strengthen landscape buffers adjacent to existing areas of housing.
N5	Protect and enhance existing natural habitats including woodland, scrubland and grassland to adapt to the impacts of climate change and achieve at least a 10% net gain in biodiversity.
N6	Promote additional tree planting within green spaces and along streets to provide at least 2,000 additional trees of a variety of species.

Transport/ movement infrastructure criteria	
T1	Maintain and enhance connectivity with the wider footpath and cycle network and to key destinations for both new and existing residents.
T2	Establish a direct N-S walking and/or cycling link from Grange Estate across the Grange Rec to improve pedestrian connectivity and support Criteria 1.
T3	Create LG1's main street configuration to mitigate rat-running for cars whilst not compromising on direct/ easy routes for walking and cycling.
T4	Maximise the infrastructure investment for main street with development either side.
T5	Create a permeable and landscape-integrated (trees/ SUDs) street network following natural desire lines that improves accessibility, in particular to/from the N-W and S-E corners of LG1, facilitating a modal shift to walking/ cycling for local journeys. Supplement these with surgically-designed light-touch links through hedgerows, as needed.
T6	Create street typologies for the main street that enable easy bus access from the development connecting to wider destinations and public transport interchanges.
T7	Create a mobility hub on LG1 for facilitating the opportunity for easy interchange between sustainable modes of transport and consider its wider integration with the Pelican Way local centre, Letchworth town centre and key Letchworth destinations to support both local trips and longer-distance travel.

Landuse, urban structure and form criteria	
U1	Provide a 2.1 Ha regular-shaped, relatively flat plot for the school; including careful consideration of its relationship with new and existing uses.
U2	Create a car-free zone interfacing the school, promoting a positive interface with the local centre, the Greenway linear park the Grange Rec.
U3	Co-locate and relate the retail, community centre, mobility hub with the school with due consideration to safety and phasing implications, in the most accessible location to create a vibrant local centre.
U4	Maintain and frame key views to Fairfield, St. Nicholas Church and the countryside.
U5	Establish a sense of arrival/ gateway, to/from LG1 from Norton Road, Western Way and Grange Rec with a hierarchy of nodes/ vistas along LG1's street and public space networks for easy way-finding.
U6	Create a variation in character through massing and a diversity of housing typologies to support criteria 5, emphasising a gradual transition in character from an urban setting to a rural countryside interface.
U7	Maximise LG1's street and public space networks (including the Grange Rec, Greenway linear park and the peripheral green belt) to have active frontage through built form.
U8	Locating residential use/ typologies to capitalise on green views.

Masterplan options description

3.12 Using the outlined design and evaluation framework, in collaboration with NHC, Hyas and HCC, three strategic masterplan options were consolidated and consulted upon, as summarised below. For details on each option and its evaluation, see Fig. 3.3-3.5 (p. 36-38).

Option 1

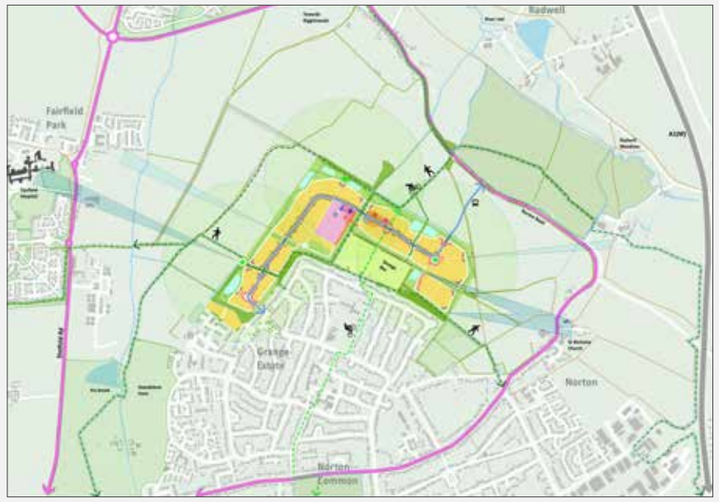


Fig. 3.3: Refer p.32 for further detail

- School (rectangular site) frontage onto the Greenway Linear Park provides direct car-free access for pedestrians, particularly when approaching from the Grange Estate, as the primary road runs through the middle of LG1. The childcare facility is co-located with school site.
- Facilitates delivery of direct pedestrian/ cycle link through the Grange Rec with connection to NCN12.
- Western section of the Greenway running from the west of the Grange Rec is framed by development parcels providing a more urban character than other options.
- Northern Biggleswade visual axis is significantly constrained, if not unachievable, by the existing shelterbelt on the northern boundary of the site.

Option 2

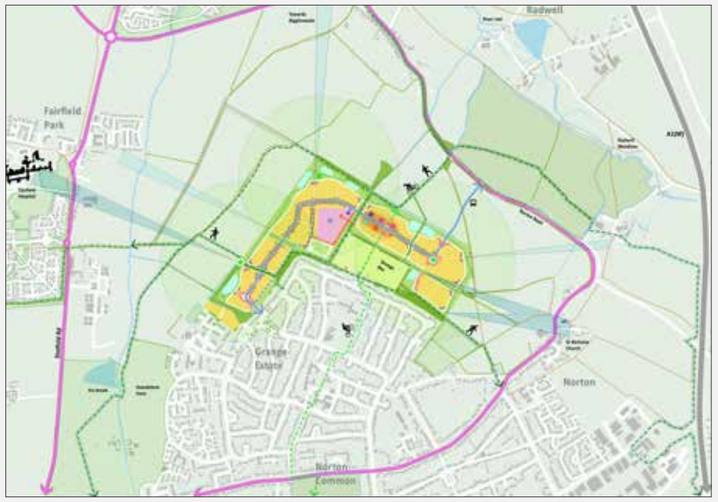


Fig. 3.4: Refer p.33 for further detail

- School (trapezoidal site) is sleeved by residential use on two sides to maximise active frontage onto streets. It requires additional connections across the Greenway Linear Park and mature hedgerow to access the local centre uses, similar to Option 1. The childcare facility is co-located with the local centre uses and not with the school.
- Western section of the Greenway running from the west of the Grange Rec incorporates an open space as part of the enhanced linear park, supporting a semi-rural character.
- Long distance N-W Biggleswade axis is maintained and partially strengthened by secondary street.
- The primary street is more convoluted to further deter rat running through LG1 and support low-speeds.

Option 3

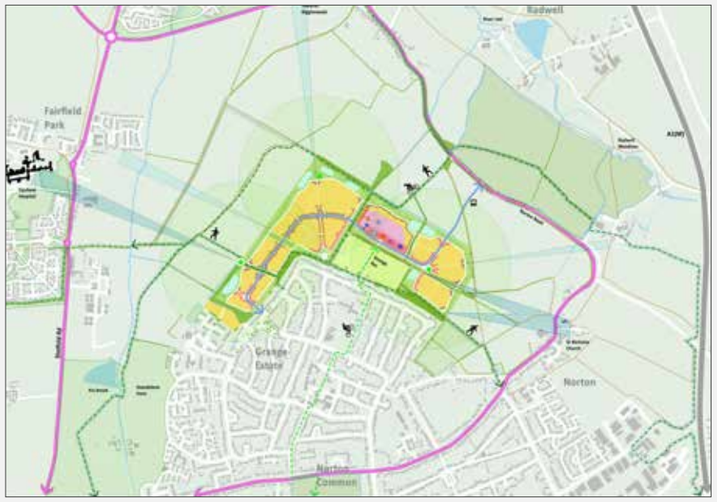
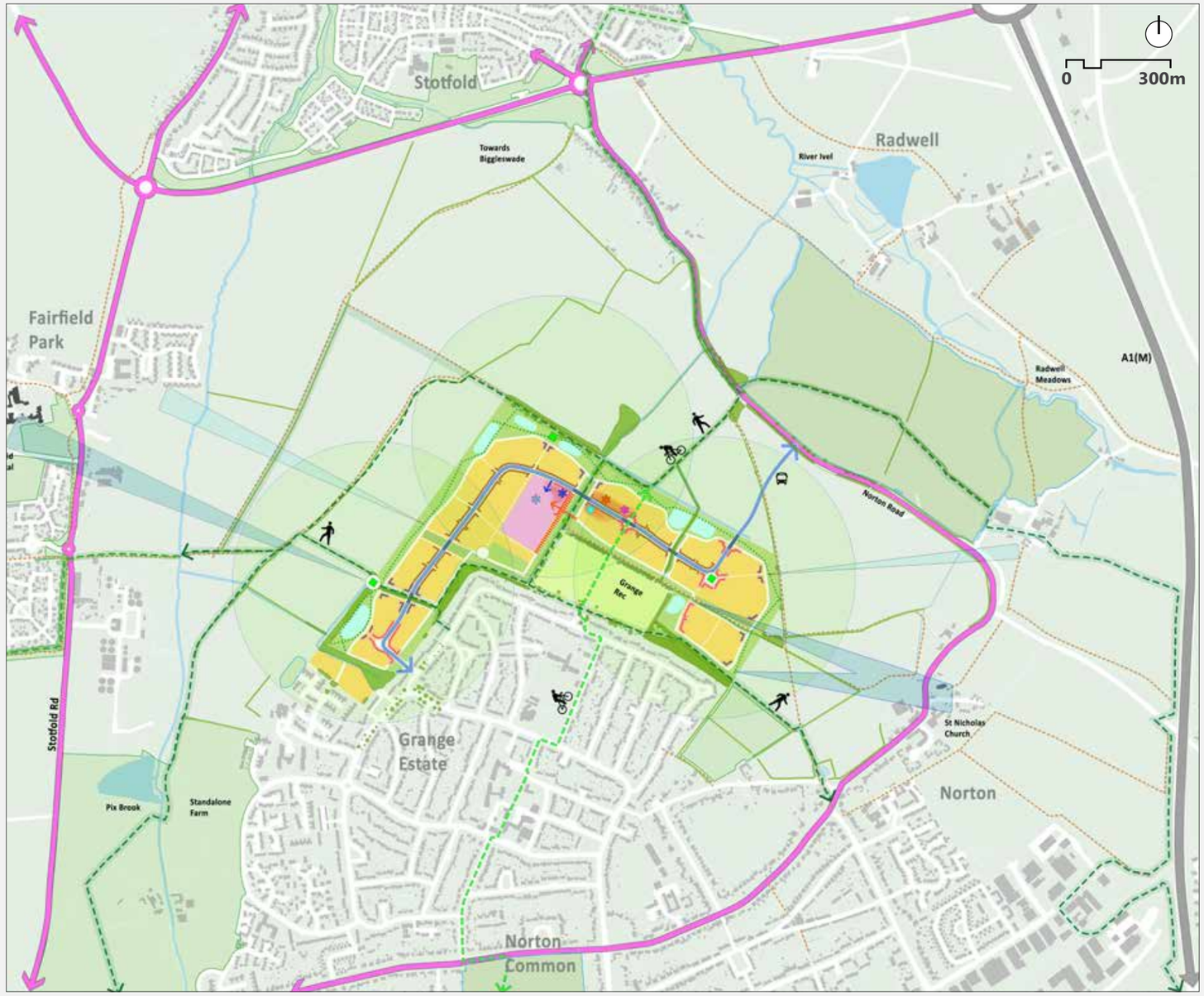


Fig. 3.5: Refer p.34 for further detail

- Neighbourhood centre uses are clustered within a central block which will be dependent on the school (rectangular site) being phased early in the development programme. Pedestrian access to the school requires a crossing over the primary street.
- Central axis through the Grange is constrained by the location of the school and is unable to provide a direct connection to the Greenway. The school location also conflicts with sensitive N-S drainage alignments.
- Green space provides frontage to neighbourhood centre and primary road generating a higher intensity of vehicular use adjacent to the northern boundary of the Grange Rec.
- Alignment of long distance Biggleswade axis provides formal urban form incorporating a formal green space.

Option 1: Design development and evaluation



Natural infrastructure		
N1	Establish peripheral green belt, align SUDs with land form	●
N2	Protect Cat A trees and strengthen hedgerows	●
N3	Create linear park along Greenway	●
N4	Strengthen landscape buffer adjacent to existing housing	●
N5	Provide LEAPs at key focal points	●
N6	Protect and enhance existing natural habitats	●
N7	Promote additional tree planting	●
Transport and movement infrastructure		
T1	Enhance connectivity with ProWs & key destinations	●
T2	Establish direct N-S link across the Grange Rec	●
T3	Main street to mitigate rat-running & support active travel	●
T4	Maximise land/cost efficiency of main street	●
T5	Create permeable, landscape-integrated street network	●
T6	Create street typologies to enable easy bus access	●
T7	Create mobility hub to facilitate sustainable travel	●
Landuse, urban structure and form		
U1	Provide 2.1ha, relatively flat, regular shaped school plot	●
U2	Create car-free zone interfacing school and green spaces	●
U3	Co-locate and relate local centre with school positively	●
U4	Maintain and frame key views	●
U5	Establish gateways & legible street/ open space hierarchy	●
U6	Create urban-rural character variation through built form	●
U7	Maximise active frontage & positive countryside interface	●
U8	Locate residential use to capitalise on green views	●

Fig. 3.3 Strategic Masterplan Option 1

Key

	Existing trees, hedgerows		Walking/ cycle route		Car-free school access		Childcare facility		Primary frontages	●	Criteria met
	Peripheral green belt		Garden City Greenway		Vehicular access to school		Retail		Secondary frontages	●	Criteria not met
	LEAPs		Etonbury Green Wheel		School		Community hub		Primary views	●	Criteria partially met and can be resolved through design
	Primary/ main street		Public Right of Way		Mobility hub		Frontage along main street		Secondary views		

Option 2: Design development and evaluation

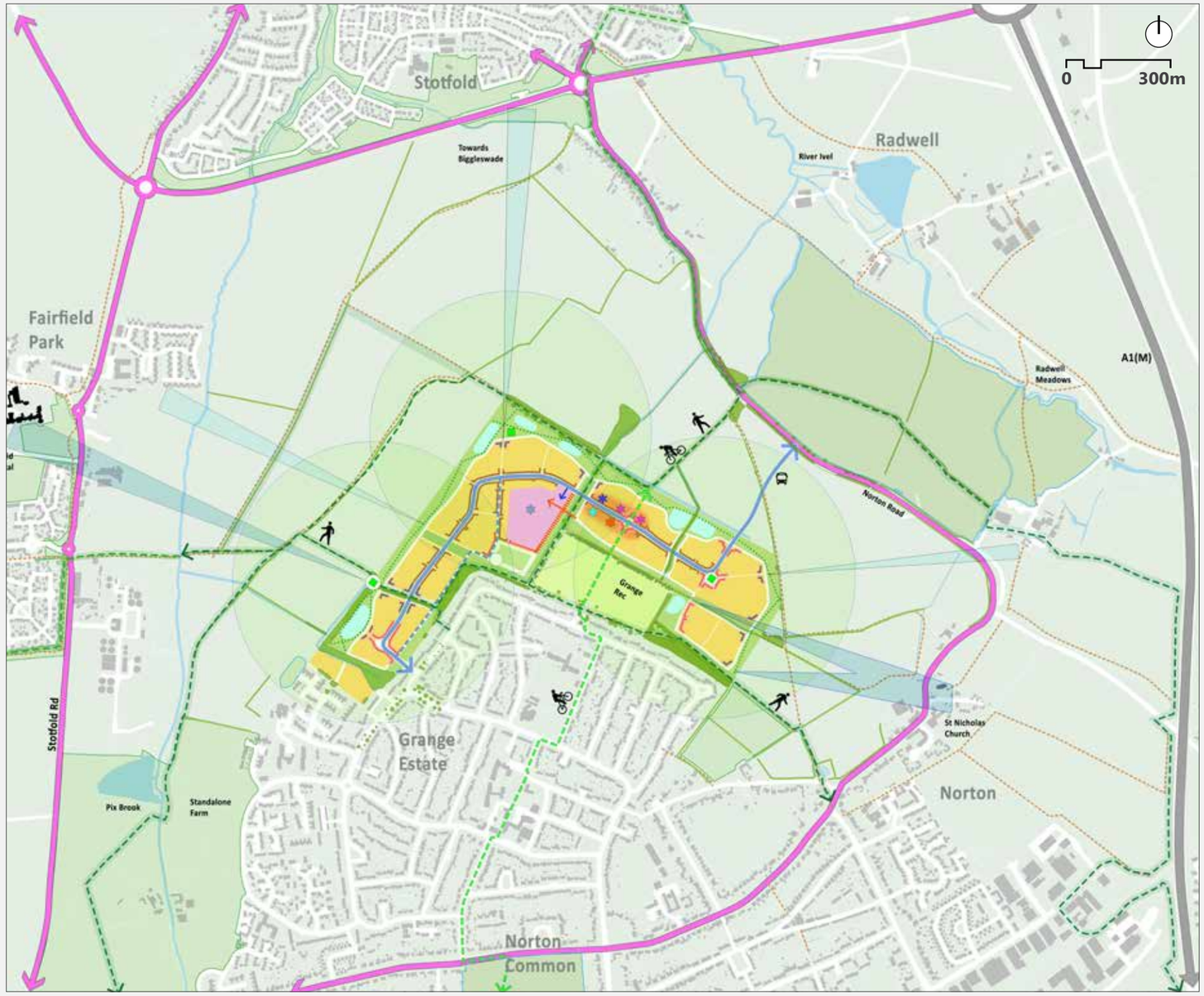


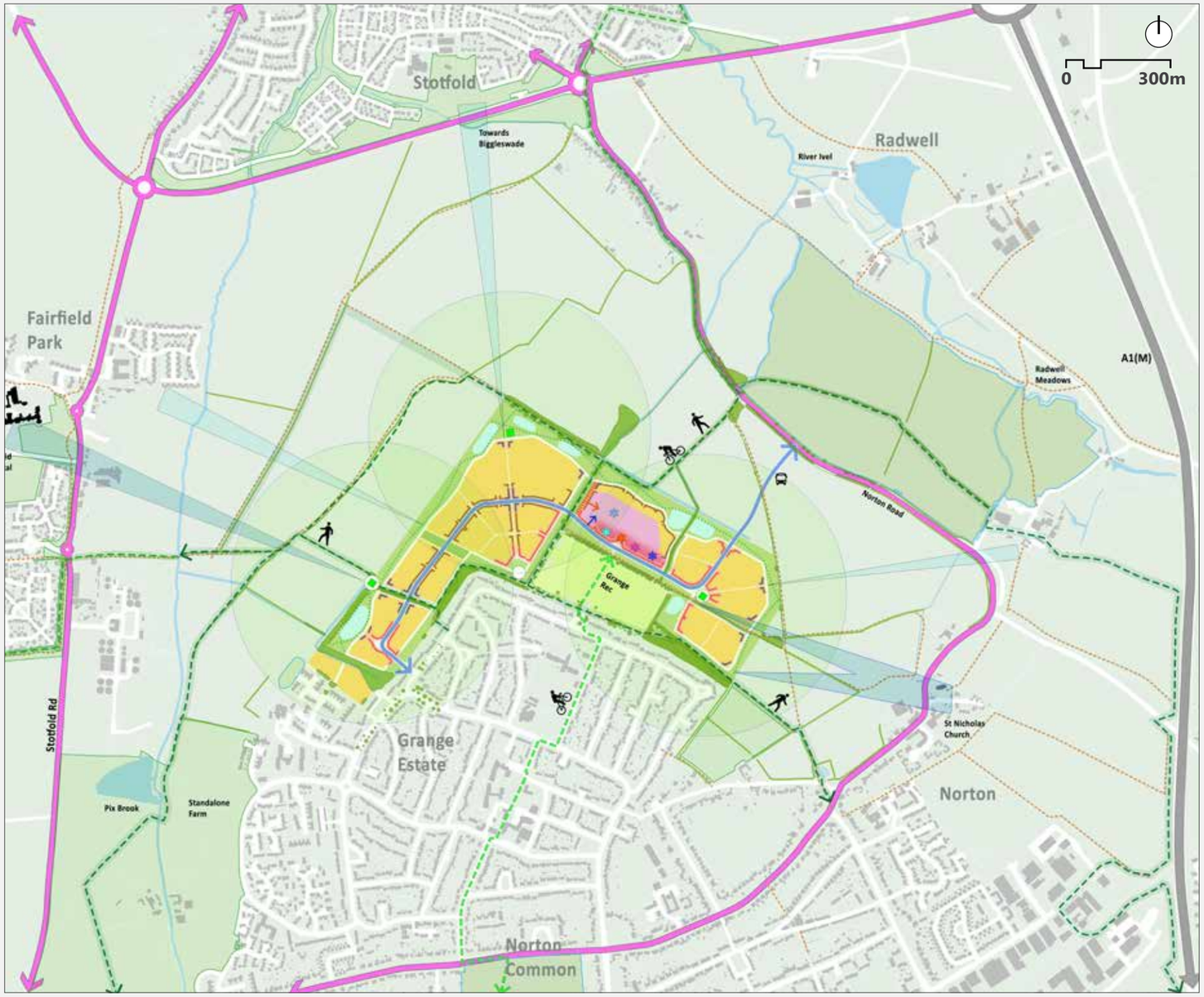
Fig. 3.4 Strategic Masterplan Option 2

Natural infrastructure	
N1	Establish peripheral green belt, align SUDs with land form
N2	Protect Cat A trees and strengthen hedgerows
N3	Create linear park along Greenway
N4	Strengthen landscape buffer adjacent to existing housing
N5	Provide LEAPs at key focal points
N6	Protect and enhance existing natural habitats
N7	Promote additional tree planting
Transport and movement infrastructure	
T1	Enhance connectivity with ProWs & key destinations
T2	Establish direct N-S link across the Grange Rec
T3	Main street to mitigate rat-running & support active travel
T4	Maximise land/cost efficiency of main street
T5	Create permeable, landscape-integrated street network
T6	Create street typologies to enable easy bus access
T7	Create mobility hub to facilitate sustainable travel
Landuse, urban structure and form	
U1	Provide 2.1ha, relatively flat, regular shaped school plot
U2	Create car-free zone interfacing school and green spaces
U3	Co-locate and relate local centre with school positively
U4	Maintain and frame key views
U5	Establish gateways & legible street/ open space hierarchy
U6	Create urban-rural character variation through built form
U7	Maximise active frontage & positive countryside interface
U8	Locate residential use to capitalise on green views

Key

	Existing trees, hedgerows		Walking/ cycle route		Car-free school access		Childcare facility		Primary frontages		Criteria met
	Peripheral green belt		Garden City Greenway		Vehicular access to school		Retail		Secondary frontages		Criteria not met
	LEAPs		Etonbury Green Wheel		School		Community hub		Primary views		Criteria partially met and can be resolved through design
	Primary/ main street		Public Right of Way		Mobility hub		Frontage along main street		Secondary views		

Option 3: Design development and evaluation



Natural infrastructure		
N1	Establish peripheral green belt, align SUDs with land form	🔴
N2	Protect Cat A trees and strengthen hedgerows	🟢
N3	Create linear park along Greenway	🟢
N4	Strengthen landscape buffer adjacent to existing housing	🟢
N5	Provide LEAPs at key focal points	🟢
N6	Protect and enhance existing natural habitats	🟢
N7	Promote additional tree planting	🟢
Transport and movement infrastructure		
T1	Enhance connectivity with ProWs & key destinations	🟢
T2	Establish direct N-S link across the Grange Rec	🔴
T3	Main street to mitigate rat-running & support active travel	🟢
T4	Maximise land/cost efficiency of main street	🔴
T5	Create permeable, landscape-integrated street network	🟢
T6	Create street typologies to enable easy bus access	🟢
T7	Create mobility hub to facilitate sustainable travel	🟢
Landuse, urban structure and form		
U1	Provide 2.1ha, relatively flat, regular shaped school plot	🟡
U2	Create car-free zone interfacing school and green spaces	🟢
U3	Co-locate and relate local centre with school positively	🟡
U4	Maintain and frame key views	🟢
U5	Establish gateways & legible street/ open space hierarchy	🟢
U6	Create urban-rural character variation through built form	🟢
U7	Maximise active frontage & positive countryside interface	🟢
U8	Locate residential use to capitalise on green views	🟢

Fig. 3.5 Strategic Masterplan Option 3

Key

	Existing trees, hedgerows		Walking/ cycle route		Car-free school access		Childcare facility		Primary frontages	🟢	Criteria met
	Peripheral green belt		Garden City Greenway		Vehicular access to school		Retail		Secondary frontages	🔴	Criteria not met
	LEAPs		Etonbury Green Wheel		School		Community hub		Primary views	🟡	Criteria partially met and can be resolved through design
	Primary/ main street		Public Right of Way		Mobility hub		Frontage along main street		Secondary views		

Community consultation feedback (October 2023 - November 2023)

3.13 The three masterplan options were consulted with the wider community from 17th October to 17th November 2023. The feedback received was systematically mapped (Fig. 3.6-3.11) aligned with the previously established three key themes of design (p.34): landscape and natural infrastructure, transport and movement infrastructure, land use and urban design. Key feedback and responses to the consultation are summarised below. Further detail is outlined in the SCI (April 2024/ Appendix C - p.90-93, p.171-173).

Landscape and natural infrastructure theme

3.14 A common theme in the feedback was the importance of including and maintaining open spaces on the site and nearby. A core value of the masterplan options is for there to be a landscape-led approach. This includes a landscape buffer around the site, enhancing the Greenway with 3 Local Equipped Play Areas (LEAPS) in the development and enhancements to a village green in options 2 and 3. These commitments, along with planting over 2,000 new trees on the site, are part of the approach that will enable the scheme to reflect Garden City Principles. Positive feedback was also received regarding improving the Greenway and additional countryside link along the Stotfold Parish boundary.

3.15 There was much support for more planting and landscaping to encourage more biodiversity and wildlife on LG1. All options contribute to c.40% of net amount of greenspace within LG1 boundaries including areas of wetlands, native grasslands and other habitats that contribute to BNG. The feasibility stage BNG assessment comfortably exceed the commitment of achieving a 10% net gain within LG1. See Section 5.0 for details.

3.16 There were concerns over flood risk and surface water management as well as SUDs features offering little amenity or ecological value. In response it was clarified that the proposals are informed by baseline technical re-

Fig, 3.6 (Top) LGCHF & the project team at the masterplan options exhibition on 15th November 2023 at Grange Academy, Sparhawke, SG6 4PY. Source: Kanda Consulting

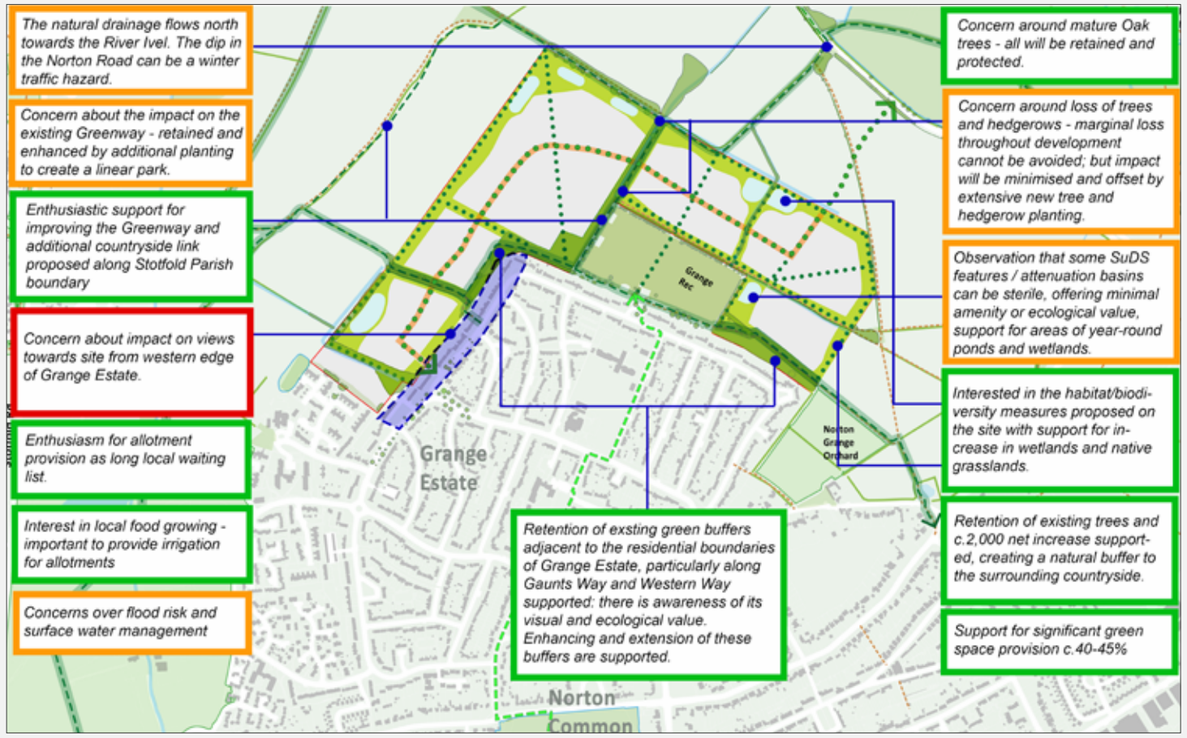


Fig. 3.7 Landscape theme: Consultation feedback on masterplan options. (Based on the consolidated feedback received from Kanda Consulting post consultation and discussions undertaken on the day with members of the community during events).

ports leading to a surface water strategy within the strategic masterplan framework that incorporates a series of attenuation basins. Dialogue with HCC has commenced, and further work will be undertaken. LGCHF will ensure that the correct drainage and flood risk assessments take place, and all surface water is properly managed as part of the proposals for the LG1 masterplan.

Transport and movement infrastructure theme

3.17 There were concerns about traffic both on LG1 and further into the Grange Estate and the knock on effect of additional cars on existing roads and environmental quality. This was often mentioned in conjunction with the access strategy and whether two points are enough. In response, the LGCHF team have worked closely with HCC to agree the access points from Norton Road and Western Way. Alternatives to car travel which will reduce the demand for car usage and benefit the whole town are also being explored. This has resulted in proposals for enhanced and improved walking and cycling routes through and around the site, with opportunities for improvements to Norton Common and into Letchworth town centre. This will also include consideration of promoting active travel as well as bus services, cycle storage and repair facilities and car clubs as part of a mobility hub.

3.18 Residents were supportive of new and enhanced active travel routes but were concerned that there would not be enough provision for cars and that would lead to overspill parking in the Grange. Balancing car dependency with provisions for active travel is difficult, but in response to these concerns, the potential for a low parking scheme was dropped and the masterplan options have been developed with these considerations in mind, and in accordance with NHC parking standards. This will enable car travel whilst providing enhanced opportunities for more sustainable modes of transport. The proposed mobility hub on the site will aid active travel and alternative travel methods as well as providing bus facilities. This was positively received when discussed at consultation events.

Fig, 3.8 (Top) LGCHF & the project team at the masterplan options exhibition on 15th November 2023 at Grange Academy, Sparhawke, SG6 4PY. Source: Kanda Consulting

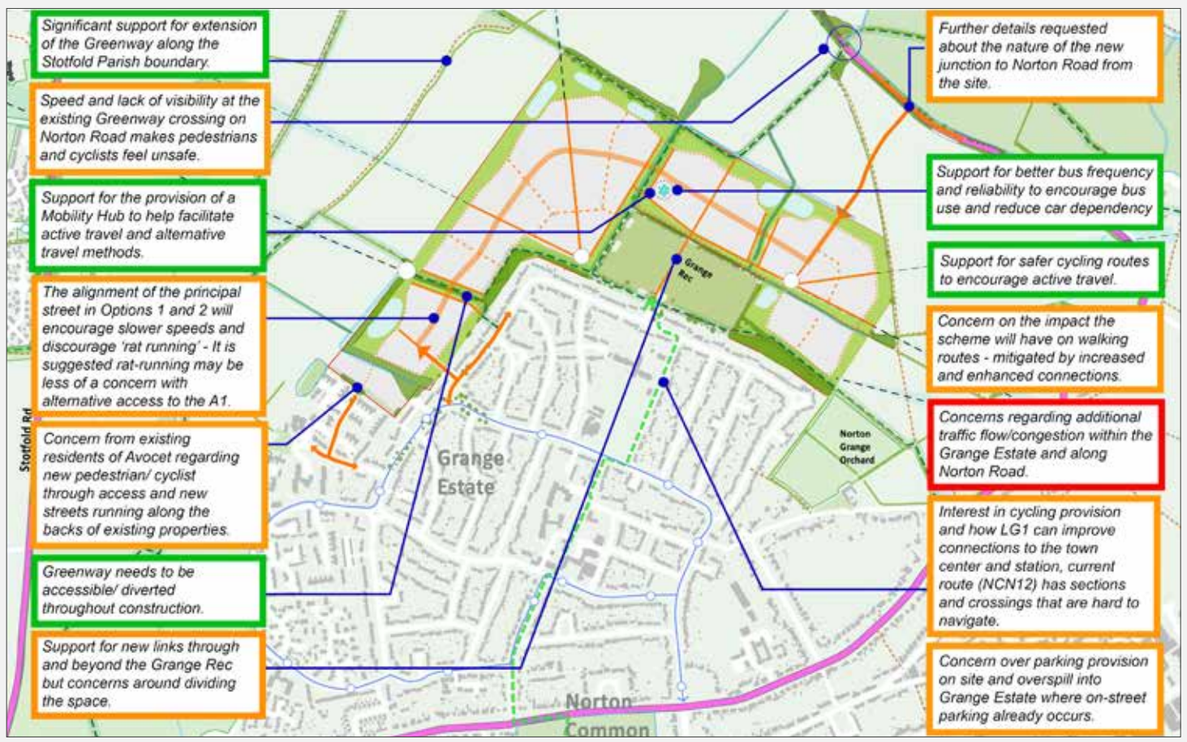


Fig. 3.9 Transport theme: Consultation feedback on masterplan options. (Based on the consolidated feedback received from Kanda Consulting post consultation and discussions undertaken on the day with members of the community during events).

3.19 We fully understand traffic concerns and that the above measures alone will not address all of the concerns raised. LGCHF will continue to work with NHC and HCC to agree a series of measures in line with their requirements, supported by the masterplan.

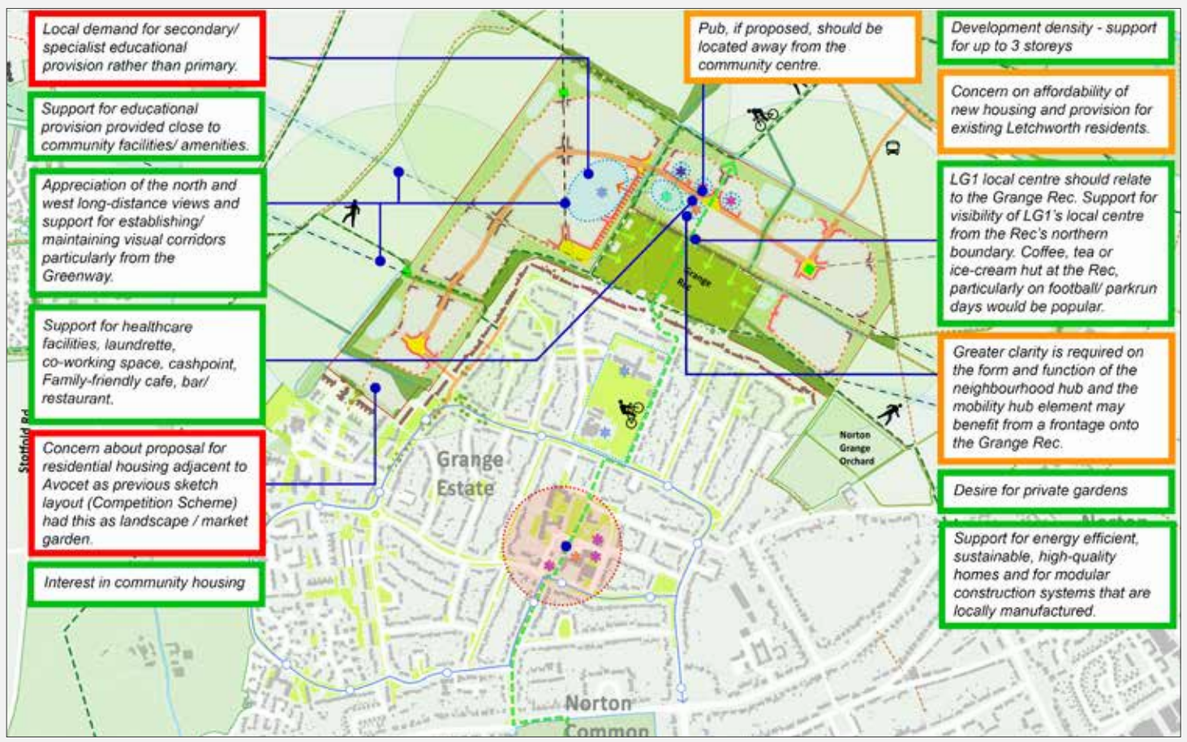
Land use and urban design theme

3.20 There was a lot of feedback on the supporting infrastructure, particularly on the primary school and the lack of GP surgery in the masterplan options. When the site was allocated in NHC's local plan, the policy includes the provision of a 2FE primary school. Therefore, the masterplan for LG1 includes a reserve site to meet this HCC requirement. The provision of a GP surgery is outside the jurisdiction of LGCHF, but such a facility would be supported if required by the local NHS providers and accommodated in the masterplan. LGCHF will work with the NHS and NHC to support the potential inclusion of flexible space as well as ensuring that there is appropriate community space, looking at the Grange as a whole, working with partners including NHC and settle.

3.21 Maintaining the key views from the site towards Biggleswade, Stotfold, Fairfield and St Nicholas Church is a priority for respondents and helped to inform their opinion on which option they preferred. The masterplan options have been designed to provide variety. However, all three contain the views towards Stotfold, St. Nicholas Church and towards the North-East. However, in option 1, the view towards the North-West to Biggleswade is not maintained due to the layout of the school and blocked by existing trees on the northern boundary of the site.

3.22 Residents were supportive of 40% affordable housing on the site but questioned what 'affordable' actually meant and whether the homes would genuinely be so. LGCHF are committed to providing 40% of affordable housing on the site, as is the policy of NHC, who will have nomination rights for these homes. LGCHF is also working with Eastern Community Homes to grasp opportunities for local self-build, co-operative and community land trust homes for local people to provide access to affordable housing opportunities for local people.

3.23 Cumulatively, based on consultation feedback, a mix of the best aspects of each of the three options, in particular Option 1 & 2, resulted in the consolidation of the preferred masterplan option. This was further reviewed at a Quality Review Panel in January 2024.



Fig, 3.10 (Top) LGCHF & the project team at the masterplan options exhibition on 4th November 2023 at the Three Horseshoes 102 Norton Rd, SG6 1AG.
Source: Kanda Consulting

Fig. 3.11 Land use theme: Consultation feedback on masterplan options.
(Based on the consolidated feedback received from Kanda Consulting post consultation and discussions undertaken on the day with members of the community during events).

Quality Review Panel 1 (January 2024)

3.24 Key QRP feedback with direct design implications on the strategic masterplan development are summarised below. The design actions were coordinated and agreed with NHC.

	DSE QRP comment	Design action taken
1.	Co-locate multi-functional non-residential units with attractive public space along the northern edge of the recreation ground to improve its setting and to encourage inter-community movement along the new pedestrian/ cycle link.	A south-facing public square is introduced along the Rec's northern boundary to improve its setting and supported by multi-functional non-residential uses to encourage community interaction and dwell (See, Fig. 3.12).
2.	In addition to co-locating the non-residential elements of the scheme with attractive public space, the design team should seek to strengthen the 'local centre' by ensuring that buildings such as the school (if delivered) and senior living accommodation are multi-purpose in providing additional public facilities.	The local centre uses are envisaged as multi-purpose and multi-functional spaces that can adapt to the evolving needs of the local community.
3.	Another concern on the preferred option is that the configuration of the primary street appears to limit opportunities for south-facing open space, resulting in a lack of attractive public space for social integration at the heart of the scheme.	A south-facing open space is introduced along the Rec's northern boundary to support social integration. This space is open to the east/west ensuring solar exposure all-day and partial shade from the treeline to the south.
4.	Structuring the scheme around the site's NI is a very positive starting point. Given that the site's main asset is its landscape offer - best experienced at the site's edges - we suggest that the design team explore layout options that create social function and activity along the site's 'inner' edges and focus the 'outer' edges on enjoyment of the surrounding landscape and views.	The proposed strategic masterplan creates social function and activity with the local centre uses along the site's 'inner' edges along main avenue/ streets and focus the 'outer' green/ landscaped edges on enjoyment of the surrounding landscape, recreational uses, dwell spaces in nature-rich environments and framed views at strategic locations (See, Fig. 8.6).

	DSE QRP comment	Design action taken
5.	The existing condition of houses backing onto the Rec does not create a positive frontage to open space. However, the green buffers proposed to the remaining three edges of the Rec could create a similar sense of separation to the new development. To avoid this, the team must carefully consider the design of these green edges to appear as an extension to the Rec, which could in turn allow this space to read as a village green at the heart of the two communities.	The proposed green buffers surrounding the Grange Recreation Ground are envisaged as 'seams that integrate' and not 'barriers that isolate'. This is ensured by having a variety of activity spaces that function as an extension of the Recreation Ground.
6.	Given that viable retail use for a development of this size is likely to comprise only one or two units, reference to a 'local centre' could be misleading; however, this should still form an attractive and important part of the scheme. Given the uncertainty regarding the quantum and nature of the non-residential elements, it could be helpful to start with the design of an attractive public space which would activate the edge of the Rec and allow flexibility for the scheme to develop around it as more certainty about uses is given.	The proposed non-residential uses and senior living stem from the new south-facing open space along the northern boundary of the Rec, activating it and wraps around the main avenue/ primary road (See, Fig. 3.12).
7.	Consider a more 'Letchworth' character to the main vehicular road and prioritise taller buildings and continuous frontage to the recreation ground.	Taller buildings and continuous frontage have been prioritised along the recreation ground, in particular along its northern edge (See, Section 8 & 9).

	DSE QRP comment	Design action taken
8.	In designing a main vehicular route with low traffic speeds and a character that complements the proposal, the option of running the main vehicular route along the northern edge of the recreation ground could be re-considered. The design team should explore precedents of similar configurations and test how this could potentially create a more welcoming edge to the Rec.	It was discussed and agreed with NHC that having the main vehicular road running alongside the Rec might result in an more urban character along this green space with ecological sensitivities. It would also not support access to the new south-facing open space without crossing the primary road. Hence, was not pursued further.
9.	We support the intention for modal shift towards more sustainable transport options and welcome the work that has been done so far to explore regular bus access to the new development and flexible car parking strategies that respond to demand. We strongly encourage the client to commit to the delivery of these aspirations by embedding them into their masterplan framework. Providing residents with free membership of an on-site car club could also help as a step-change towards this.	This has been embedded into the Masterplan Framework Report (See, Section 6.0 & 12.0) and will be further considered and developed in collaboration with NHC, HCC and the appointed development partner in the next design stages.
10.	We find it unlikely that the primary street will be used as a 'rat-run' to the A1; however, its intended purpose should be reinforced through its design. We recommend that the transport planner works around a street width set by the architects/urban designers, and that a separate cycle route is provided to limit the width of the vehicular road.	The street widths are developed in coordination with the wider project team (See, Section 6.0) and embrace a landscape-integrated approach. A separate cycle route (i.e. primary active travel routes) are proposed along key desire lines (See, Fig. 6.3)
11.	It is commendable that the scheme addresses the existing pRoWs; however, the importance of the Greenway and the NCN12 appears overstated.	It is agreed with NHC that the Greenway and NCN12 are important travel routes for daily commute to the town centre and station, and not just for recreational uses.

	DSE QRP comment	Design action taken
12.	The design team have identified some attractive views from the site and have indicated from where in the development these can be enjoyed. The design team should conduct a study of the extent, angles, and any flexibility of these views and formalise them in the masterplan to ensure their eventual delivery.	A study of the extent, angles and flexibility of these views have been conducted aligned with the baseline Landscape Character and Sensitivity Study. The views are formalised into the proposed strategic masterplan to support eventual delivery (See, Fig. 3.12).
13.	It would be positive if the view towards Fairfield Hospital could be drawn in further so that it could be enjoyed from within the development, rather than only from the edge of the site.	View towards Fairfield Hospital are drawn in further so that it could be enjoyed from within the development, rather than only from the edge of the site.
14.	The Locally Equipped Area for Play (LEAP) proposed in the east of the site could be moved further south for better integration with the recreation ground and greater proximity to the Grange Estate, to encourage use by the established community here.	The Locally Equipped Area for Play (LEAP) proposed in the east of the site has been moved further south adjacent to the attenuation basin along the Rec's eastern edge for better integration and greater proximity to the Grange Estate (See, Fig. 3.12).
15.	The development should establish the Rec as the geographical and functional heart of the two communities. This fundamental shift in purpose should be supported by a design that makes the Rec a welcoming space for all.	The development establishes the Rec as a central green space for both the existing and new communities. This is reflected in Landscape framework (See, Section 4, para 4.7) and Charater Area 1 (See, Section 9).
16.	The aspiration for the final scheme should be for each block or group of homes to offer something special that collectively contributes to a modern interpretation of the Garden City. More detailed testing of the development blocks is required to ensure that such aspirations are deliverable.	Testing of the development blocks resulting in illustrative configurations have been undertaken (See, Section 9) to ensure that development contributes to a modern interpretation of the Garden City.

	DSE QRP comment	Design action taken
17.	Generally, the proposed character zones appear promising; however, in order to refine these further, the design team should consider how the residents of each house will experience the site and whether they would identify as living in an urban, suburban, or countryside part of the development. More consideration is also needed for how aesthetic character will vary within these broader areas – for example, how dwellings along the northern edge of the site should differ from those along the western edge, despite both having height, density, and typology consistent with the 'countryside living' character area.	Character Areas have been further refined and local sensitivities and proximities that will inform aesthetic character variation is highlighted for further consideration in the next stages of the project. See, Section 9 for further details.
18.	The 'local centre' does not evoke the sense of somewhere in Letchworth, where main streets are defined more by their green verges and trees than by the height and continuity of their frontage. Locating taller buildings fronting the Rec would create a more locally appropriate character along the main street and would allow building heights to step up with the natural topography, ameliorating views into the site.	Design development of the main street takes a landscape-integrated approach inspired by streetscapes of Letchworth. It is envisaged as a tree-lined avenue aligned with provision of adequate space for walking, cycling, cars, parking and other utilities. See, Section 6 for details. This approach will be further developed in the next stages of design development. Taller buildings are proposed to front to the Rec with building heights gradually stepping down towards the countryside (See, Section 9).
19.	The character of the main vehicular road will contribute significantly to the development, so its material treatment should be carefully considered. Kerb height would be minimised to create a sense of the road gently edging out into the landscape. To ensure a softer impact, the route should work with the existing topography and provision for pedestrians should be provided separately.	

	DSE QRP comment	Design action taken
20.	If the OA is submitted in partnership with a master developer, with reserved matters schemes subsequently delivered by housebuilders, there is the potential for issues to arise in terms of the flexibility of the outline proposal. LGCHF should ensure that they are able to maintain sufficient control, should this path be taken. The use of a design code may be worth exploring to ensure that the overall vision is delivered, along with looking at locations that have successfully delivered using similar models e.g. Newhall, Harlow.	A design code will be developed as part of the OA. It will be a joint document between LGCHF and the appointed development partner, setting out the detailed design requirements and approach across the LG1 development. It will be used to consider future planning applications and detailed design proposals. (See, p.7 and Section 12.0 for further details).

3.25 The key design actions stemming from the QRP for the strategic masterplan stage, as summarised above, has informed the production of the final proposed strategic masterplan (Fig. 3.13, see overleaf) and other illustrative material included in this report.

3.26 Further feedback received in the QRP that pertains to either subsequent design stages such as development of design code, further development of the sustainability strategy and/or elements that are outside of LGCHF's direct control (e.g. reviewing need for a school within LG1 and the design development of the Rec) have been duly noted for discussion with relevant stakeholders.

Proposed strategic masterplan

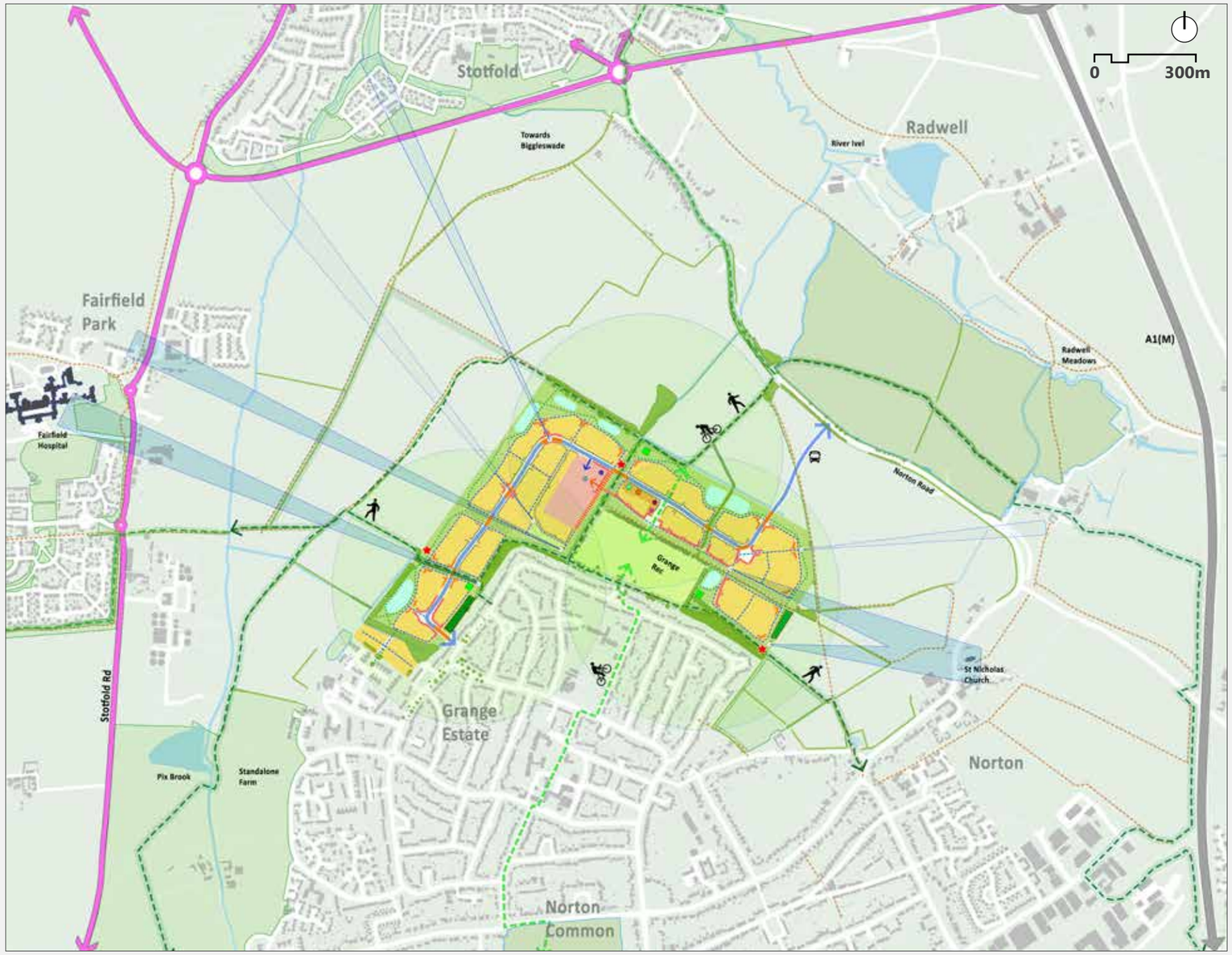


Fig. 3.12 Proposed strategic masterplan framework

Key

	Existing trees, hedgerows		Walking/ cycle route		Car-free school access		Childcare facility		Frontage along main street		Primary views
	Peripheral green belt		Garden City Greenway		Vehicular access to school		Retail		Primary frontages		Secondary views
	LEAPs		Etonbury Green Wheel		School		Community hub		Secondary frontages		Community allotment
	Primary/ main street		Public Right of Way		Mobility hub		Senior living		Traffic calming		Pop-up event/activity hot spot

Design development

3.27 The strategic masterplan embraces a landscape led-approach to design development reflecting best practice and the desire for a high quality development that reflects Garden City design principles and values.

3.28 Aligned with the PPA requirements, the proposed strategic masterplan framework is explained in further detail in the following chapters supported by framework plans, illustrations and precedent images.

3.29 In addition to the extensive community consultation that underpins this project as detailed in the SCI, we have also worked in close collaboration with NHC, Hyas and Hertfordshire County Council (HCC) to develop the strategic masterplan framework. This was undertaken through regular meetings and wider Project Working Group workshops at key stages of the project aligned with the PPA process. Two milestone Project Working Group (PWG) workshops were also undertaken in September and December 2023, respectively, to discuss the masterplan options and direction of travel for the preferred option with NHC, Hyas and HCC.

3.30 This was further supported by an internal peer review with Allies and Morrison in November 2023 and a formal QRP in January 2024 as summarised on p.42-44.

4

Landscape and green infrastructure framework

4. Landscape and green infrastructure framework

Landscape and green infrastructure context

Introduction

4.1 The existing landscape structure and green infrastructure framework of the LG1 site is predominantly agricultural in character with a mosaic of arable fields bounded by native hedgerows, several distinctive mature oak trees, small areas of native scrub, woodland and linear shelterbelts. The wider catchment of the site encompasses a variety of urban, suburban and rural qualities. This includes the Grange Recreation Ground, a prominent and popular open space that provides several football pitches and children's play facilities which will in time be bounded on three sides by the residential development.

4.2 The site is served by an extensive network of footpaths, including the Garden City Greenway and a national cycle route (NCN12). There is a community orchard to the east, modest river corridor of the Pix Brook to the west and the more prominent River Ivel to the north, with small areas of wetland, established areas of woodland and a small number of local wildlife sites and nature reserves. The site sits in an elevated position offering long-distance views to the north and west across a prominent pattern of settlements, new areas of housing, rolling countryside and a distinctive windfarm, located close to Biggleswade in the north.

Landscape baseline studies

4.3 Two detailed landscape studies have been prepared to provide a technical assessment of the site and inform the development of the Strategic Masterplan Framework.

4.4 A Landscape Character and Sensitivity Study (February 2024/ Appendix D) provides a description of the green infrastructure context of the site and surroundings. This includes an analysis of the historic field pattern, identifying important hedgerows that are predominately located on the northern and southern boundaries of the site. A preliminary visual assessment highlights the importance of views west to the historic spires of Fairfield Hall and east to the tower of St Nicholas Church. The most sensitive views towards the site are from Stotfold, the Norton Road, the A407 and along adjacent footpaths. An assessment of Landscape and Visual Sensitivities of the site identifies that the north of the site has the greatest sensitivity (assessed as medium sensitivity) taking account of topography, visual prominence from the north and west, limited screening and proximity to the settlements of Fairfield Park and Norton Village.

4.5 A Green Infrastructure Audit (July 2023/ Appendix E) provides an assessment of the existing provision of green infrastructure and public open space. It follows NHC planning standards that are based on Fields in Trust Guidelines for Outdoor Sport and Play in England (FIT/2020). 91 sites were surveyed within the agreed catchment of the study that total approximately 168 Ha of public open space. From this total, 70 sites (135 Ha) are within North Herts and 21 sites (33 Ha) are within Central Beds. The audit included a preliminary assessment of quality, in total 16 sites were recorded as being of high quality, 67 sites as medium quality and 8 sites as low quality. The Green Infrastructure Audit provides an initial benchmark for establishing the open space provision for LG1 based on FIT standards and these have been used to structure the network of open spaces within the strategic masterplan framework.

Existing landscape structure

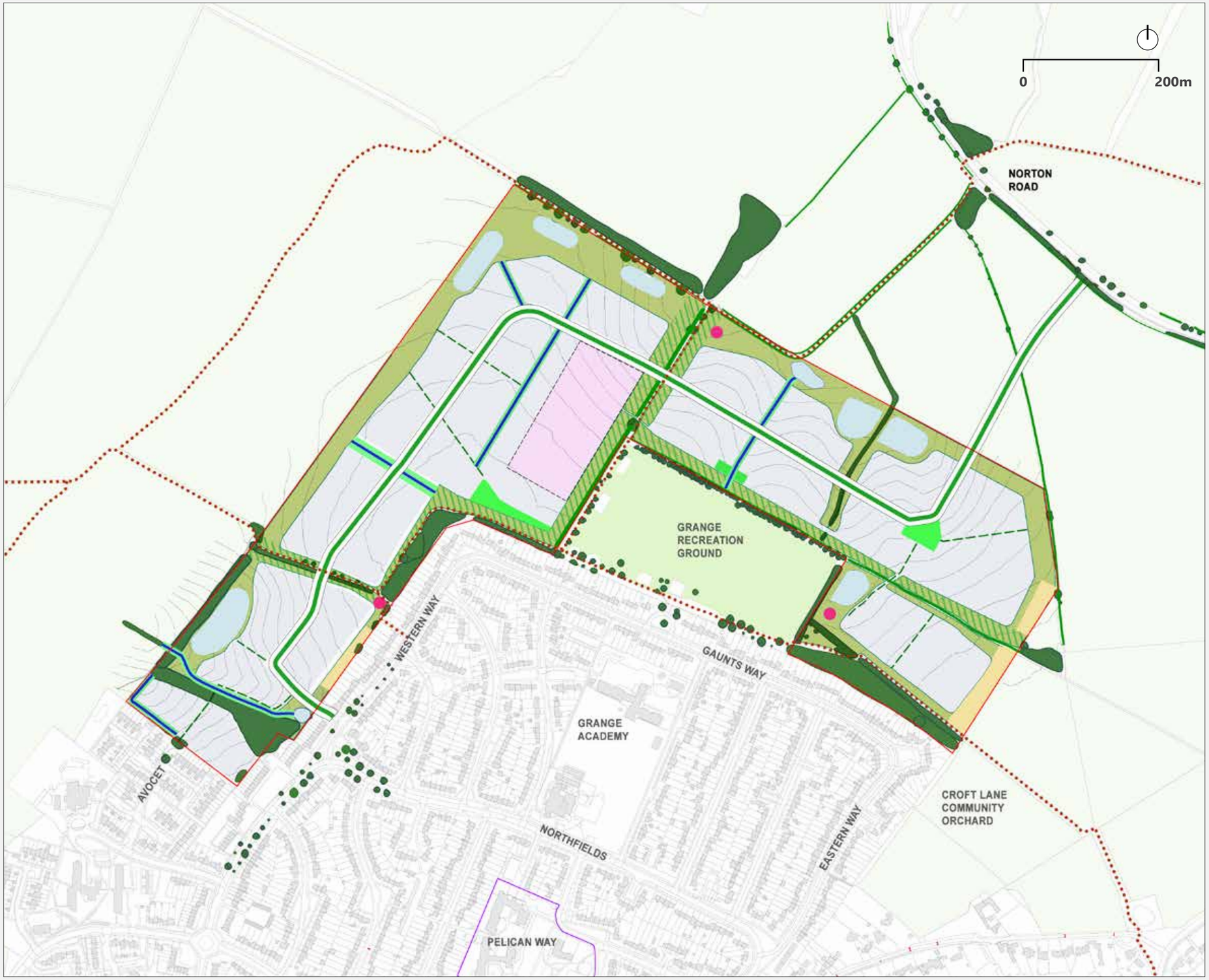
4.6 The main landscape features of LG1 are defined by a synthesis of factors including land form, hydrology, ecology and agricultural production. The field pattern is formed by mature, well managed hedgerows and dense shelterbelts driving much of the site's current identity. The topography and field pattern contribute to the character and environmental form of the site, framing and restricting both near and long-distance views. The Garden City Greenway provides the main structure for the footpath network crossing the west, central and eastern sections of the site. This is supplemented by additional footpaths that connect to the surrounding settlements of Fairfield Park, Stotfold and Norton Village and link to the adjacent Etonbury Green Wheel. Mature hedgerows generally run along each path providing a partial sense of enclosure, serving as ecological corridors and providing seasonal and wildlife interest. Some paths are registered Public Rights of Way whilst others are more informal in nature and have become established along field margins.

Proposed green infrastructure framework

Overview

4.7 The Strategic Green Infrastructure Framework (see Fig. 4.1) demonstrates how the site provides a pivot between garden, or countryside, and city. It provides a direct connection between Letchworth and the Grange Estate, surrounding agricultural fields and the adjacent settlements of Fairfield Park, Stotfold, Radwell and Norton Village. The framework protects and enhances the existing natural capital of the site including hedgerows, shelterbelts, woodlands and mature trees. It provides additional open spaces for recreation and amenity

Fig. 4.1: Proposed landscape and green infrastructure framework plan



Key

	Site boundary
	Existing trees, hedges and vegetation
	Attenuation basin (SuDS)
	Linear park
	Streets with swales (SuDS)
	Peripheral green buffer
	Tree-lined avenue
	Amenity public space
	School building and play ground
	Local Equipment Area for Play (LEAP)
	Allotments
	Greenway
	Pedestrian friendly secondary streets

Note: The proposed framework plan takes account of the preliminary assessment of the Surface Water Flooding Constraints and Flood Risk Assessment and Drainage Strategy (January 2023/ Appendix L). This is further being reviewed by Stantec (January 2024 onwards) in response to initial discussions with the County Council (response letter December 2023). More detailed assessment and design coordination for Flood Risk and Surface Water Management will be required at subsequent design stages.

including a new linear park, allotments and play areas. Green spaces surrounding the Rec will complement and extend this central green space, improving connectivity with LG1. The landscape framework also incorporates additional native habitat to improve ecological connectivity and deliver a biodiversity net gain. Planting should promote climate-resilience. The entire development is framed by a multi-functional nature-rich green buffer to structure and screen long-distance views, incorporating wetlands, ponds and attenuation basins, and providing additional footpaths and play areas

Public open space provision

Fields in Trust Open Space Guidelines

4.8 NHC planning policy follows the Fields in Trust Open Space Guidelines and Standards for public open space provision for residential development, and is measured by hectares per 1,000 head of population (HOP). NHC uses a benchmark of 2.4 people per house (NHC LGC Open Space Settlement Profile, Nov 2022) which provides a projected population of 2,160 new residents for the site (900 homes x 2.4 people). The FIT Quantity Guidelines are therefore multiplied by 2.16 to establish the baseline level of provision for different types of open space and this is illustrated in the table alongside (Fig. 4.2). The spatial distribution of these Open Space typologies are shown on the land use framework (Fig 7.1). Taking account of the immediate proximity of sports pitches on the Grange Recreation Ground the table of open space provision does not include playing pitches for outdoor sport.

Public parks and gardens

4.9 Public Parks and Gardens in LG1 will provide places for people to meet and socialise and support a variety of informal recreation activities. They will make an important contribution to the quality of life and will be designed to promote more active and healthy lifestyles. Within the Masterplan Framework the main public park provision will be the creation of a new linear park along the route of the Greenway that will serve to connect

	Table of FIT Public Open Space Standards and Actual Provision for LG1				
		Quantity Guideline (Hectares per 1,000 HOP)[1]	**Walking Guideline (Metres from dwelling)[1]**	**FIT Standard of Open Space Provision for LG1 (x 2.16)[2]**	**Actual provision in the Strategic Masterplan Framework**
1.0	Public Parks and Gardens	0.80 Ha	710m	1.73 Ha	3.269 Ha
2.0	Amenity Green Space	0.60 Ha	480m	1.30 Ha	3.131 Ha
3.0	Natural and Semi-Natural	1.80 Ha	720m	3.89 Ha	8.373 Ha
4.0	Allotments[3]	0.30 Ha	800m	0.65 Ha	0.656 Ha
5.0	Equipped Play Areas	0.25 Ha	As below	0.54 Ha	0.54 Ha
5.1	Local Area for Play (LAP)		100m		
5.2	Locally Equipped Area for Play (LEAP)		400m		
5.3	Neighbourhood Equipped Area Play (NEAP)		1,000m	Provided in Grange Recreation Ground	
6.0	Other Outdoor Provision[4]	0.30 Ha	700m	0.65 Ha	0.65 Ha
	Total public open space	**4.05 Ha**		**8.76 Ha**	**16.619 Ha**
1	Guidance for Outdoor Sport and Play / Fields in Trust Guidelines (October 2015)				
2	Assumes 1 House has 2.4 people / NHC LGC Open Space Settlement Profile, Nov 2022				
3	Fields in Trust recommends 0.30 Ha per 1,000 HOP for Allotments but does not set an access standard - 800m walking distance is proposed / NHC Open Space Settlement Profile, Nov 2022				
4	Other Outdoor Provision relates to play areas and is for MUGAs and skateboard parks				

Fig. 4.2 Table of FIT Public Open Space Standards and Actual Provision for LG1
(Note: Including LG1's primary street, the total proposed open space % is approx. 43%; excluding the primary street it is approx. 37%)

individual neighbourhoods with the central hub and proposed school. This is seen as a central part of the placemaking strategy, both continuing and evolving the green space traditions of Letchworth and will help to fulfil the sustainable design objectives of LG1. 1.73 Ha will be required to meet the Local Plan (FIT) standard of provision - the Strategic Masterplan Framework provides 3.269 Ha of Public Parks and Gardens.

Amenity green space

4.10 The provision of Amenity Green Spaces within the existing Grange Estate are generally uniform and of average quality but offer little recreational or environmental benefit. Such green spaces in LG1 will be located and used to strengthen key gateways, boundaries and pedestrian routes. They will increase biodiversity by including meadow grassland, pollinator rich perennial planting and generous planting of native and fruiting trees. These spaces should also contribute to surface water management and sustainable drainage networks by using raingardens, swales and attenuation basins. 1.30 Ha will be required to meet the Local Plan (FIT) standard of provision - the Strategic Masterplan Framework provides 3.131 Ha of Amenity Green Space.

Natural and semi-natural green space

4.11 This is the largest type of public open space by area within the masterplan framework, providing a substantial green buffer or frame around the outer boundaries of the site. This will make a strong contribution to both the landscape character and biodiversity net gain of the site, incorporating existing hedgerows and wooded shelterbelts along with the native scrub boundaries that already provide mature natural buffers to areas of housing within the Grange Estate. This will also improve ecological connectivity between existing natural and semi-natural green spaces and establish new wildlife corridors and the design will provide native habitat for priority plant and animal species. 3.89 Ha will be required to meet the Local Plan (FIT) standard of provision - the SMF provides 8.373 Ha of Natural and Semi-natural Green Space.

Children's play areas

4.12 FIT standards of provision for Children's Play include LAPs, LEAPs and NEAPs along with other play provision that includes Multi-Use Games Areas (MUGA), ball courts and skateparks. The principal objectives for play will be to ensure there is an even distribution of accessible play across the masterplan framework to appeal to boys and girls across the age groups and meeting defined access standards and that these facilities can be shared by both existing residents of the Grange Estate and the new neighbourhoods within LG1. The focus will be on providing three LEAPs within LG1 and a NEAP within the Grange Recreation Ground to significantly upgrade the existing play facilities. A limited number of smaller LAPs will be located within individual residential blocks to provide play equipment for toddlers close to home. Up to 1.19 Ha will be required to meet the Local Plan (FIT) standard of provision - the Strategic Masterplan Framework provides 0.54 Ha for both Children's Play areas and other play spaces.

Allotments

4.13 Allotments and other provision for community food growing will be incorporated within the open space network of LG1 following an assessment of the demand for such provision from both existing and new residents. Two allotment sites are provided within the Masterplan Framework; one to the west providing a boundary with the existing housing of the Grange Estate along Western Way; and one to the east complementing the Croft Lane Community Orchard and strengthening the green boundary or buffer adjacent to the Norton Village Conservation Area. 0.65 Ha will be required to meet the Local Plan (FIT) standard of provision - the Strategic Masterplan Framework provides 0.65 Ha of Allotments.

Playing pitches and outdoor sports

4.14 Outdoor Sports provision including sports pitches for active recreation are already provided on the Rec, including five natural turf football pitches and a changing pavilion. Rather than creating additional sports pitches it is proposed that, subject to agreement on the planning contributions from LG1, funding will be used to enhance the quality of existing provision within the Rec. In addition and again subject to agreement, contributions towards indoor sports provision will be used to improve existing sports facilities across Letchworth.

The Greenway and footpath network

4.15 Maintaining and enhancing the existing footpath network is a key objective of the masterplan to promote walking and cycling, support leisure activities and encourage active travel. The route of the Greenway will be improved with better surfacing and additional facilities including benches, picnic tables and natural play. A new loop will be added to the north-west of LG1 to provide walkers with an option to walk around rather than through LG1 in the future, thereby maintaining the rural character of this pedestrian route. This network of paths provides direct access to the Grange Estate and onward towards the centre of Letchworth as well as rural recreational routes to surrounding settlements, Radwell Meadows and the Etonbury Green Wheel. Detailed proposals for the entire pedestrian & cycle network are provided in section 6.0 - Movement Framework.

Strategic drainage network

4.16 The surface water SuDS drainage network will be integrated within the landscape and green infrastructure framework to reflect its multi-functional role in placemaking. The principal components will be a series of swales aligned with the street network and a set of attenuation basins that are principally located within the outer boundary and green buffer of the site and particularly along the western and northern edges. This drainage network will supplement the existing pattern of ditches within the site that run alongside hedgerows and drain west toward the Pix Brook and north towards the River Ivel. The wider SuDS system will be gravity-fed, where possible, and include additional drainage features including wetlands and ponds, rain gardens, filtration strips, filtration drains and permeable paving.

Landscape and green infrastructure - Precedents

Fig. 4.3: Derwenthorpe, York. Enclosed courtyard planting within a residential neighbourhood. Source: Peter Neal

Fig. 4.4: Bicester Eco Town, Oxfordshire: Raised bed allotment plots available to residents to rent annually. Source: Peter Neal

Fig. 4.5: Alconbury Weald, Cambridgeshire: Housing located close to a SuDS attenuation basin and wetland. Source: Peter Neal

Fig. 4.6: Alconbury Weald, Cambridgeshire: Children's play area located within a green space close to housing. Source: Peter Neal

Fig. 4.7: Upton, Northampton. SuDS Swale with native bullrush planting integrated within the street network. Source: Peter Neal

Fig. 4.8: Alconbury Weald, Cambridgeshire: Linear park with strong landscape framework and integrated areas for play. Source: Peter Neal

5

Habitat and biodiversity framework

5. Habitat and biodiversity framework

Habitat and biodiversity context

Introduction

5.1 The LG1 site is largely composed of arable fields with some poor semi-improved grassland field boundaries with boundary hedgerows, some of which are also associated with ditches and scattered trees. Small areas of scrub, plantation broad-leaved woodland, bare ground and introduced shrub are also present within the site. There are several public rights of way across and through the site while most of the field boundaries have permissible path networks. Notable habitats within and adjacent to the site include deciduous broad-leaved woodland (S41) and good quality semi-improved grasslands. These are local priority habitats and Habitats of Principal Importance (HPI) but not subject to direct impacts from the development. Small areas of traditional orchard (S41) are found adjacent to and 360m south of the site. Other habitats including semi-natural broad-leaved woodland, lines of trees, plantation broad-leaved woodland and scattered broad-leaved trees.

5.2 Three statutory wildlife sites of local significance have been found within 2km of the site (Norton Common, Stotfold Mill Meadows and Ivel Springs, local nature reserves). There are 15 non-statutory locally designated sites within 2km of the site. Of those, Norton Pond, Radwell Meadows, Radwell Lake and River Ivel at Nortonbury may be the subject of indirect impacts. None of the 15 non-statutory locally designated sites are expected to be directly impacted by the development.

Biodiversity baseline studies

5.3 A set of baseline ecology studies have been prepared by TEP for the site including an Ecological Desk Study (August 2023), a Preliminary Ecological Assessment (December 2023), a Hedgerow Assessment (December 2023) and a Feasibility Stage Biodiversity Net Gain (BNG) Report (December 2023). These are supported by a series of species surveys including a Badger Survey (August 2023), Reptile Survey (October 2023), Amphibian Survey (August 2023), Water Vole and Otter Survey (December 2023), Dormouse Survey (October 2023), Bat Survey (October 2023), Breeding Bird Survey (December 2023), and Winter Bird Survey Report (September 2023).

5.4 Great Crested Newt (GCN) has been located within Norton Pond 350m to the southeast of LG1, however Natural England mitigation licence will not be required as the pond is unlikely to be impacted by the proposals.

5.5 No badger sett(s) were identified but evidence of badger activity was identified on site, as badger scat present in April 2023. Prior to works commencing a further walkover badger survey will be required to ascertain current status of badgers in vicinity of the works.

5.6 No reptiles found during main survey. Survey on land to the north of Norton Road found two slowworms and a single grass snake. This is a major road and considered to present a significant barrier to reptile movement.

5.7 No evidence of water vole was recorded within the surveyed area of Pix Brook and the survey identified that the Brook provides low suitability for water vole. Three otter spraints were recorded on the first survey visit, approximately 450m southwest of the site. No evidence of potential holts was recorded during the surveys. The desk study returned no records of dormice within 2km of the site and no evidence of dormouse was found during the nest tube surveys. Commuting and foraging bat species recorded on site include the Common pipistrelle, the Soprano pipistrelle and the Brown long-eared bat. Rarer species include Leisler's bat, the Nathusius' pipistrelle and the Barbastelle. The Bat Survey report (TEP/Oct 2023, Para 5.6 and Sec 6), provides detail on further survey and mitigation measures. The principle for the Masterplan Framework is to retain bat foraging and commuting habitats where possible and to provide additional habitat enhancements particularly along the northern boundary which records the highest suitability for bat roosts.

Ecological opportunities and constraints

5.8 Following the completion of the Desktop Study, Preliminary Ecological Assessment and protected species survey data, an Opportunities and Constraints Plan (G9546.08.001 / PEA, TEP - December 2023) has been produced for the site, which also takes account of the Hertfordshire County Council (HCC) Ecological Networks Map for the LG1 site and surrounding area.

5.9 The main constraints, that are recorded as Medium to Low level, include the network of hedgerows across the site, small areas of plantation woodland and mature trees that offer bat roost potential. Of these, 3 trees were found to have high bat roost potential, 6 trees with moderate bat roost potential and 11 with low roost potential. All these trees are located within the northern boundary of the site and adjacent plantation and along the hedgerow within the centre of the site that runs adjacent to the Greenway.

5.10 Key ecological opportunities for the site will be to protect and enhance existing hedgerows to establish productive wildlife corridors that can form part of a wider local nature recovery network. The design intent is to provide a protective buffer alongside these hedgerows of native scrub, wildflower grassland and drainage ditches or swales that will provide additional habitat for invertebrates, pollinators, small mammals and birds. The

areas of native scrub adjacent to the Grange Estate and tree-lined shelterbelts, referred to as plantation woodland, offer particular value for breeding birds, foraging bats and small mammals. These are to be retained within the Strategic Masterplan Framework and should be actively managed in the future to enhance their biodiversity benefit. Beyond the site boundary an area of Swamp reedbed (S41) to the north of the small plantation could be enhanced and semi-improved grassland along the Norton Road offer beneficial habitat for invertebrates including pollinating insects.

5.11 Some hedgerows will be subject to some losses as part of the proposals to provide access routes through the site. Replacement hedgerow planting will be incorporated into the development to mitigate for any losses occurring and there will be significant net gain in hedgerow and tree planting including a commitment to plant an additional 2,000 trees. Some of the small areas of semi-improved and poor semi-improved grasslands may be lost, but this habitat loss can be mitigated within the proposed development. All the arable field margin habitats are expected to be lost as part of the proposals although these losses are small and can be mitigated on site. This represents a small proportion of over 2,000 acres of agricultural estate owned by LGCHF on the periphery of the urban area. It is recommended that a Construction Management Plan, Precautionary Working Method Statement, and a habitat management plan should be produced for the site. This will include precautionary working measures to avoid impacts on a range of species.

Proposed habitat and biodiversity framework

Overview

5.12 The preliminary ecological framework and allocation of habitats for the Strategic Masterplan Framework is shown on the Biodiversity and Habitat Framework Plan (Fig. 5.2, overleaf). This provides a synthesis of the baseline and proposed habitat assessment plans provided in the BNG Report and reflects the ecological design principles of the Proposed UK Habitats Plan (DWG G9546.05.005A / TEP December 2023). This retains the principal habitat features of the site including hedgerows, scrub, mature trees, woodland and plantation shelterbelt. The native planted green buffer will include new areas of broadleaved woodland, mixed scrub, hedgerows, meadows, attenuation basins, wetlands and ponds as part of the sustainable drainage system. The linear parkland will include areas of neutral grassland and, where feasible, calcareous grassland at the detailed design stage.

Biodiversity Net Gain baseline calculation

5.13 The Scheme was assessed using Biodiversity Metric 4.0 in line with the user guide and technical supplement provided and a full BNG report has been prepared (TEP, Feasibility Stage Biodiversity Net Gain (BNG) Report / December 2023). The principles of biodiversity net gain as set out in the Biodiversity Net Gain Good Practice Guidelines have been considered throughout this assessment process. Post-development calculations have been based on the emerging Strategic Masterplan Framework (Option 2). The most appropriate UK Habitat Classification type for each habitat parcel was assigned based on the landscape design, and a target condition was assigned for each parcel based upon the condition assessment criteria for habitats within the Biodiversity Metric 4.0 Technical Supplement. The target condition for habitat types varied depending upon their location, likely levels of use and management measures required.

5.14 The majority of woodland, hedgerows and mature oak trees will be retained within the Strategic Masterplan Framework and the BNG assessment takes account of the following habitats that will be created, including neutral grassland (8.35ha), broadleaved woodland (1.31ha), mixed scrub (1.18ha), biodiverse Sustainable Drainage System (SuDS) ponds (1.69ha), and Modified (Amenity) grasslands for outdoor play space and parkland (0.69ha). In summary the scheme area totals 47.01ha of which 3.88ha will be retained, the majority of which will be existing hawthorn scrub (0.79ha), mixed scrub (0.78ha), other broadleaved woodland (0.76ha). The following table (Fig. 5.1) provides the headline results for this Feasibility Stage Assessment.

Table of BNG headline result based on application area only			
On-site baseline	Habitat Units	125.43	
	Hedgerow Units	30.76	
	Watercourse Units	0.00	
On-site post intervention (including habitat retention, creation & enhancement)	Habitat Units	148.08	
	Hedgerow Units	30.76	
	Watercourse Units	0.00	
On-site net change (units and percentage)	Habitat Units	22.65	18.06%
	Hedgerow Units	5.95	19.34%
	Watercourse Units	0.00	0.00%

Fig. 5.1 Table of BNG headline result based on application area only.

5.15 Based on the Scheme footprint as it stands, the headline results indicate a Net Gain of 18.06% which equates to 22.65 Biodiversity Units (BU) for area-based habitats and a Net gain of 19.34% (5.95 BU) for linear habitats/hedgerows. Full details of the conversion from the High-level Plans to the UK Habitat classification along with the target condition are provided in the Assessor Comments within the completed Biodiversity Metric 4.0 spreadsheet (TEP December 2023 / Excel File).

Fig. 5.2: Proposed habitat and biodiversity framework plan

Key

	Site boundary
	Existing native broadleaved woodland, dense scrub and native hedgerows
	Proposed native green buffer incorporating broadleaved woodland, mixed scrub, hedgerows and species-rich grassland
	Neutral grassland (linear parks)
	Modified grassland (play areas)
	Attenuation pond (SuDS system)
	Swale (SuDS System)
	Allotments
	Developable land parcels

Note: Refer to TEP Feasibility Stage BNG Report and analysis drawings for detailed habitat descriptions including: Baseline UK Habitats (G9546.05.003A) and Proposed UK Habitats G9546.05.005A),December 2023 or revised.

Note: The proposed framework plan takes account of the preliminary assessment of the Surface Water Flooding Constraints and Flood Risk Assessment and Drainage Strategy (January 2023/ Appendix L). This is further being reviewed by Stantec (January 2024 onwards) in response to initial discussions with the County Council (response letter December 2023). More detailed assessment and design coordination for Flood Risk and Surface Water Management will be required at subsequent design stages.

Habitat and biodiversity - Precedents

Fig. 5.3: Alconbury Weald, Cambridgeshire: Informal native grassland edge to neighbourhood. Source: Peter Neal

Fig. 5.4: Alconbury Weald, Cambridgeshire: Native green planted buffer with integrated footpath and play. Source: Peter Neal

Fig. 5.5: Upton, Northampton. Wetland attenuation pond and reedbed adjacent to housing area. Source: Peter Neal

Fig. 5.6: Great Notley, Essex: Footpath crossing a mature native hedgerow. Source: Peter Neal

Fig. 5.7: Derwenthorpe, York. Retained native hedgerow incorporating an active travel corridor. Source: Peter Neal

Fig. 5.8: Abbotswood, Romsey. Attenuation pond and reedbed managed for amphibians and biodiversity value. Source: Peter Neal

6

Movement framework

6. Movement framework

Transport infrastructure context

Introduction

6.1 The site is situated approximately 2km north of Letchworth Garden City Rail Station (a key commuter link) and town centre which can be accessed in approximately 25 minutes on foot and in approximately 10 minutes by bicycle. It is well connected to local pedestrian and cycle networks with the Garden City Greenway, Etonbury Green Wheel, National Cycle Network Route 12 (NCN12), Footpath 32 and a number of other permissive footpaths directly serving the site.

6.2 Arriva Bus Route 55 is the only bus route serving the Grange Estate, south of LG1. The route links the Grange Estate with central and eastern Letchworth (including the town centre and rail station), Lister Hospital and central Stevenage.

6.3 The location of the primary vehicular access has been agreed in principle on Norton Road c200m to the east of the double hedgerow which includes NCN12, the Greenway and Etonbury Green Wheel. There has recently been a submission to the HCC Speed Management Group to reduce the speed limit on Norton Road from 60mph to 50mph, which has been approved.

Transport baseline studies

6.4 A comprehensive Transport and Accessibility Audit (March 2024/ Appendix K) has been prepared to provide a technical assessment of the site and inform the development of the Strategic Masterplan Framework. The audit considers the site's location within the strategic wider setting in relation to key destinations, other future development sites and the multi-modal transport networks, highlighting the strategic importance of the Greenway, Etonbury Green Wheel and National Cycle Route 12 alignments to support active travel to/from LG1 (Fig. 3.1, Appendix K).

6.5 The report also includes detailed accessibility audits of principal pedestrian and cycle routes between Site LG1 and surrounding destinations identifying key locations for public realm and streetscape improvements, in relation to pedestrian crossings, junction improvements, safety and wayfinding, for further consideration by local authorities.

6.6 An evaluation has also been undertaken of transport opportunities and constraints for LG1, together with an overview of previous transport studies and how these cumulatively inform the emerging multi-modal movement framework for LG1, including consideration of a sustainable mobility hub.

Proposed movement framework

Overview

6.7 The Strategic Movement Framework (Fig. 6.1, overleaf) demonstrates how the site seeks to maximise opportunities for sustainable modes of travel – buses, walking and cycling – within LG1 and connecting to key destinations within the surrounding area, aligned with the draft Hertfordshire Place & Movement Planning and Design Guidance (P&MPDG). Aligned with LG1's design vision and placemaking objectives, the movement framework supports at least a 10% modal shift target.

Walking and cycling

6.8 Walking (Fig. 6.2) and cycling (Fig. 6.3) are supported and promoted within the scheme through a wide range of measures. The framework provides a permeable, connected street pattern and block structure with a clear hierarchy of routes that are legible and safe with natural surveillance from surrounding built form. Strong pedestrian and cycle permeability is aligned with natural desire lines that link into and extend the existing PRoW network to support access to the Grange Estate, main destinations and recreational movement. Additionally, a Greenway extension link to the west (outside the LG1 boundary), preserves the rural character of the existing Greenway, giving users the option of using the Greenway without passing through the new development.

6.9 Dedicated primary north-south and east-west active travel routes with a 3m dedicated cycle track following existing desire lines and projected movement patterns provide connections to the Greenway/ NCN 12 and Etonbury Green Wheel. The proposed secondary active travel routes are 'shared pedestrian and cycling routes' that link to the primary network, Site LG1's access points and key destinations within Letchworth, surrounding settlements and key open spaces. The framework also identifies strategic locations for wayfinding.

6.10 The design of all street typologies within LG1 is proposed to support shared use of cyclists as part of the carriageway and pavements for pedestrians within a low-speed 20 mph environment to promote active travel. The primary vehicular north-south access route between Norton Road and LG1, will also include a shared use footway/ cycleway to one side of the road. For details please refer to the street typologies section (p.67-86).

6.11 In terms of linking LG1 with the wider context, the framework identifies important opportunity areas for improving wider walking and cycling infrastructure and connectivity to surrounding destinations. This includes

Fig. 6.1: Movement framework plan

Key

	Site boundary
	Green open space
	Developable land parcels
	Primary active travel route (3m dedicated cycle path)
	Secondary active travel route (walking and cycling)
	Main street (for bus access and shared usage by cyclists)
	Secondary street (segregated footways with cycling on-street)
	Edge street (shared surface including walking and cycle)
	Pedestrian trail
	Potential cycle / pedestrian link
	National Cycle Network (NCN) 12
	Primary gateways
	Potential wayfinding markers
	Active travel priority junctions/ speed management measures
	Vehicular entrance to school
	Pedestrian / cycle entrance to school
	Upgrade to Greenway standard
	External active travel route connection to key destinations

Note: The proposed framework plan takes account of the preliminary assessment of the Surface Water Flooding Constraints and Flood Risk Assessment and Drainage Strategy (January 2023/ Appendix L). This is further being reviewed by Stantec (January 2024 onwards) in response to initial discussions with the County Council (response letter December 2023). More detailed assessment and design coordination for Flood Risk and Surface Water Management will be required at subsequent design stages.

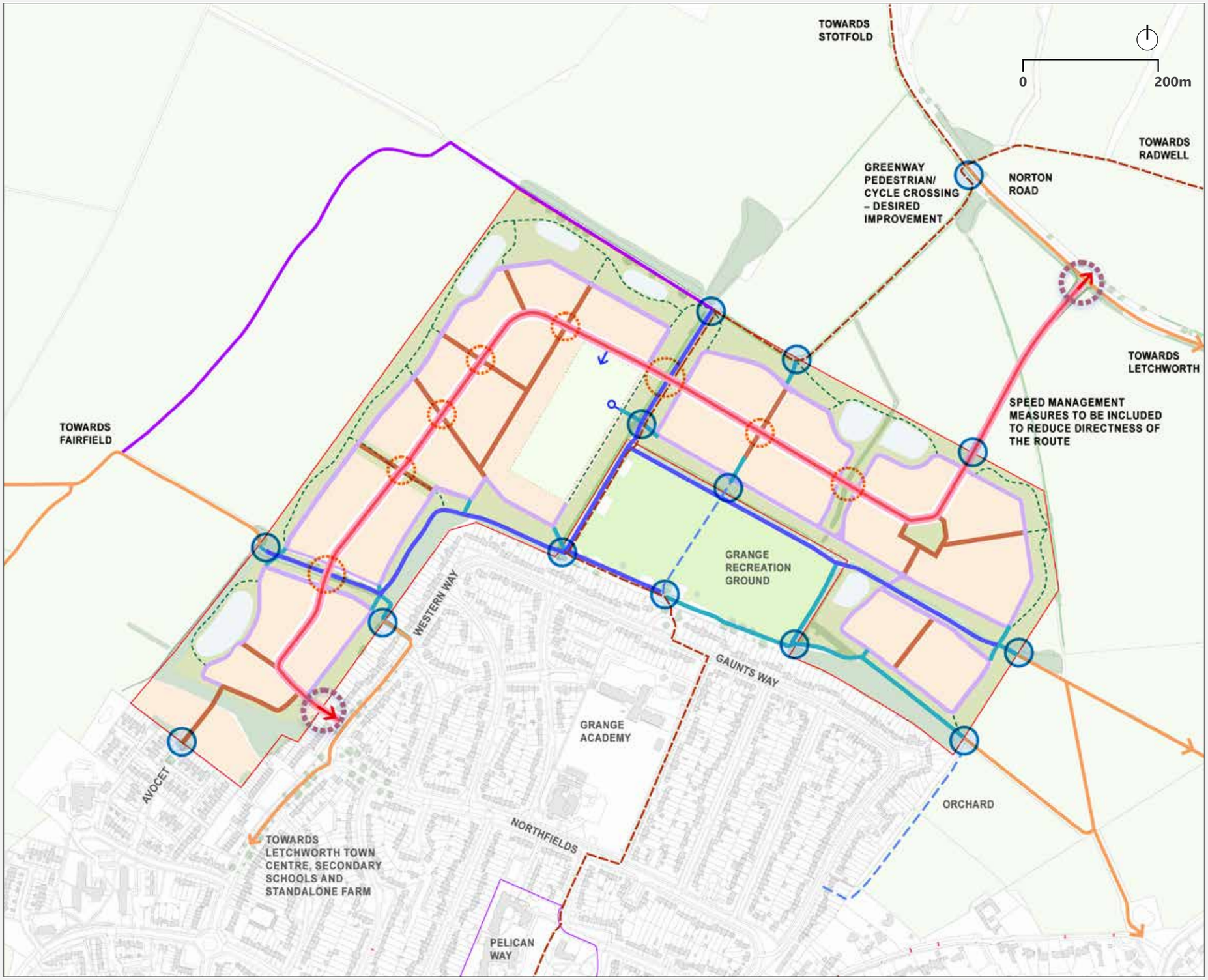
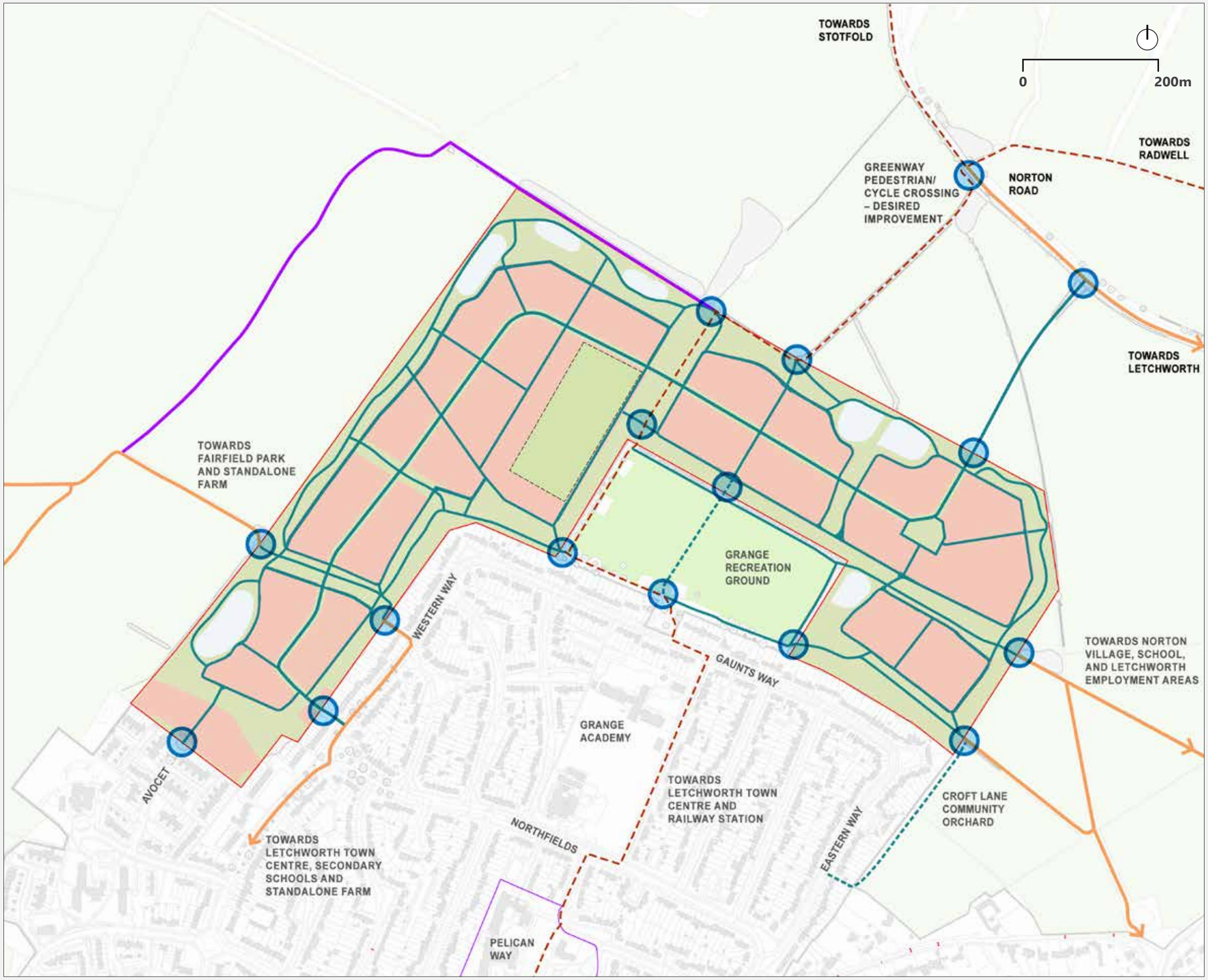


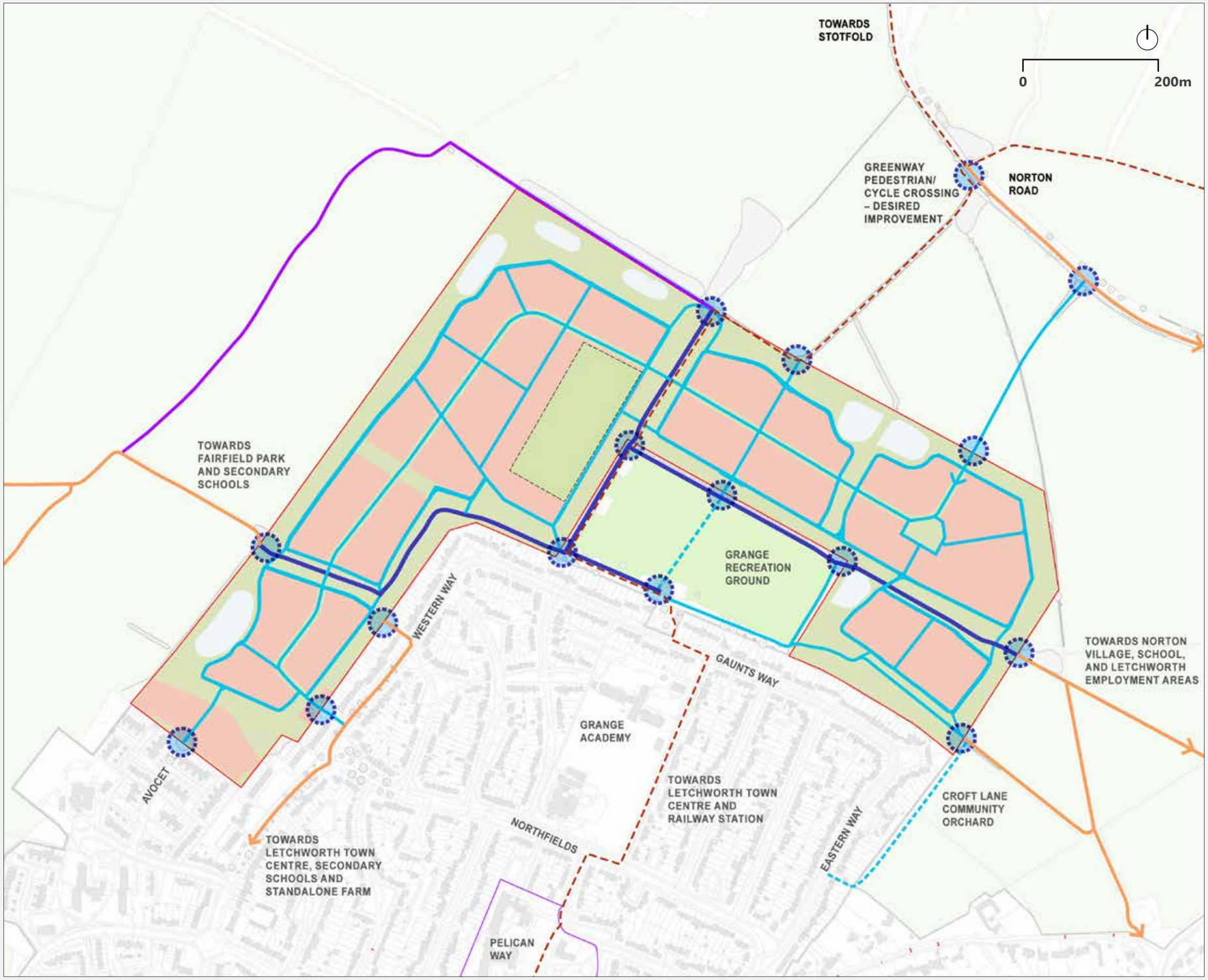
Fig. 6.2: Movement framework plan: Walking routes



Key

	Site boundary
	Green open space
	Developable land parcels
	Walking route
	Potential walking route
	Pedestrian gateway with potential for wayfinding markers
	Upgrade to Greenway standard
	External active travel route connection to key destinations
	National Cycle Network (NCN) 12

Fig. 6.3: Movement framework plan: Cycling routes



Key

	Site boundary
	Green open space
	Developable land parcels
	Primary active travel route (3m dedicated cycle path)
	Secondary active travel route (walking and cycling)
	Potential new active travel route
	Cycle gateways with potential for wayfinding markers
	Upgrade to Greenway standard
	External active travel route connection to key destinations
	National Cycle Network (NCN) 12

Note: The primary cycle route will be hard surfaced with an appropriate material reflecting the surrounding conditions and safety requirements in agreement with HCC. We will work with NHC and HCC to ensure that an appropriate lighting strategy of the cycle route is implemented, which will also consider its environmental impact and long term management as part of the wider sustainable transport contributions.

key crossing points as highlighted in the framework plan, aligned with Steer's Accessibility Audit Report (Chapter 5, see Appendix K), and enhancements to the existing Greenway and National Cycle Network (NCN) route 12 which is the key strategic pedestrian and cycle link to Letchworth railway station and town centre. Further discussions are to be undertaken with settle (main landowner of Grange Estate) to safeguard NCN12 route through the Pelican Way regeneration site.

6.12 The framework provides safe routes to school with a car-free zone along the proposed enhanced Greenway linear park to the west of the existing Grange Recreation Ground, and the school's vehicular entrance provided from the main avenue.

6.13 In terms of cycle parking, a planning compliant approach to provision for all land uses will be adopted. Cycle parking provision will be in front of houses for easy and convenient access and to support modal shift. They will be provided within secure covered space(s) within the plot curtilage and/or use of garages for cycle storage. Provision of visitor cycle parking will be in clusters on-street or within key open spaces.

Bus access and route

6.14 To support public transport, primary street and associated junctions will be designed to accommodate bus access, supporting bus links to Letchworth town centre and railway station.

6.15 The masterplan layout will support all homes to be within 400m walking distance to a bus stop, and include designated bus stops along the main avenue (positions to be agreed). An adequate bus turning area will be provided within the site using the internal road network as a 'loop' and/or a turning circle.

6.16 The subsequent planning submission will include further details regarding the above, and an indicative bus access strategy setting out the above design principles, minimum routing requirements and indicative costs to facilitate a minimum viable bus service (shuttle to Letchworth town centre and railway station). It is envisaged that a HertsLynx-esque service will serve the development from the outset until the point a standard bus service can be introduced. Further discussions with HCC and CBC Passenger Transport Units to consider re-instatement of school buses for 'entitled' secondary school age pupils are to be undertaken.

Sustainable mobility hub

6.17 The transport framework includes a mobility hub within LG1 to join shared transport measures with public transport and active travel in a high-quality public realm space. Key components will include a bus stop, car club, cycle hire, lockers, electric vehicle charging points, centralised delivery lockers and potentially a co-working space and small café. It will be located in a central location in proximity to the Grange Recreation Ground, the neighbourhood centre and the Letchworth Greenway/ NCN12 for easy access. It will also be in proximity to the 'reserve' school site to support access to/from school using active travel modes (Fig. 6.4-6.7, overleaf).

6.18 Adopting a coordinated approach with settle's Pelican Way regeneration scheme and the Letchworth station improvements will help maximise its positive impacts, enable modal shift and support commercial viability.

Vehicular access and movement

6.19 To support active travel and sustainable transport modes, the whole site will be a low-speed vehicular environment of 20 mph.

6.20 This will be supported by traffic and speed management measures 'designed-into' the masterplan layout, in particular, along the central and unifying Avenue (i.e. primary street) to deter potential rat-running through the site. This will also include active travel priority junctions and traffic calming measures at key locations including intersections with active travel routes and hedgerows, using design features such as raised tables, pedestrian/ cycle crossing facilities, pinch points with reduced carriageway widths, structured planting and chicanes with cycle bypasses. These are to be further tested and considered during subsequent highway design stages. All secondary and tertiary streets will be designed as home zones to share vehicular space with cyclists and separate footways for pedestrians.

6.21 Learning from the Garden City pioneers, the Norton Road access route and junction will be designed as a multi-modal 'parkway-inspired' gateway into LG1 and wider Letchworth. It will support a shared pedestrian and cycle access. See p.82-84 for further details on this street typology. Further studies to explore its potential realignment to reduce the directness of this access route and further support low speeds through the LG1 development, allow on carriage-way cycling on the primary avenue within LG1 and enhance the overall attractiveness of the walking environment will be explored in the next design stages.

6.22 The two new 'gateway' junctions with Western Way and Norton Road will provide vehicular access to the site integrated with sustainable modes and create a high-quality experience. The exact form and layout of these junctions are to be confirmed subsequently through detailed trip generation and capacity assessments. Emergency access will be provided from both the Norton Road and Western Way junctions. Construction access will be provided from Norton Road. For details on the phasing and infrastructure delivery plan, see section 12.0.

Car parking and placemaking implications

6.23 In terms of car parking, the development will comply with the standards in the NHC Local Plan, with potential for shared use of spaces for non-residential uses. Any consideration of reduced car parking ratios (including visitor parking) will be thoroughly tested against evidence of lower parking needs for specific housing typologies e.g. affordable housing and/or senior living.

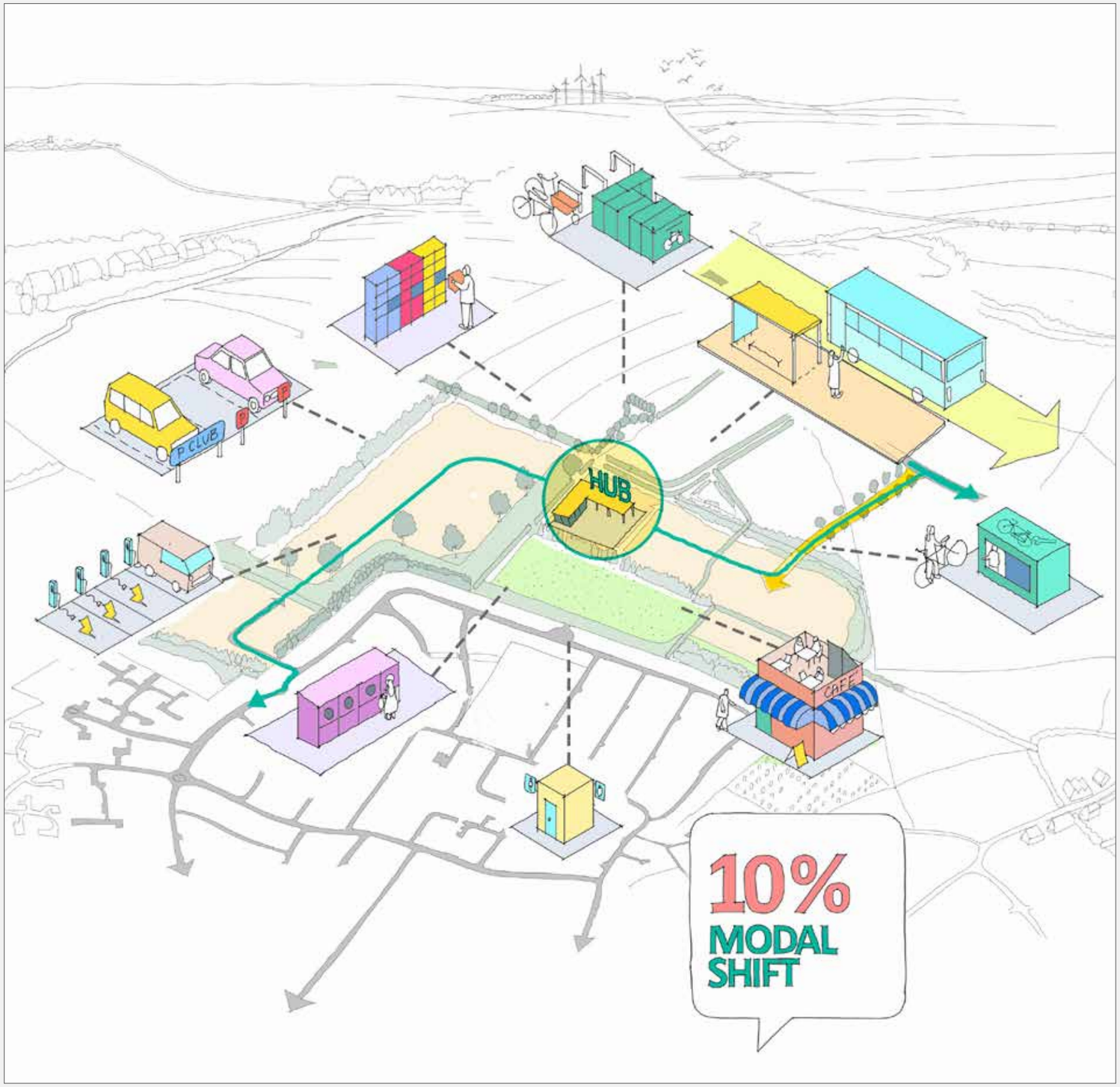


Fig. 6.4: Proposed Mobility Hub to support achieving a 10% modal shift.

Fig. 6.5: Precedent - Mobility hub, Bike hire. Source: CoMoUK

Fig. 6.6: Seabrook Orchard, Devon: Mobility Hub. Source: CoMoUK

Fig. 6.7: Seabrook Orchard, Devon: Mobility Hub. Source: CoMoUK

6.24 There is a need for additional car parking spaces for the Grange Recreation Ground for football and events, which will need to be considered further in collaboration with NHC. This should balance the need between parking provision and promoting non-car modes of travel, as well as the opportunity to share parking with other users. For example, peak times for the recreation ground may be when the school is not in use.

6.25 To minimise the visual impact of car parking in streetscapes, in particular, for on-street and off-plot parking typologies, street sections will be integrated with structural planting. Refer to street typologies (p.67-86).

6.26 Should car use reduce over time and the demand for parking fall as a result of a change in habits and/or the sustainable travel strategy, there will be the option to re-use these spaces (subject to local demand) as productive allotments/raised beds, opportunities for doorstep play, and/or space for social interaction (Fig. 6.8-6.10). Consideration will also be given to appropriateness of innovative communal approaches to car parking (Fig. 6.11) e.g. car barns with PV/ green roofs, attractively designed for safe use in the next design stages (See DP8, p.33). A robust access, maintenance and stewardship strategy for such spaces will be required to ensure safety. There will be provision of EV charging for all modes. Residents will be provided with a minimum of one active EV charging point per dwelling from the outset.

6.27 A comprehensive Outline Residential Travel Plan will be submitted as part of the planning application, with a Detailed Travel Plan to be produced pre-occupation. This will be secured by s106 agreement. The Travel Plan will promote sustainable travel modes to the site through an extensive integrated package of measures and by setting mode share targets, that will be informed by post occupation multi-modal transport surveys. The surveys will be undertaken 6 months (or at 75% occupation of units), two years and five years post occupation to monitor progress against targets.

Fig. 6.8: Southampton city centre: Car parking space reclaimed as sit-out space, rented by adjacent cafe. Source: Meristem Design

Fig. 6.9: Cambridge: Cyclehoop parking. Source: WSP report to Greater Cambridge Partnership joint assembly

Fig. 6.10: Waltham Forest, London: Car parking reclaimed as a parklet. Source: https://walthamforestecho.co.uk/

Fig. 6.11: Derwenthrope, York: Communal car parking, some with PVs on roofs. Source: EcoResponsive Environments

Car parking strategy

6.28 The Foundation's approach to car parking on the LG1 development has been informed by the following:

- Commercial input
- Planning policy
- Community consultation
- General connectivity

6.29 This influences the amount of parking that should be provided. Once this is defined, the typologies can then be considered (Fig. 6.12-6.14). When the LG1 scheme was in its formative stages, consideration was made to a low parking scheme, placing a greater reliance on active travel and public transport. This was tested in consultation with the community and our advisors.

6.30 First and foremost, there was strong concern by the local community during our consultation exercise about the impact of a low parking scheme on existing residents. This focused on overspill car parking on the Grange, where there are issues with on-street parking on the northern section of the Grange particularly on Gaunts Way. This has been a consistent theme during consultation events.

6.31 Our commercial advice is that low parking schemes are attractive to the market in highly accessible locations, such as town centre developments and we have seen how this can work well in town centre schemes in Letchworth. However, the nature of the LG1 site is that although there are transport links and opportunities for enhancement, a low parking scheme in this location would be less attractive in terms of the viability of the development.

6.32 Policy T2 of the Local Plan states:
Planning permission will be granted provided that:
a) Parking for residential development is provided in accordance with the minimum standards set out in Appendix 4 of this Plan;
b) Parking for non-residential development is provided having regard to the standards for non-residential development set out in the relevant Supplementary Planning Document;
c) Proposals have regard to relevant Supplementary Planning Documents, strategies or advice and;
d) Applicants clearly identify how they provide for all likely types of parking demand and demonstrate that parking will be safe and of a design and layout that will function satisfactorily.
Variations from these standards will only be considered where applicants can demonstrate that the accessibility, type, scale, mix and use of the development; the availability of and opportunities for public transport; local car ownership levels; and on-street conditions justify such variations.

6.33 Appendix 4 of the Local Plan sets out the amount of parking required:

- 1 bedroom; 1 space per dwelling
- 2–3 bedrooms; 2 spaces per dwelling

6.34 In addition, 0.25 to 0.75 visitor parking spaces will be required (with higher standard applied where there are no garages and lower standard applied for every dwelling with a garage). Some of this provision should be covered or in a secure parking court if there is no on-plot or covered parking to serve dwellings. Reference is made to a Supplementary Planning Document, yet to be adopted.

6.35 It is our view that the most appropriate approach with respect to this development, considering the site-specific circumstances and commercial advice, is to be compliant with the adopted Policy T2 of the Local Plan. We do not believe that the site meets the tests in this policy for reduced parking provision, even with the proposed improvements envisaged to the local transport and active travel infrastructure. We believe that this reflects the balanced approach which will reduce the potential for overspill parking in the Grange, whilst not promoting car use. It will also ensure that the car parking strategy will not detract from the attractiveness of the site for potential partners.

Fig. 6.12: On-plot integrated garages best suited for wider plots with both a front door and a habitable room with window fronting to the street for surveillance. Source: EcoResponsive Environments

Fig. 6.13: On-street parking integrated with structural planting to soften visual impact. Source: EcoResponsive Environments

Fig. 6.14: Off-plot parking courts: well designed and surveilled. Source: www.ciht.org.uk/media/4395/guidance_note_-_residential_parking.pdf

Off-site improvements

6.36 Potential off-site interventions are identified within Chapter 5 of the Accessibility Audit (Appendix K/ March 2024) and are aligned with the existing routes and desire lines to local destinations (Fig. 6.15) to identify priorities for improvements in coordination with NHC, HCC and CBC. Some key areas for further consideration and discussion are listed below:

- Enhancement of the northern pedestrian/cycle crossing of Norton Road. This would be a desired improvement location.
- A co-ordinated approach with NHC will be required for the parking to serve the Grange Rec. This may include an addition to existing parking provision, but should in any case incorporate additional cycle parking. This will form part of the Grange Improvement Plan that NHC is formulating, who will also be responsible for its design and implementation. In discussions with HCC it is considered that a Travel Plan may be utilised to assist with the future travel to and from the Rec, which would necessitate NHC to undertake this. NHC will also need to take the lead when considering detailed matters such as lighting and surfacing within the Rec area.
- The Heritage Foundation promotes the upgrade of Norton Common to ensure that it can be enhanced as an active travel route as part of the package of off-site sustainable transport contributions. This is under the ownership of NHC and would therefore require their support along with careful consideration and design of measures to ensure that an upgrade does not have a harmful ecological impact.
- Chapter 5 of the Accessibility Audit also includes a comprehensive audit of the routes from Site LG1 to Fearnhill and Highfield Secondary Schools and identifies potential improvements.

6.37 These improvements are a series of suggested areas for further consideration by local authorities as part of the strategic master planning process which will be developed in more detail in discussion with HCC and NHC. This will include a review of the sustainable transport Section 106 contribution and what can be reasonably funded through this requirement, along with consideration of land ownership, ecological and other implications. The implementation, management and stewardship of any improvements will also need to be clarified. This process will include prioritisation of those most important improvements that can be delivered within the parameters of available funding (S106, NHC and HCC).

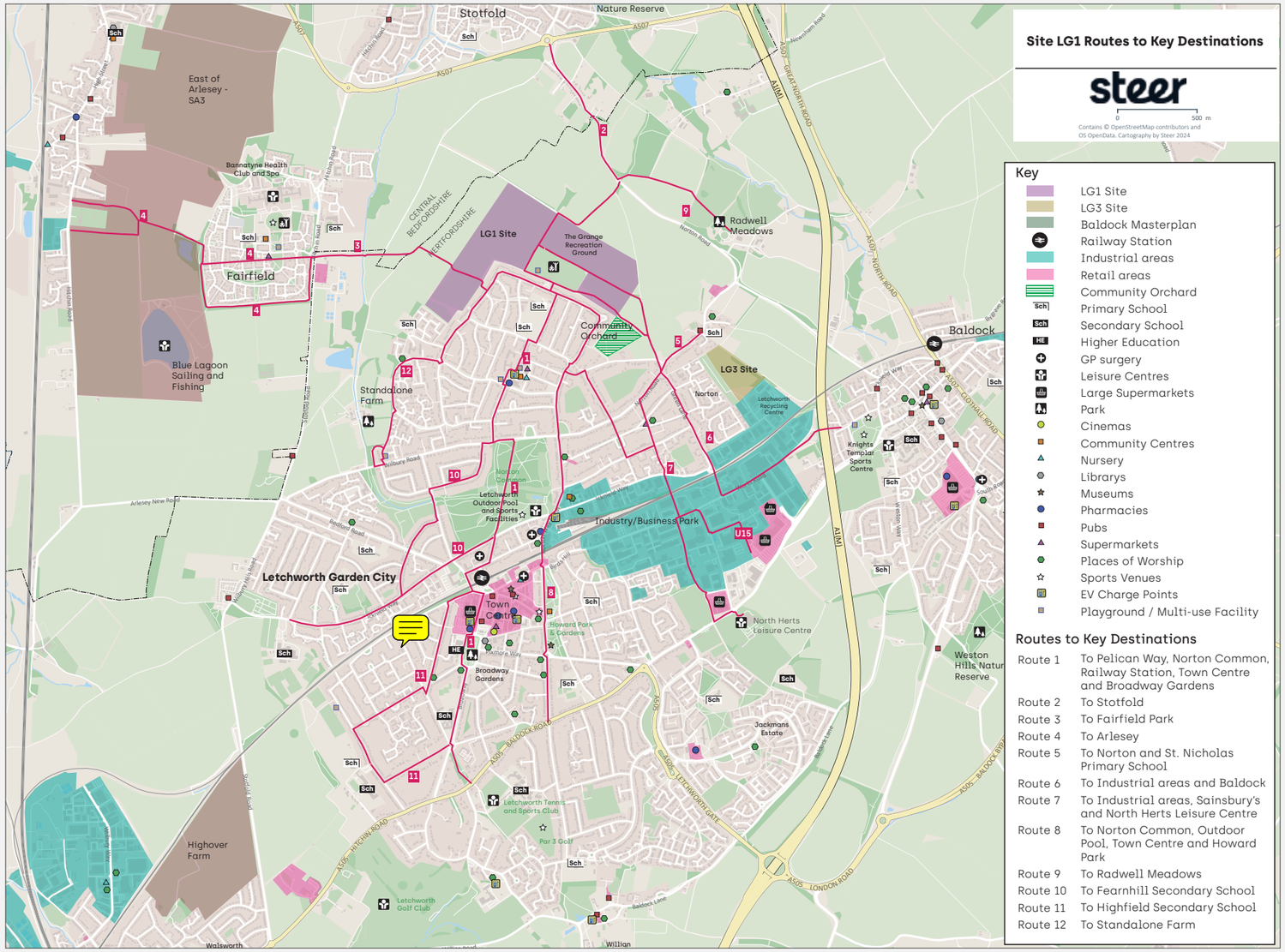


Fig. 6.15: Existing routes to key destinations.
Source: Steer

Street typologies

Type 1 - Primary Street

6.38 The intended character of this multi-modal street is that of a 20mph avenue that unifies the masterplan. The illustrative typical section (Fig. 6.16) and plan (Fig. 6.17, overleaf) with key dimensions tabulated below provides guidance on how this typology can balance a wide range of functions: on-street parking, access to plots, bus stops, light columns, crossing points, structured planting and traffic management measures to deter rat-running.

1	Carriageway (2 lanes, integrated with speed management measures)	6m
2	Cycling provision (in carriageway, no dedicated cycling lane)	n/a
3	Footway Width (x2)	2.0m
4	Minimum parking space	2.5m
5	Structured planting zone	2.5m
6	Tree offset from building facade	Min 5m
7	Tree offset from kerb edge	Min 1.2m
8	Hedgerows zone (within plot curtilage, protected by covenants)	1m
9	Street lighting (to be designed in coordination with street trees)	n/a

*** Utilities to be located under footway
Note 1: Street trees illustrated after 25 years
Note 2: Speed management measures are set out in the HCC Design guide 'Part 4 – Detailed Design and Specification, Chapter 8 – Speed Management'.

Fig. 6.16 Type 1 - Typical illustrative section

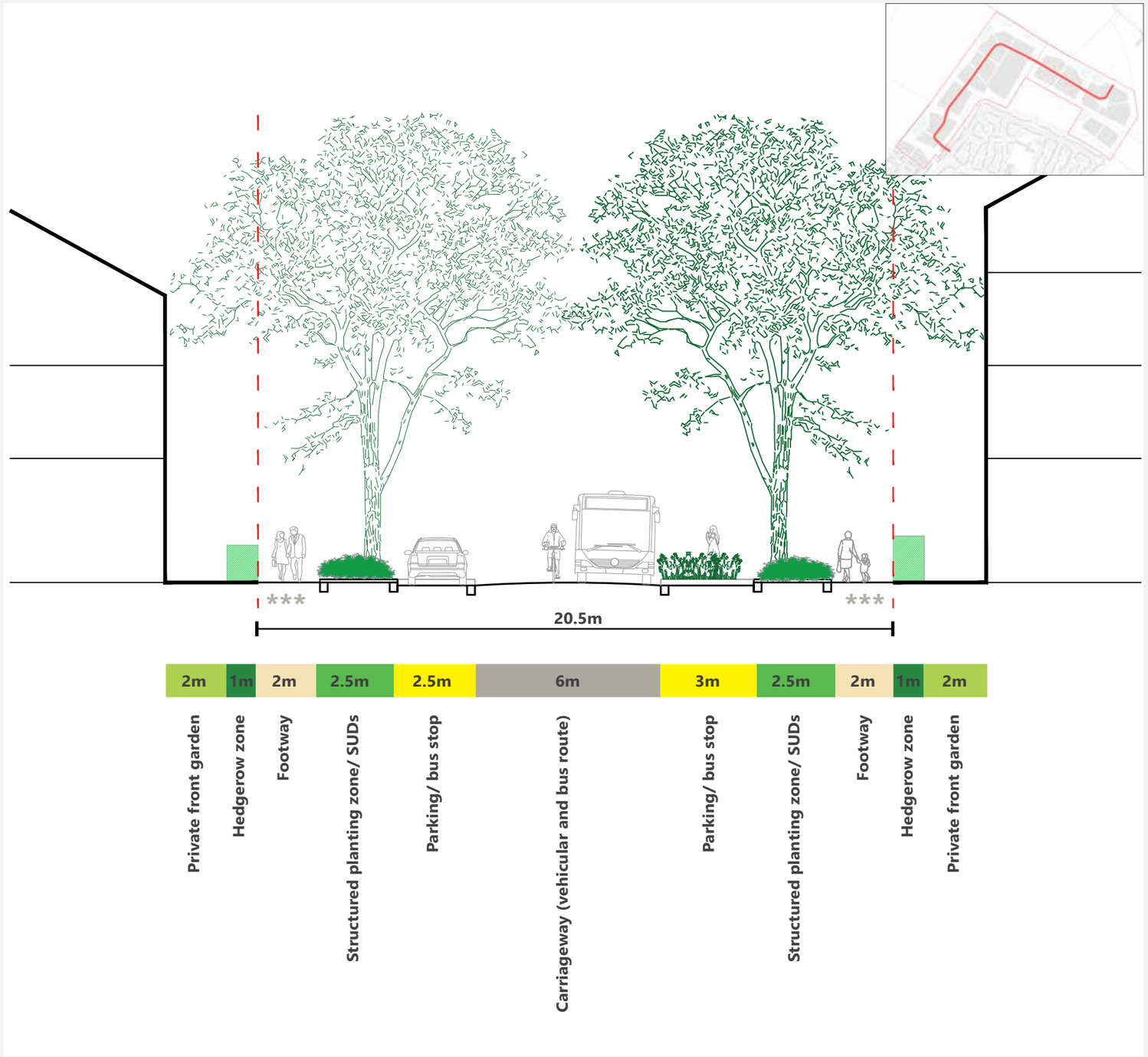
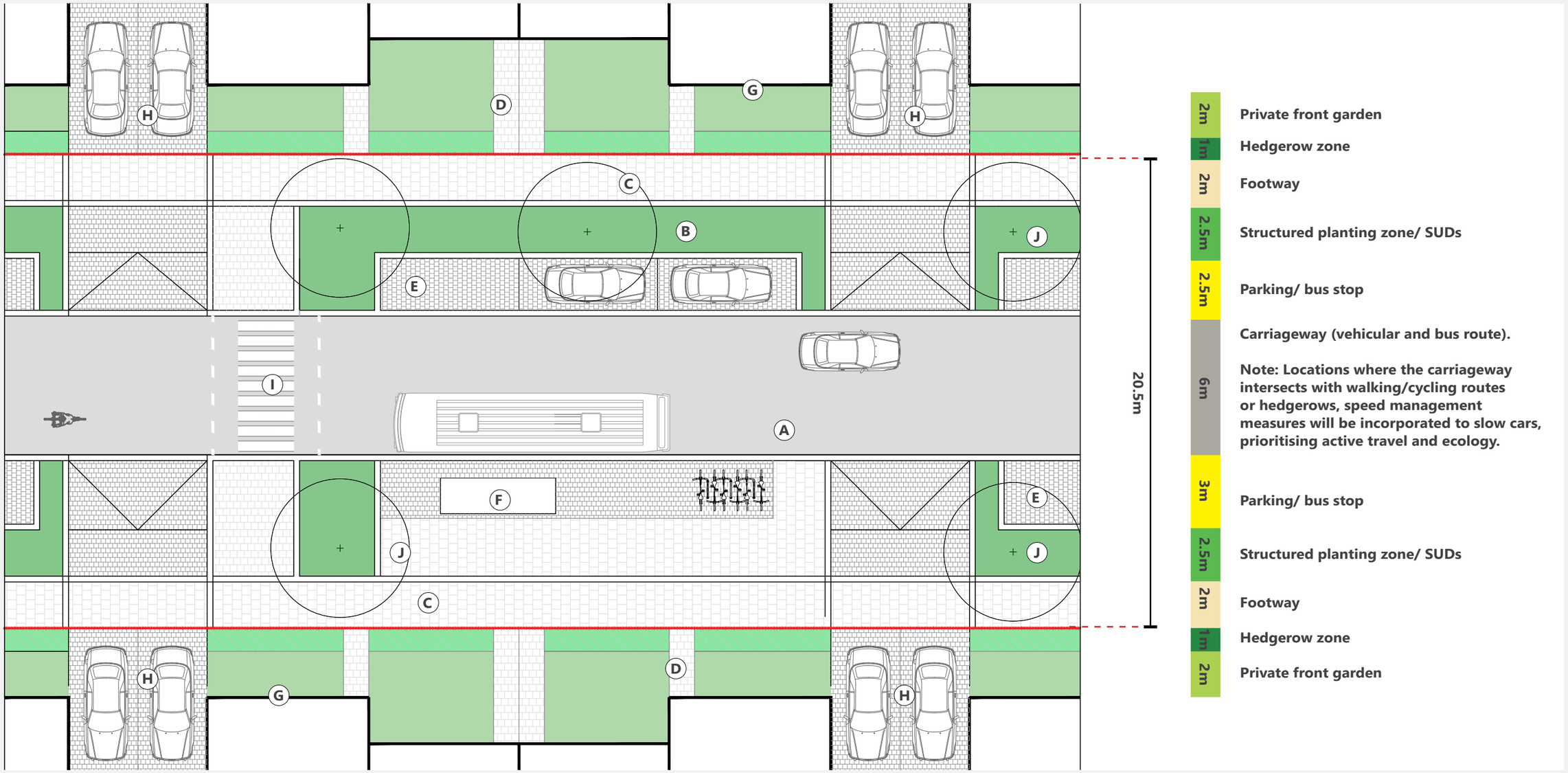


Fig. 6.17 Type 1 - Typical illustrative plan



(A) Carriageway - tarmac surface material for shared use of cyclists, vehicular traffic and bus route through the site.

(B) Green verges including semi-mature trees, shrub planting and/or SUDs features integrated with street lights, cycle parking.

(C) Footpath on both sides - continuous level footway surface to be provided throughout.

(D) Direct access to dwellings from roadway.

(E) On-street parking (cars and cycles) in clusters punctuated by structured planting. Car parking bays will be 2.5m x 6.0m.

(F) Bus stop with bus bay on carriageway.

(G) A largely continuous building frontage with strong enclosure utilising soft hedgerow boundaries to the plot boundaries.

(H) On-plot parking is positioned at well-spaced intervals to ensure the dominance of the building line and its visual continuity to secure an attractive streetscape along the primary street.

(I) Accessible crossing point.

(J) Street lights and EV charging points are to be designed in coordination with street trees early in the design process.

(K) There will be some flexibility within the primary route street section to accommodate a 3m wide shared use footway on one side of the road if required.

Type 1 - Primary street - Precedents

Fig. 6.18: Letchworth: Tree-lined streets with soft boundaries to plots, example for main avenue. Source: EcoResponsive Environments

Fig. 6.19: Letchworth: Seasonal variation of tree-lined streets with verges and soft boundaries to plots for distinct character, example for main avenue. Source: EcoResponsive Environments

Fig. 6.20: Bromley-by-Bow, London: Structured planting softens parking impact, example for LG1's avenue. Source: EcoResponsive Environments

Fig. 6.21: Fairfield Park: Raised table to slow cars at active travel route intersections, example for main street. Source: EcoResponsive Environments

Fig. 6.22: London: Trees and material change at crossings contribute to speed management, example for LG1's avenue. Source: treesforstreets.org

Type 2 - Secondary Street

6.39 These act as the main circulation routes acting as internal distributors and are proposed to be design as homezones. The illustrative typical section (Fig. 6.23) and plan (Fig. 6.24, overleaf) with key dimensions tabulated below provides guidance on how this typology can balance a wide range of functions including on-street parking, access to plots, traffic calming and integration of structured planting and/or SUDs features (Fig. 6.29-6.33).

1	Carriageway (2 lanes)	**5.5m**
2	Cycling provision (in carriageway)	**n/a**
3	Footway Width (x2)	**2.0m**
4	Planted verge/ SUDs/ parking (tree spacing varies - see plan for reference)	**2.5m**
5	Traffic calming buildout zone (leaving clear carriageway width of 3.7m, see note 2 below.)	**Max 1.8m**
6	Tree offset from building facade	**Min 5m**
7	Tree offset from kerb edge	**Min 1.2m**
8	Hedgerows zone (within plot curtilage, protected by covenants)	**1m**
9	Street lighting (to be designed in coordination with street trees)	**n/a**

*** Utilities to be located under footway
Note 1: Street trees illustrated after 25 years
Note 2: For further details see HCC design Standards Part 4 Detailed Design and Specification, Chapter 8 - Speed Management Features.

Fig. 6.23: Type 2 - Typical illustrative section

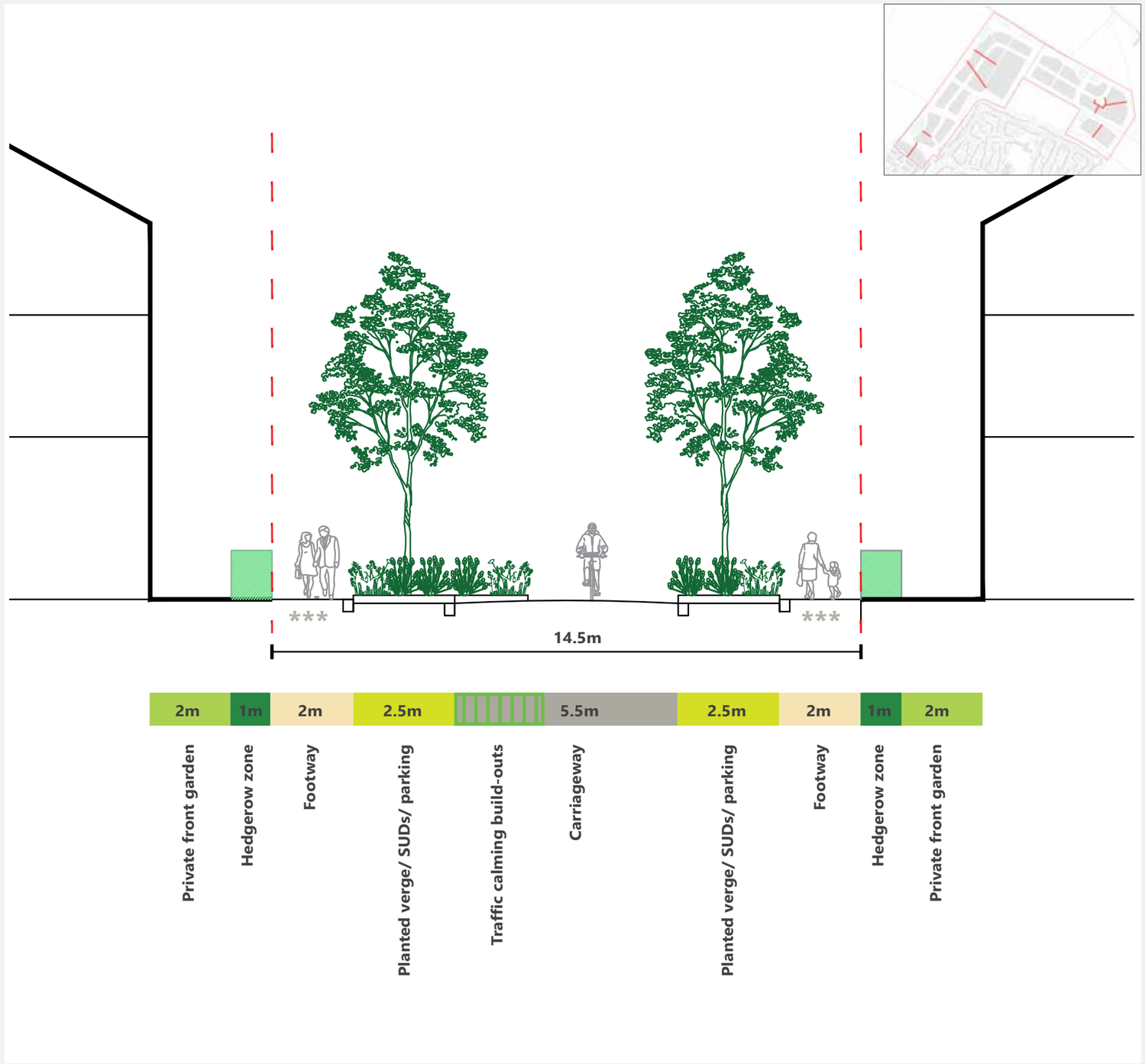
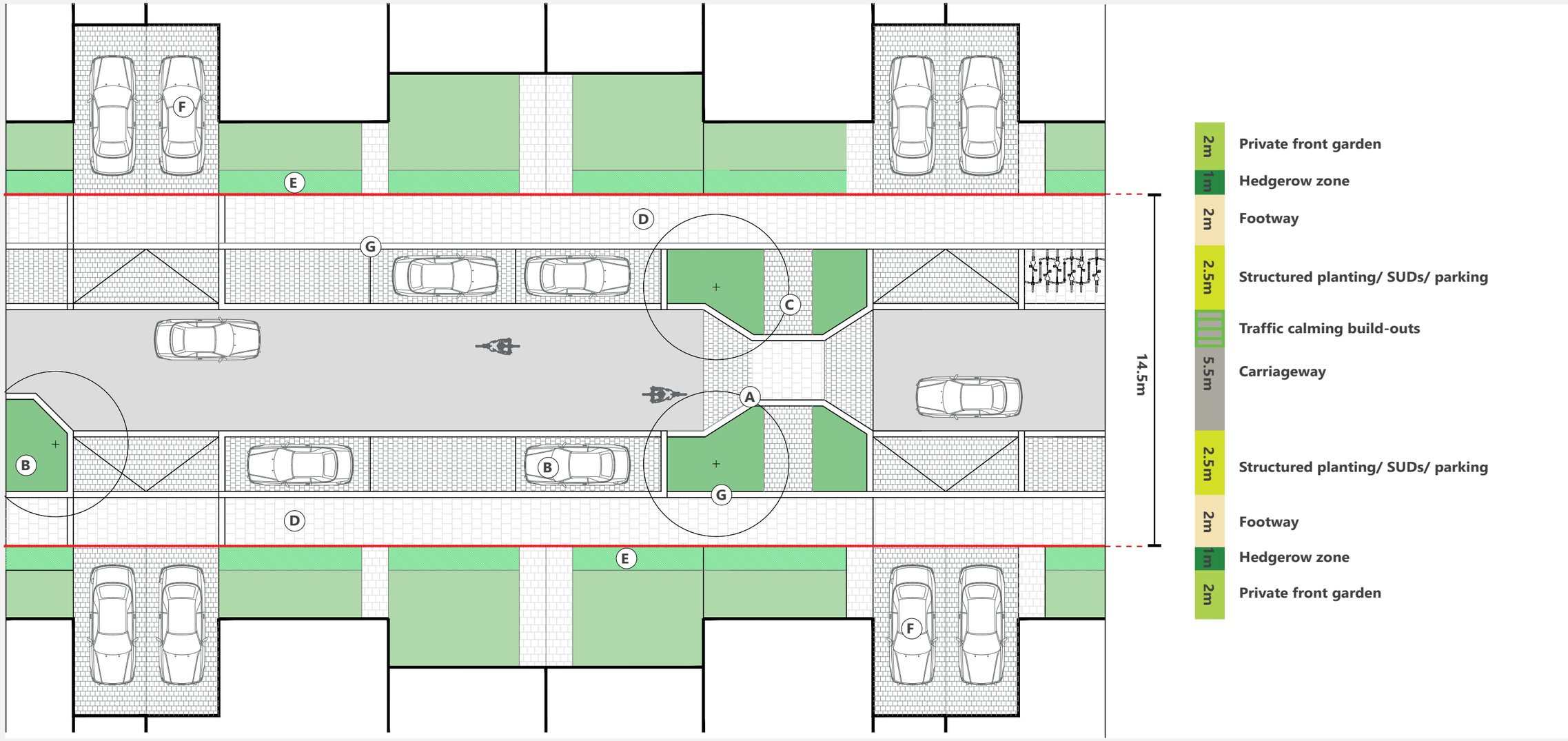


Fig. 6.24: Type 2 - Typical illustrative plan



A Carriageway - Localised narrowing permitted to accommodate street trees, contribute to traffic calming and add variety and informality to the street scene. Cyclists are to share the carriageway.

B Structured planting integrated at varied intervals between parking and on-plot access. Upto 3-4 parallel parking bays in single line on the road before it is broken by verge or tree.

C Build-outs for traffic calming can also provide spaces for cycle parking or social seating. For detailed guidance of build outs with cycle parking please see HCC Design guide part 4, Chapter 6 - designing for parking.

D Footways - Permeable surface material or block paving to differentiate from carriageway.

E A largely continuous building frontage with strong enclosure utilising soft hedgerow boundaries to the plot boundaries.

F On-plot parking are positioned at well-spaced intervals to ensure the dominance of the building line and its visual continuity to secure an attractive streetscape along the primary street.

G Street lights and EV charging points are to be designed in coordination with street trees early in the design process.

Type 2A - Secondary Street (swale in middle)

6.40 These secondary streets not only act as internal distributors and are proposed to be HomeZones, but also, play an active role in the site wide sustainable urban drainage strategy, designed to integrate with the wider systems managing stormwater. The illustrative typical section (Fig. 6.25) and plan (Fig. 6.26, overleaf) with key dimensions tabulated below provides guidance on how this typology can balance a wide range of functions (Fig. 6.29-6.33).

1	Carriageway (1 lane x 2)	**3.7m**
2	Cycling provision (in carriageway)	**n/a**
3	Footway Width (x2)	**2.0m**
4	Planted verge/ parking (tree spacing varies - see plan for reference)	**2.5m**
5	Swale (pedestrian crossings across it are subject to detail design - see plan)	**Min. 5m**
6	Tree offset from building facade	**Min. 5m**
7	Tree offset from kerb edge	**Min. 1.2m**
8	Hedgerows zone (within plot curtilage, protected by covenants)	**1m**
9	Street lighting (to be designed in coordination with street trees)	**n/a**

*** Utilities to be located under footway
Note 1: Street trees illustrated after 25 years
Note 2: Trees to be planted in soft verges wherever possible. Alternatively, root-able soil volume above to be provided by suspended pavement system.

Fig. 6.25: Type 2A (swale in middle) - Typical illustrative section

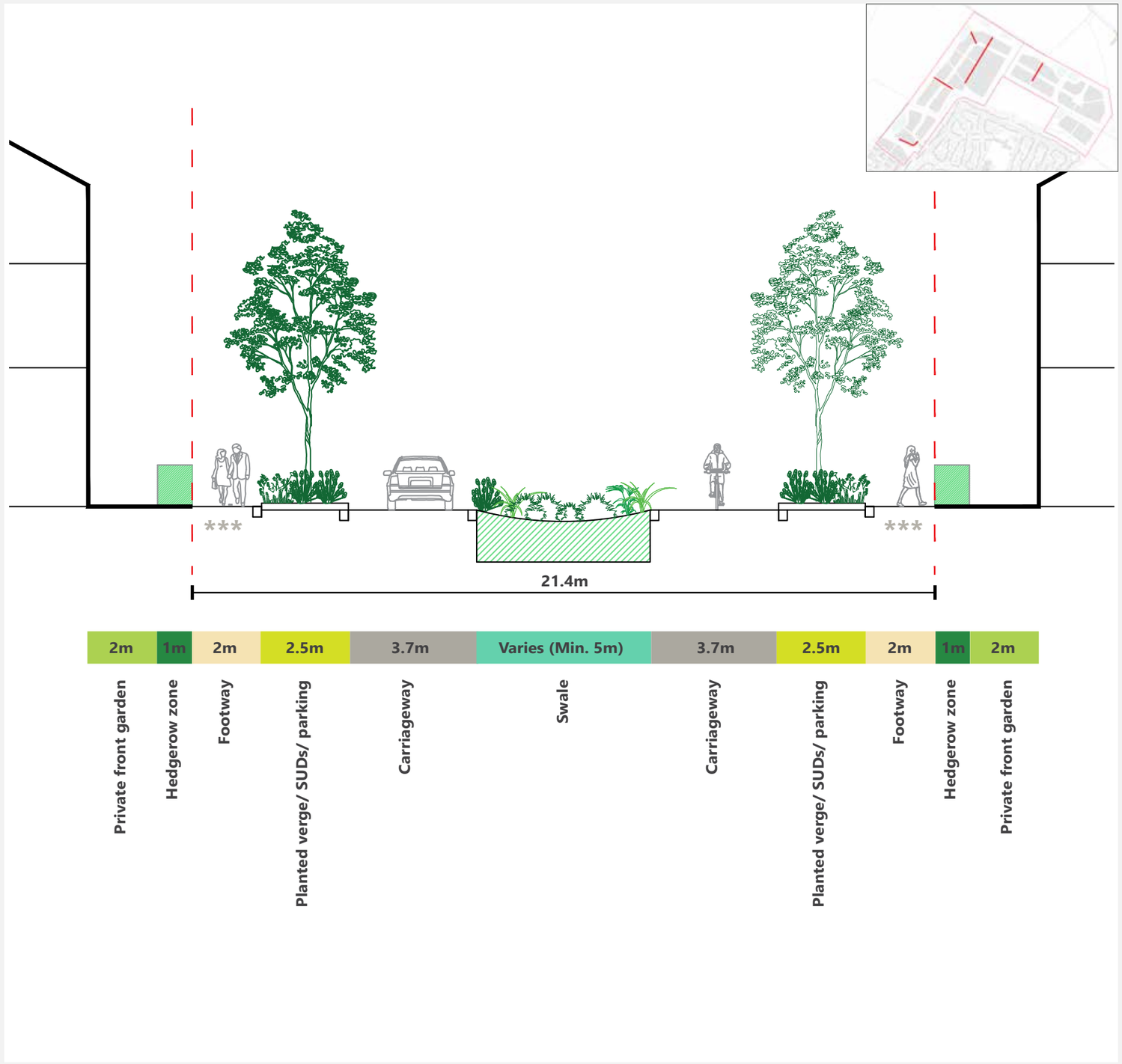
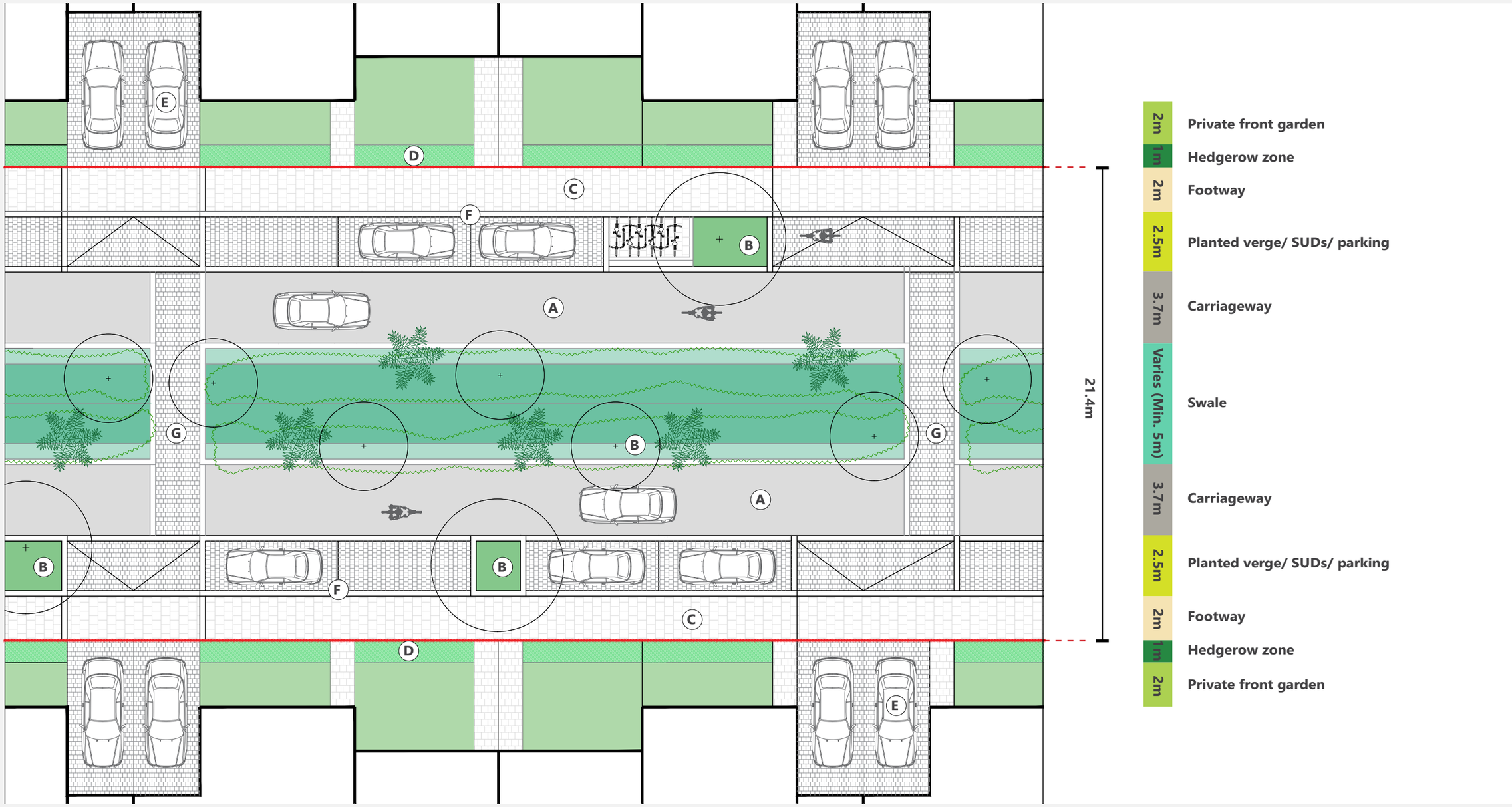


Fig. 6.26: Type 2A (swale in middle) - Typical illustrative plan



(A) Carriageway - Cyclists are to share the carriageway. Primary surface material reflective of HomeZones; reduced kerb heights.

(B) Structured planting integrated at varied intervals between parking and on-plot access and additional planting along swale

(C) Footways - Permeable surface material or block paving to differentiate from carriageway.

(D) A largely continuous building frontage with strong enclosure utilising soft hedgerow boundaries to the plot boundaries.

(E) On-plot parking is positioned at well-spaced intervals to ensure the dominance of the building line and its visual continuity to secure an attractive streetscape along the street.

(F) Street lights and EV charging points are to be designed in coordination with street trees early in the design process.

(G) Width of swale can vary, subject to discussions with the Local Lead Flooding Authority. Pedestrian crossings across swale is subject to detail design.

Type 2B - Secondary Street (swale on one side)

6.41 Consideration will also be given to the appropriateness of swales on one side in the next design stages. This will have to be balanced with parking requirements and access to homes. In addition to playing an active role in the site wide sustainable urban drainage strategy, these may also offer potential for play-on-the-way. The illustrative typical section (Fig. 6.27) and plan (Fig. 6.28, overleaf) with key dimensions tabulated below provides guidance on how this typology can balance a wide range of function.

1	Carriageway (1 lane x 2)	**5.5m**
2	Cycling provision (in carriageway)	**n/a**
3	Footway Width (x2)	**2.0m**
4	Planted verge/ parking (tree spacing varies - see plan for reference)	**2.5m**
5	Swale (pedestrian crossings across it are subject to detail design - see plan)	**Min. 5m**
6	Tree offset from building facade	**Min. 5m**
7	Tree offset from kerb edge	**Min. 1.2m**
8	Hedgerows zone (within plot curtilage, protected by covenants)	**1m**
9	Street lighting (to be designed in coordination with street trees)	**n/a**

*** Utilities to be located under footway
Note 1: Street trees illustrated after 25 years
Note 2: Trees to be planted in soft verges wherever possible. Alternatively, root-able soil volume above to be provided by suspended pavement system.

Fig. 6.27: Type 2B (swale on one side) - Typical illustrative section

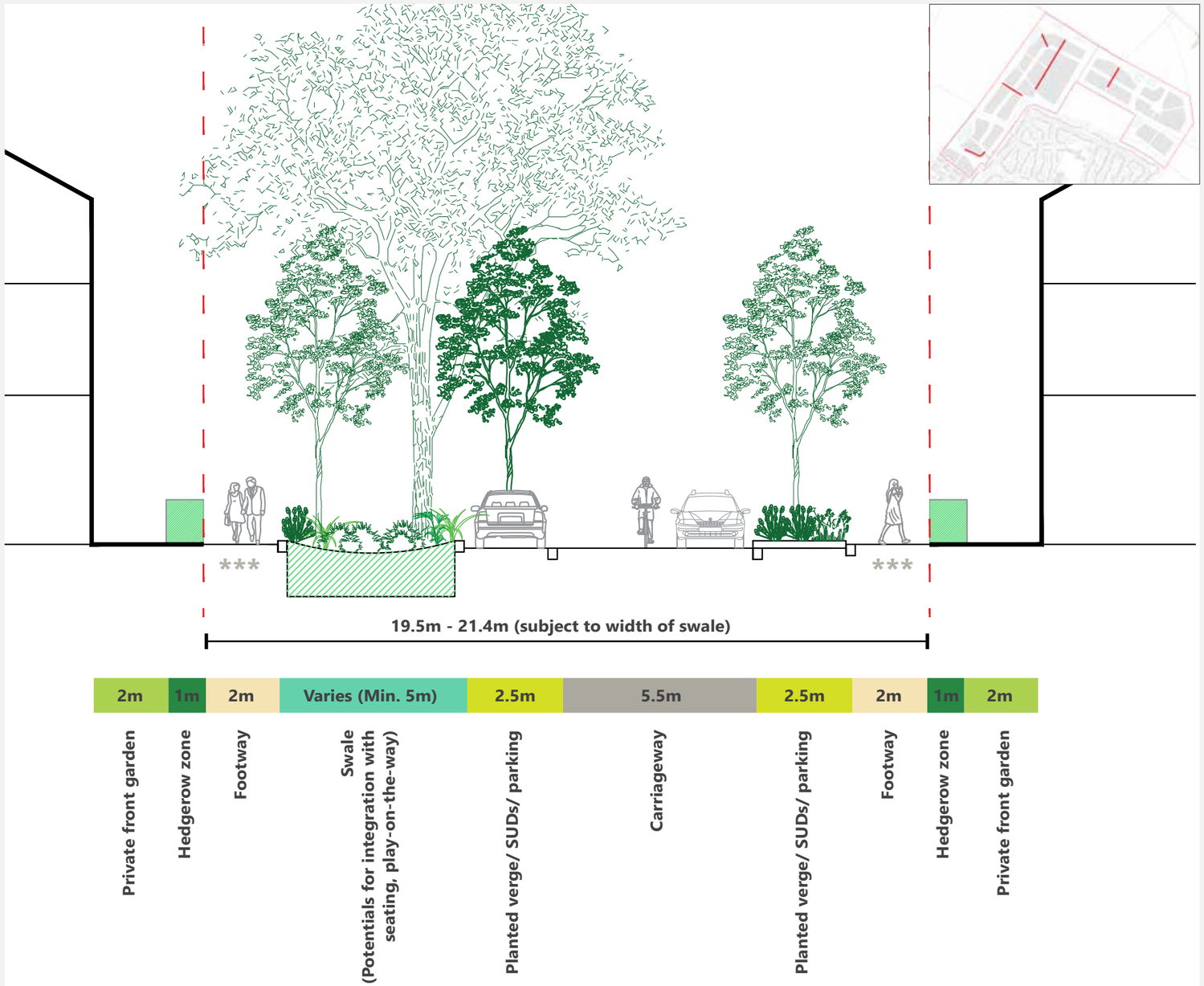
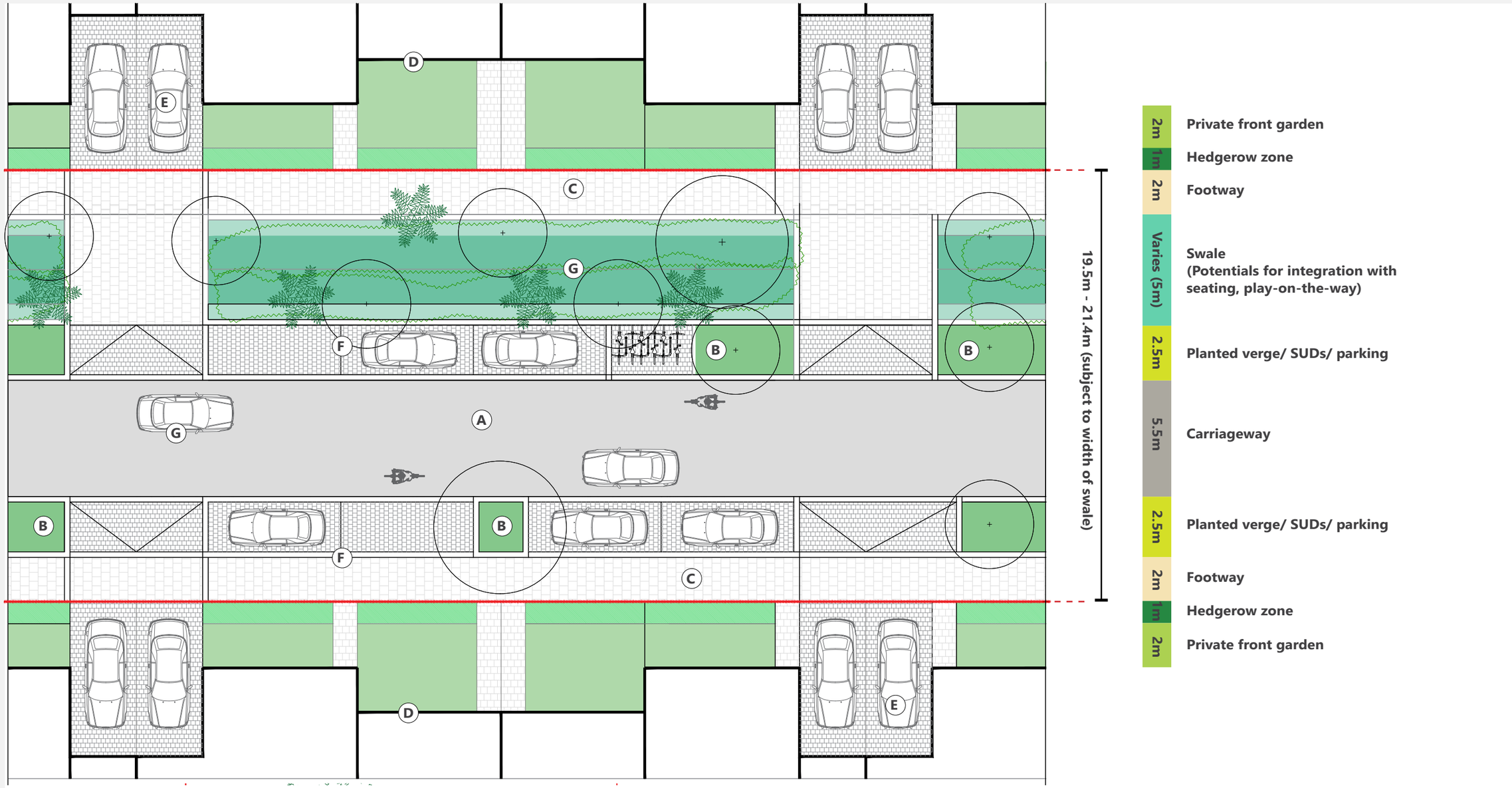


Fig. 6.28: Type 2B (swale on one side) - Typical illustrative plan



(A) **Carriageway - Cyclists are to share the carriageway. Primary surface material reflective of homezones; reduced kerb heights.**

(B) **Structured planting integrated at varied intervals between parking and on-plot access and additional planting along swale**

(C) **Footways - Permeable surface material or block paving to differentiate from carriageway.**

(D) **A largely continuous building frontage with strong enclosure utilising soft hedgerow boundaries to the plot boundaries.**

(E) **On-plot parking is positioned at well-spaced intervals to ensure the dominance of the building line and its visual continuity to secure an attractive streetscape along the primary street.**

(F) **Street lights and EV charging points are to be designed in coordination with street trees early in the design process.**

(G) **Width of swale can vary, subject to discussions with the Local Lead Flooding Authority. Pedestrian crossings across swale is subject to detail design. Opportunities for seating, socialisation and play-on-the-way will be explored in the next stages.**

Type 2 - Secondary street - Precedents

Fig. 6.29: Upton, Northamptonshire: Local streets with swales fronted by housing, example for LG1's swale streets. Source: Peter Neal

Fig. 6.30: Upton, Northamptonshire: Tree-lined and planted swale streets for biodiversity, example for LG1's swale street. Source: Peter Neal

Fig. 6.31: Eddington, Cambridge: A SuDS Swale feature located along the side of a street, Eddington, Cambridge. Source: Peter Neal

Fig. 6.32: Anstelveen, Amsterdam: Shared streets create a desirable neighbourhoods for families with kids, example for LG1's local streets. Source: EcoResponsive Environments

Fig. 6.33: Marmalade Lane, Cambridge: Streets as social spaces with opporunities for play, example for LG1's local streets. Source: TOWN

Type 3 - Tertiary Street

6.42 These tertiary streets are edge streets running along the proposed peripheral landscape buffer interfacing with the countryside and/or existing shelterbelts adjacent to Grange Estate. They function as HomeZones with a rural and informal character. The illustrative typical section (Fig. 6.34) and plan (Fig. 6.35, overleaf) with key dimensions tabulated below provides guidance on how this typology can balance a wide range of functions (Fig. 6.38-6.43).

1	Carriageway (varies in width)	**3.7-7.5m**
2	Cycling provision (in carriageway)	**n/a**
3	Footway (flushed kerb and integrated with carriageway)	**2.0m**
4	Planted verge/ parking (tree spacing varies - see plan for reference)	**2.5m**
5	Tree offset from building facade (varies)	**Min 4m**
6	Tree offset from kerb edge	**n/a**
7	Hedgerows zone (within plot curtilage, protected by covenants)	**1m**
8	Street lighting (to be designed in coordination with street trees)	**n/a**
9	Traffic calming buildout zone (varies - see plan for reference, must maintain carriageway of 3.7m)	**Max 3.8m**

*** Utilities to be located under footway
Note 1: Street trees illustrated after 25 years
Note 2: Trees to be planted in soft verges wherever possible. Alternatively, root-able soil volume above to be provided by suspended pavement system.

Fig. 6.34: Type 3 - Typical illustrative section

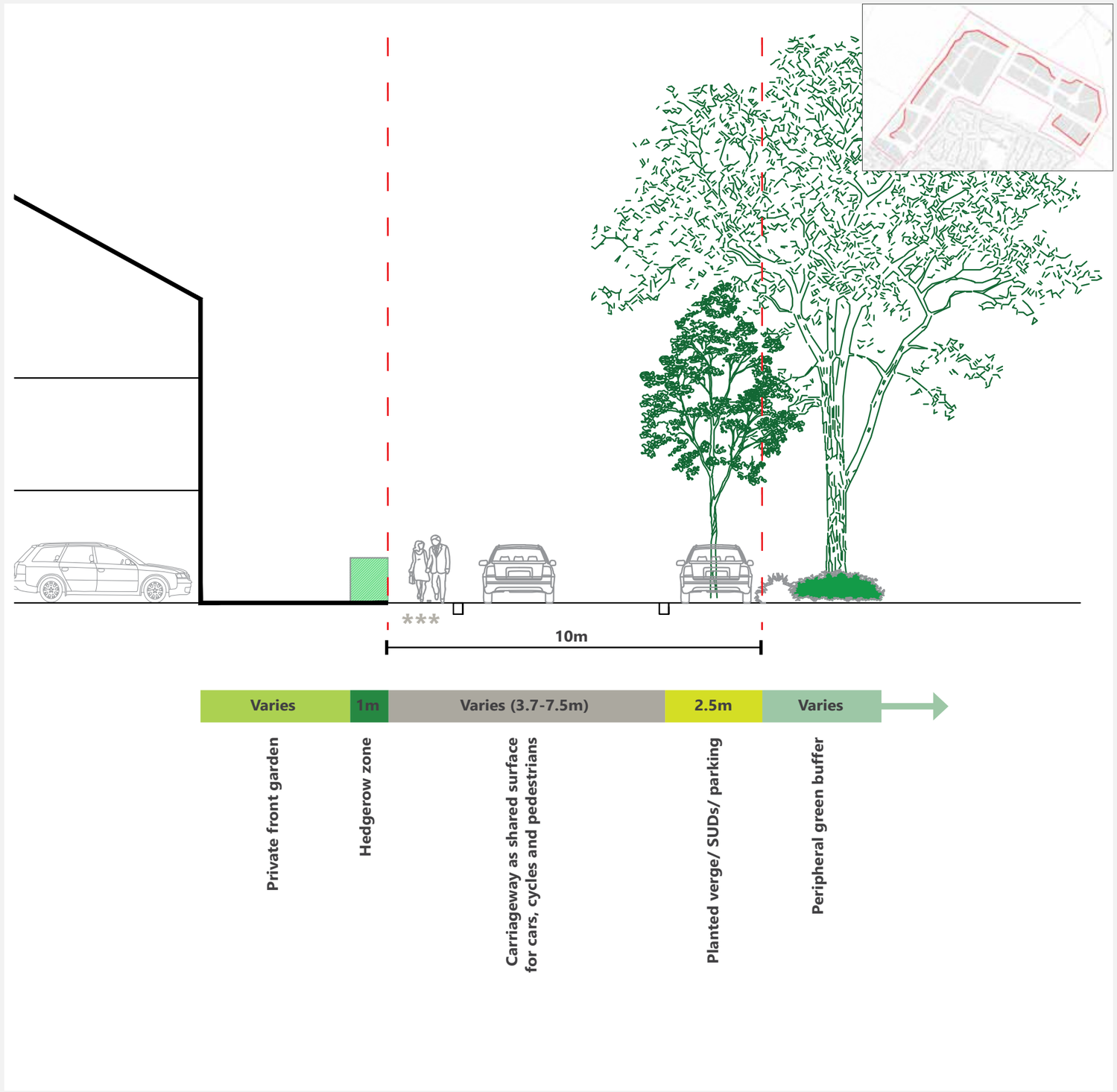
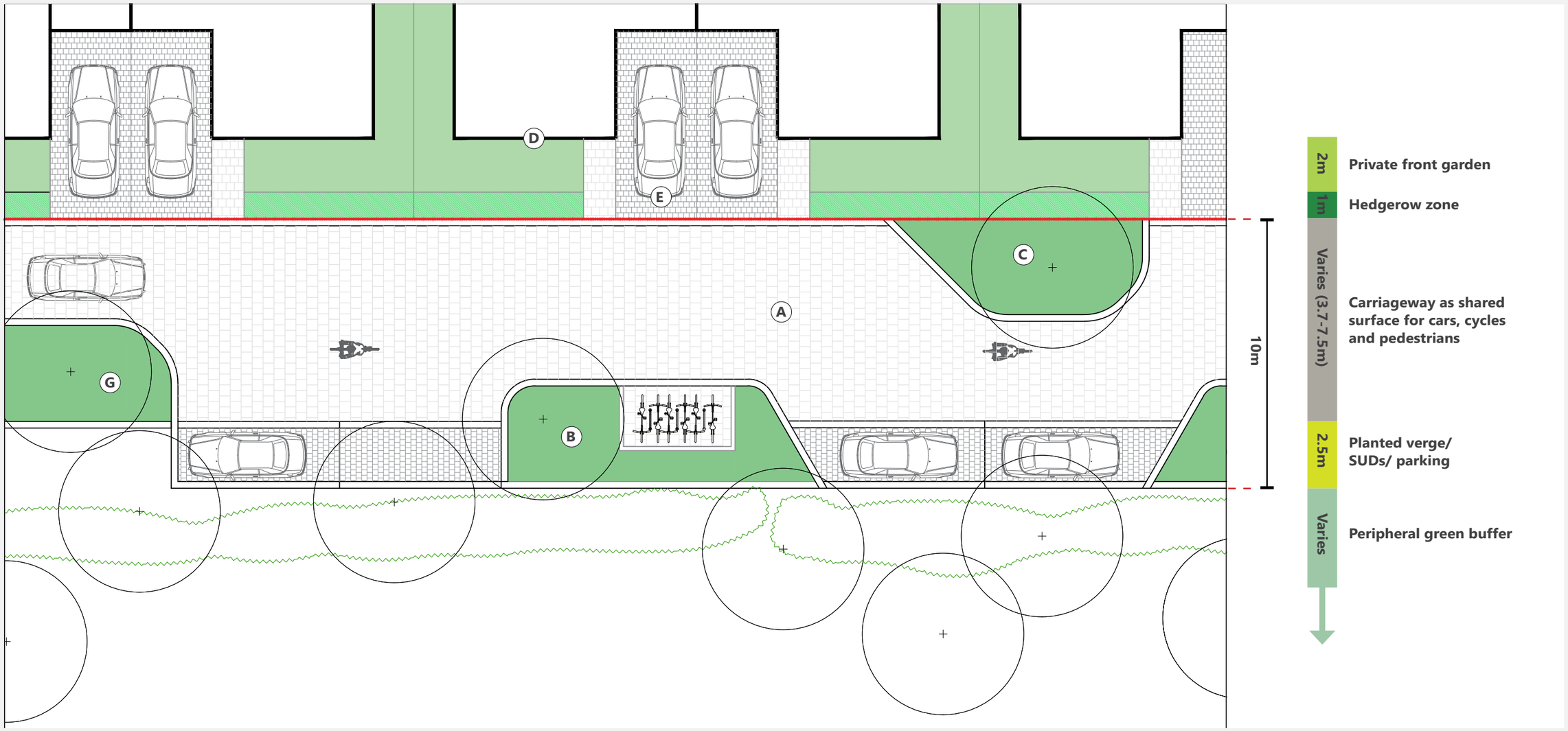


Fig. 6.35: Type 3 - Typical illustrative plan



A Carriageway - Proposed as a shared surface (kerb-free) for cars, cycles and pedestrians. Variation in overall width adds variety and informality to the street scene. Permeable surface material or block paving, subject to detail design.

B Structured planting integrated at varied intervals between parking and on-plot access.

C Build-outs for traffic calming can also provide spaces for cycle parking, SUDs, social seating and/or play.

D A largely continuous building frontage with strong enclosure utilising soft hedgerow boundaries to the plot boundaries.

E On-plot parking is positioned at well-spaced intervals and partly recessed to ensure the dominance of the building line and its visual continuity and to secure an attractive streetscape along the primary street.

F Street lights and EV charging points are to be designed in coordination with street trees early in the design process.

G Consideration will be given to including planting, trees or raised verges to prevent vehicles parking on verges in the next design stages

H On-plot parking will likely be the main parking typology for tertiary streets supplemented by on-street parking. However, consideration will be given to the appropriateness of innovative communal approaches to car parking e.g. car barns with PV/ green roofs, in the next design stages.

Type 3A - Tertiery Street (along hedgerows)

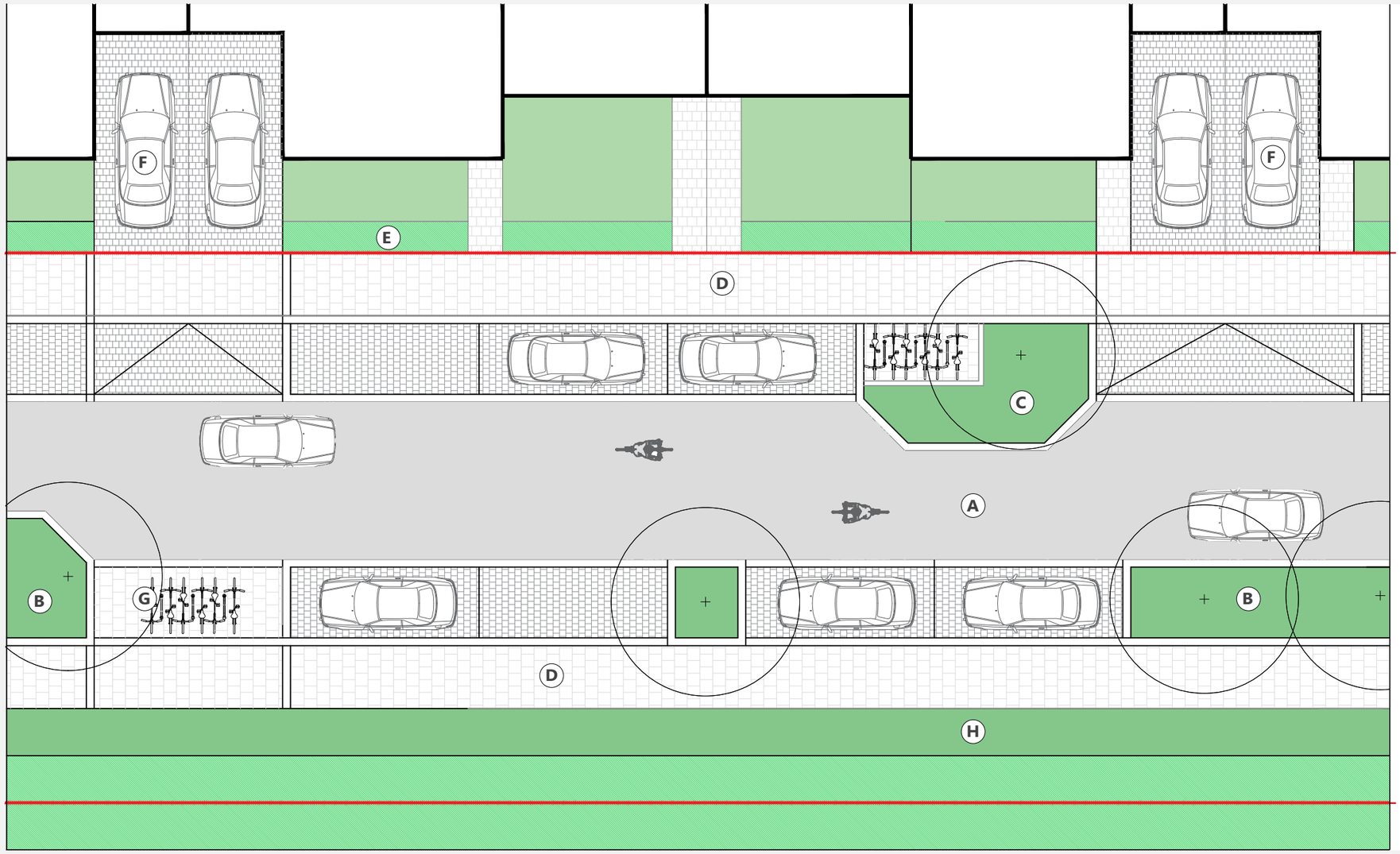
6.43 These secondary streets, run alongside existing hedgerows, act as internal distributors and are proposed to be HomeZones. They play a key role in the site's ecological networks. The illustrative typical section (Fig. 6.36) and plan (Fig. 6.37, overleaf) with key dimensions tabulated below provides guidance on how this typology can balance a wide range of functions.

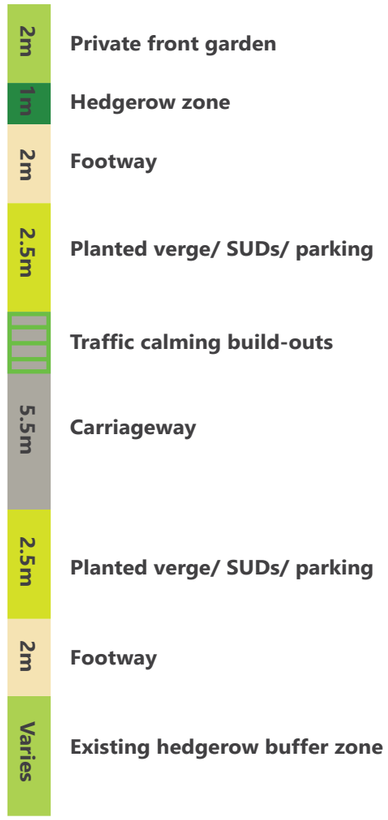
1	Carriageway (2 lanes)	**5.5m**
2	Cycling provision (in carriageway)	**n/a**
3	Footway Width (x2)	**2.0m**
4	Planted verge/ SUDs/ parking (tree spacing varies - see plan)	**2.5m**
5	Traffic calming buildout zone	**Max 1.8m**
6	Tree offset from building facade	**Min 5m**
7	Tree offset from kerb edge	**Min 1.2m**
8	Hedgerows zone (within plot curtilage, protected by covenants)	**1m**
9	Existing hedgerow buffer (either side from hedgerow centreline)	**Varies (Min 6m)**
10	Street lighting (to be designed in coordination with street trees and with sensitivity to hedgerow habitats)	**n/a**

*** Utilities to be located under footway
Note 1: Street trees illustrated after 25 years
Note 2: Trees to be planted in soft verges wherever possible. Alternatively, root-able soil volume above to be provided by suspended pavement system.

Fig. 6.36: Type 3A - Typical illustrative section

Fig. 6.37: Type 3A - Typical illustrative plan





A	**Carriageway - Localised narrowing permitted to accommodate street trees, contribute to traffic calming and add variety and informality to the street scene. Cyclists are to share the carriageway. Primary surface material macadam with reduced kerb heights.**
B	**Structured planting integrated at varied intervals between parking and on-plot access.**
C	**Build-outs for traffic calming can also provide spaces for cycle parking or social seating. See HCC Design guide part 4, Chapter 6.**
D	**Footways - Permeable surface material or block paving to differentiate from carriageway.**
E	**A largely continuous building frontage with strong enclosure utilising soft hedgerow boundaries to the plot boundaries.**
F	**On-plot parking are positioned at well-spaced intervals to ensure the dominance of the building line and its visual continuity to secure an attractive streetscape along the primary street.**
G	**Street lights and EV charging points are to be designed in coordination with street trees early in the design process.**
H	**Hedgerow buffer zones to be aligned with Hedgerow Regulations Act 1997 and local planning policy.**

Type 3 - Tertiary street - Precedents

Fig. 6.38: Trumpington Meadows, Cambridge: Houses fronting to countryside, example for LG1's peripheral edge. Source: Peter Neal

Fig. 6.39: Derwenthorpe, York: Informal character of street and landscape, example for LG1's edge streets. Source: Peter Neal

Fig. 6.40: Derwenthorpe, York: Picturesque streets framed by landscape, example for LG1's edge streets. Source: EcoResponsive Environments

Fig. 6.41: Upton, Northamptonshire: Warmer toned materials to exemplify rural character, example for edge streets. Source: Peter Neal

Fig. 6.42: Derwenthorpe, York: A landscaped street edge, example for LG1's interface with peripheral buffer. Source: EcoResponsive Environments

Fig. 6.43: Trumpington Meadows, Cambridge: Shared kerb-free streets fronting landscape, example for LG1's peripheral edge. Source: Peter Neal

Type 4 - Parkway approach road

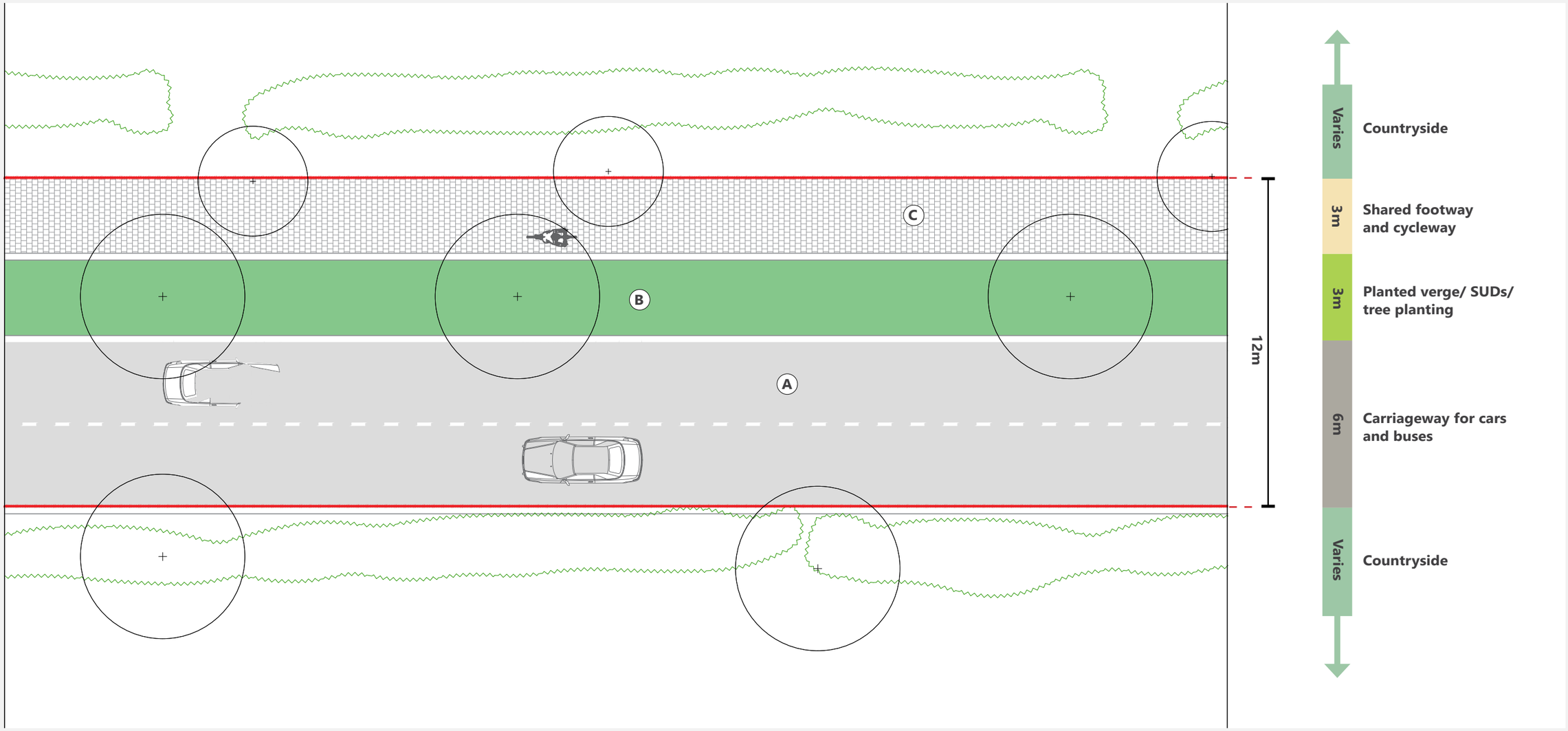
6.44 Learning from the original master planning of the Garden City, this street typology celebrates a parkway-inspired multi-modal northern access gateway into LG1 and wider Letchworth from Norton Road. The illustrative typical section (Fig. 6.44) and plan (Fig. 6.45, overleaf) with key dimensions tabulated below provides guidance on how this typology can balance a wide range of functions and modes of movement (Fig. 6.46-6.50).

1	Carriageway (2-way, supports bus and emergency access)	6m
2	Shared footway for pedestrian and cyclists	3.0m
3	Planted verge/ SUDs/ tree planting (tree spacing varies)	3.0m
4	Tree offset from kerb edge	Min 1.2m
5	Street lighting (to be designed in coordination with street trees)	n/a
6	Car and cycle parking provision (no parking space requirement assumed)	n/a

*** Utilities to be located under footway
Note 1: Street trees illustrated after 25 years
Note 2: Trees to be planted in soft verges wherever possible. Alternatively, root-able soil volume above to be provided by suspended pavement system.

Fig. 6.44: Type 4 - Typical illustrative section

Fig. 6.45: Type 4 - Typical illustrative plan



A **Carriageway - tarmac surface material, principally for vehicular traffic and bus route through the site.**

B **Green verges including trees, shrub planting, wildflower meadow and/or SUDs features integrated with street lighting.**

C **A shared pavement for pedestrians and cycles only on one side of the carriageway.**

Type 4 - Parkway approach - Precedents

Fig. 9.46: Minneapolis Parkway, US: Strong tree-lined access road with green verges defining spaces for vehicles and people. Source: Peter Neal

Fig. 9.47: Minneapolis Parkway, US: Strong tree-lined access road with green verges defining spaces for vehicles and people. Source: Peter Neal

Fig. 9.48: Cambourne, Cambridgeshire: Landscape integrated access route with soft spaces on either side of the road. Source: Peter Neal

Fig. 9.49: Letchworth: Generous landscaped verges, mature trees and informal planting along the route. Source: Peter Neal

Fig. 9.50: Letchworth: Generous landscaped verges, mature trees and informal planting along the route. Source: Peter Neal

Type 5 - Shared pedestrian and cyclist routes

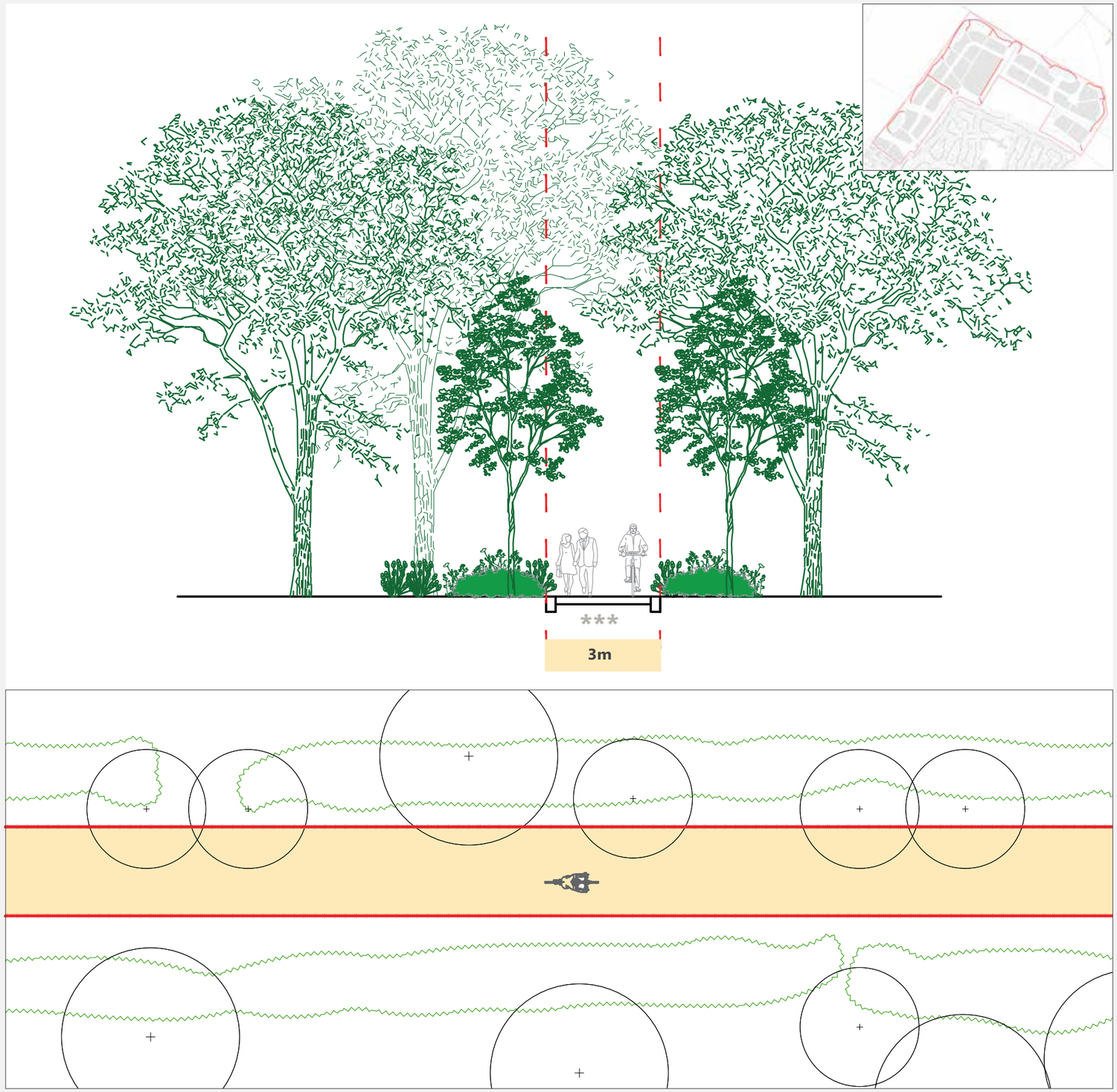
6.45 The character of active travel routes will vary across the masterplan as indicated in the framework plans (Fig. 6.1-6.3). The network will be a mix of primary (with 3m dedicated cycle path) and secondary active travel routes which are shared between pedestrians and cyclists. The shared routes form the majority of the proposed active travel network, whilst the primary routes are focused along key desire lines where flows will be highest.

6.46 An illustrative typical section and plan (Fig. 6.51) with key characteristics tabulated below are of shared active travel routes. This may need to be reviewed in areas of higher use or flow (to provide a 3m wide cycle track and 2m footway), where there may be an increased risk of conflict, aligned with Non-Motorised User (NMU) Guidance emerging HCC design guide.

1	Shared footway for pedestrian and cyclists	**3m**
2	Planted verge/ SUDs/ tree planting width alongside the shared footway (spacing varies subject to location)	**n/a**
3	Tree offset from kerb edge	**Min 1.2m**
4	Street lighting (to be designed in coordination with street trees)	**n/a**
5	Cycle parking provision (intermittent along adjacent streets)	**n/a**

*** Utilities to be located under footway
Note 1: Street trees illustrated after 25 years
Note 2: Trees to be planted in soft verges wherever possible. Alternatively, root-able soil volume above to be provided by suspended pavement system.

Fig. 6.51: (Above) Type 5 - Typical illustrative section, (Below) Typical illustrative plan



Type 5 - Pedestrian and cycle only paths - Precedents

Fig. 6.52: Milton Keynes: Paths lined with native grassland, example for LG1's peripheral trail, predominantly for pedestrians. Source: Peter Neal

Fig. 6.53: Trumpington Meadows, Cambridge: Housing fronts onto paths for safety, example for LG1's shared routes. Source: Peter Neal

Fig. 6.54: Cambourne, Cambridgeshire: Natural surveillance of paths by buildings, example for LG1's shared routes. Source: Peter Neal

Fig. 6.55: Eddington, Cambridge: Dedicated cycle lane, example for LG1's primary active travel routes. Source: Peter Neal

Fig. 6.56: Derwenthorpe, York: Materiality change from street to path emphasises rural quality, example for peripheral path. Source: Peter Neal

Fig. 6.57: Milton Keynes: Shared routes along green networks, example for routes along existing hedgerows/shelterbelts. Source: Peter Neal

7

Land use framework

7. Land use framework

Land use context

Introduction

7.1 The allocation of the LG1 site followed an exhaustive alternative site assessment by LGCHF, in response to NHC demonstrating a need for additional housing within the Local Plan period. This included consideration of land to the south, west and east of the existing urban area, as well as the LG1 site and its environs. It also included consideration of a densification of existing residential neighbourhood, particularly parts of the early master plan area that are of a lower density and re-development of employment areas.

7.2 Following this review, it was agreed that there would be some re-development of employment areas, particularly on its periphery, for housing, some regeneration incorporating new homes in the town centre and the allocation of some greenfield land, as part of a balanced approach, including the LG1 site, which is the largest of the allocation.

7.3 The decision to support the LG1 site was on the basis of the least harm in terms of nearby Conservation Areas and coalescence with adjoining settlements, as well as the potential to link into existing and enhanced multi-modal transport links and provide a quantum of development that would support investment into local services and facilities.

7.4 The site is situated approximately 2km north of Letchworth Garden City Rail Station (a key commuter link) and town centre (a destination for retail and wide range of community facilities) which can be accessed in approximately 25 minutes on foot and in approximately 10 minutes by bicycle.

7.5 Strategically, the train station and bus services provide easy access to London and to other more local centres of employment and entertainment from Letchworth. Supporting these longer distance journeys as well as local cycle trips to areas of employment and local facilities, the north-south National Cycle Network (Route 12) is a strategic link that runs through LG1 linking it to Letchworth town centre and railway station, via Grange Estate and Norton Common.

7.6 This is further supported by good access to the countryside and nearby settlements via a network of public right of ways. Additionally, both Letchworth Greenway and the Etonbury Green Wheel give LG1 access to the multiple leisure and recreational destination and nature reserves within the wider context.

7.7 More locally, the closest neighbourhood-level local centre is located in the Grange Estate at Pelican Way. This can be accessed in approximately 15min walk from the site.

Policy context

7.8 In relation to land use, Policy SP15 of the North Hertfordshire Local Plan (2011-2031) outlines that the LG1 development proposals should provide the following planning and masterplanning requirements:

- Provision of upto 900 homes, with 40% affordable housing.
- An appropriate education solution which delivers a new 2FE primary school on-site.
- Neighbourhood-level retail and community facilities providing around 900m2 (net) of retail and food and beverage floorspace and a GP surgery.
- At least 9 serviced plots for self-build development.
- Provision of an appropriate site for a care home for older people in Use Class C2 in accordance with the locational criteria in Policy HS4 subject to up-to-date assessment of likely future needs and existing supply.

Proposed land use framework

Overview

7.9 The proposed land use framework (Fig. 7.1, overleaf) demonstrates how the LG1 development would not only address the Local Plan requirements, but also, flexibly respond to the emerging context of the Grange Recreation Ground enhancements, possible regeneration within Grange Estate and delivery of the primary school.

Amount and distribution

7.10 The proposed land use amount and distribution are set out in the development framework plan (Fig. 7.2). The net developable area is approx. 24 ha including residential and local centre uses. This excludes structural green space (approx. 17ha) aligned with the Fields In Trust Standards of open space provision for LG1 (see Section 4.0 for details), the primary street and the school site (2.1ha, aligned with HCC requirements).

7.11 Upon discussions with NHC, HCC and wider stakeholders including head teachers of local schools within Grange Estate on available capacity, the school site within the LG1 strategic masterplan is designated as a ‘reserve site’. The strategic masterplanning process has considered the adaptability of the ‘reserve’ school site for residential use as part of the strategic masterplanning process, in the scenario, that the school is not required to come forward. Meanwhile uses for the ‘reserve’ school site include consideration of a training and apprenticeship centre to facilitate local upskilling and

Fig. 7.1: Land use framework plan

Key

	Site boundary
	Attenuation basins (SUDs)
	Public parks and gardens (3.269Ha)
	Amenity green space (3.131Ha)
	Natural and semi natural (8.373Ha)
	Allotments (0.656Ha)
	Equipped play areas (LEAPs) (0.54Ha)
	Mixed use: Neighbourhood-level facilities (0.09Ha)
	Residential (23.511Ha)
	'Reserve' 2FE primary school site (need and timeline for delivery to be confirmed by HCC)
	Childcare facility
	Car free zone for school along the enhanced Greenway linear park
	Potential new north-south link through the Grange Rec to be confirmed by NHC
	New south-facing public square along Rec's northern boundary
	Opportunity for a cafe spilling out over new public square aligned with the new N-S link through Rec
	Mobility hub adjacent to the school
	Neighbourhood centre/ Community hub
	50-60 unit senior living scheme

Fig. 7.2: Development area framework plan

Key

	Site boundary
	Net developable area (excludes structural green space, primary roadway and school site
	Structural green space
	'Reserve' 2FE primary school site

employment relating to the phased delivery of the site and opportunities for productive and edible landscapes. Meanwhile uses will be temporary in nature aligned with the phasing of the development. This is to be further discussed in coordination with NHC, HCC, local stakeholders and institutions, where possible, throughout the project's life-cycle.

7.12 The residential land use for LG1 will include 40% affordable (refer to Section 11.0 for details on housing needs and mix), a total of at least 9 custom-build plots and the consideration of a 50-60 unit scheme for independent senior living in the 'heart of the development' in response to local demand (refer Section 11.0). Aligned with LGCHF's adopted vision, housing innovation will be showcased by part of the site being utilised to highlight different construction and design methods and tenures, including self-build and community housing within a designated part of the development. This will in part contribute to the affordable allocation.

7.13 The distribution of housing within LG1 will create mixed and balanced communities. Housing will include a range of house types and sizes, with the affordable allocation being led by NHC's housing team, which will include a proportion of single person and small households to meet local need. It will provide active frontage to streets and public open spaces with frequent front doors, support adequate provision of residential amenity with inclusive access and include careful considerations of edges and interfaces where existing Grange Estate properties back onto LG1's site boundary. This is outlined further in Section 8.0.

A vibrant neighbourhood-level local centre

7.14 LG1 will be supported by a vibrant neighbourhood hub of co-located facilities as the heart of the community, capitalising on the site's most accessible location, in relation to its wider context, in particular, the Grange Estate. Aligned with Local Plan requirements, it will include neighbourhood-level retail, community amenities, a mobility hub and inter-generational space to meet the needs of all ages anchored around new high-quality landscape-integrated people-centric public realm. This also includes a new 'south-facing sunny square' along the northern edge of the Rec, contributing towards the integration of new and existing residents and cultivation of a shared sense of community. This new open space is envisaged to have good solar exposure due to additional eastern and western open aspect. The treeline to the south will provide partial shading throughout the day. Cumulatively, this presents good microclimate opportunities for the space to be use for 'dwell' activities. Optimising the social and environmental performance of this space will need further technical analysis in the next stages to support a vibrant local centre.

7.15 LG1's neighbourhood hub is represented as a hatched zone within the framework plan. Although the location of it's key components are indicatively highlighted (Fig. 7.1), more certainty is required on three key aspects to further inform it's configuration. These are outlined below.

7.16 Firstly, the new north-south shared pedestrian and cycle pathway through the Grange Recreation Ground, as explored in a joint workshop in March 2024, led by NHC. This link will facilitate easy access between the LG1 local centre, the Grange Estate and wider Letchworth along natural movement desire lines, supported by wayfinding at strategic locations. It directly impacts the proposed location of the new south-facing square. For details, refer to the 'Workshop Summary Report' circulated by NHC on 27th March 2024. Further design development of the Grange Recreation Ground will be led by NHC and should respond to the community engagement undertaken so far, led by LGCHF, related to the enhancements on the Rec as part of the strategic masterplanning stage. See SCI (Appendix C/ May 2024, p.73-77) for further details.

7.17 Secondly, delivery of the 2FE primary school site. Should there be a demonstrable need for a new school, it will be located within the strategic masterplan to ensure easy accessibility from not only within LG1, but also the wider Grange Estate, aligned with the North Hertfordshire Local Plan (2011-2031). The proposed sustainable mobility hub is currently located in proximity to the 'reserve' school site whilst being adjacent to the proposed enhanced Greenway Linear Park and the primary street. In the scenario that the school is not required on LG1, the location of the mobility hub will need to be reviewed.

7.18 Thirdly, an understanding of possible future regeneration proposals within the Grange Estate, in particular related to the existing local facilities and amenities. This is to ensure that the LG1 proposals complements and strengthens the existing local center offer at the Grange Estate.

7.19 To facilitate LG1's neighbourhood hub as a focus for day-to-day 'needs', it will also include consideration of uses such as café, bus stop, shops, other community amenities, a 50-60 units scheme for senior living and flexible multi-functional space to support current and future needs (e.g. small businesses, flexible workspaces, productive landscape opportunities, cultural events and public services such as healthcare as included in the Local Plan), supporting the principle of a sustainable, intergenerational and resilient neighbourhood. This draws from the feedback received from NHC/Hyas, the Quality Review Panel (January 2024), community and stakeholder consultation undertaken to shape and inform LG1's strategic masterplan to date and current market trends in Letchworth. Please refer to the Statement of Community Involvement (April 2024/ Appendix C) for details.

7.20 LG1's neighbourhood hub and its evolution over time will also include consideration of the site's phased delivery, with each phase functioning as a place in its own right to support a high-quality sustainable extension to Letchworth. Refer to Section 12.0, for details on the phasing strategy.

8

Urban design framework

8. Urban design framework

Urban design context

Introduction

8.1 The urban design context for LG1's strategic masterplan is framed by the existing adjacencies to Grange Estate, surrounding interface with countryside, proximities to the historic Norton Village, links to settlements within the wider context (Fairfield, Baldock, Stotfold and Arlesey) and most importantly the planning and design principles that underpin the structure and layout of wider Letchworth: world's first Garden City.

Urban design baseline study

8.2 A comprehensive Urban Design Analysis, Townscape Assessment and Characterisation Study (February 2024 Appendix B) has been prepared to provide a holistic understanding of LG1 in relation to its surrounding context, to inform the development of its Strategic Masterplan Framework. Drawing from other relevant baseline reports, it includes a detailed analysis of the site's historical evolution, and an integrated review of its landscape structure and environmental character, transport infrastructure, land use and urban structure, built form and architecture.

8.3 The study focuses on seeking lessons for LG1 in relation to the overall urban structure and layout, block configurations, plot types and building disposition, housing typologies, massing variations, streetscape character and key architectural characteristics to inform the development of the strategic masterplan. It would also inform the development of character areas and design principles in the next project stages, as a contemporary interpretation of the Garden City character.

8.4 The study underscores the importance of embracing a landscape-led approach to LG1's strategic masterplanning process rooted in an in-depth understanding of the site's landscape assets. It highlights the key Garden City principles emphasised in the Local Plan policy (SP15 and Appendix 5/ NHC, 2022) such as the unifying role of landscape within urban layouts, vistas, accents, building groupings, plot boundary treatments and key architectural elements that provide Letchworth its historical and townscape continuity (Fig. 8.1-8.5) for the creative reinterpretation of the original Garden City principles for 21st century.

8.5 It identifies the need to maximise links and 'stitch the site' with the Grange Estate and wider Letchworth to facilitate an integrated approach to masterplanning and support easy access to local facilities using active travel, achieve legible and active street scenes and overall resilience of the LG1 development through urban form. It also highlights the importance of homes having front doors facing the countryside and public realm for active and safe interfaces with streets and open spaces.

8.6 Lastly, the historical analysis of Letchworth's architectural DNA focuses on key spatial characteristics– asymmetrical forms, corner building typologies, low slung roofs, entrance porches, arrangement of window types and their groupings etc.. These can be used to inform LG1's built form and architecture and achieve the multi-scale richness, providing a modern interpretation of the original 'street pictures' first developed by the Raymond Unwin, the original architect of the Garden City.

Proposed urban design framework

Overview

8.7 This section should be read in conjunction with other framework plans included in this report as listed below:

- Section 4.0 - Landscape framework
- Section 5.0 - Habitat and biodiversity framework
- Section 6.0 - Movement framework
- Section 7.0 - Land use framework

8.8 Aligned with the proposed vision for LG1 (refer section 3.0), the urban design framework (Fig. 8.6) demonstrates how LG1's strategic masterplan is underpinned by key Garden City layout principles to inform the creation of a contextually-responsive, visually varied yet coherent character gradient: from town to countryside. This will include a blend of formal and informal spaces within the masterplan, created through variations in massing and building heights, densities, built form and open space configurations, rooted in an understanding of Letchworth's landscape and townscape character.

Development blocks

8.9 The urban design framework proposes perimeter block development across the masterplan layout with built form contributing to active frontage of streets and public space through frequent front doors and active habitable rooms (living room, dining rooms and kitchens). This will support safety of public outdoor spaces by maximising natural surveillance onto LG1's street and key public space networks (including but not limited to the Grange Recreation Ground, the enhanced Greenway linear park and the peripheral green belt).

Fig. 8.1: Letchworth: Focal building facade create accents, terminating vistas along streets. Source: EcoResponsive Environments

Fig. 8.2: Letchworth: Strong tree-lined streets are a distinctive feature of the townscape. Source: Peter Neal

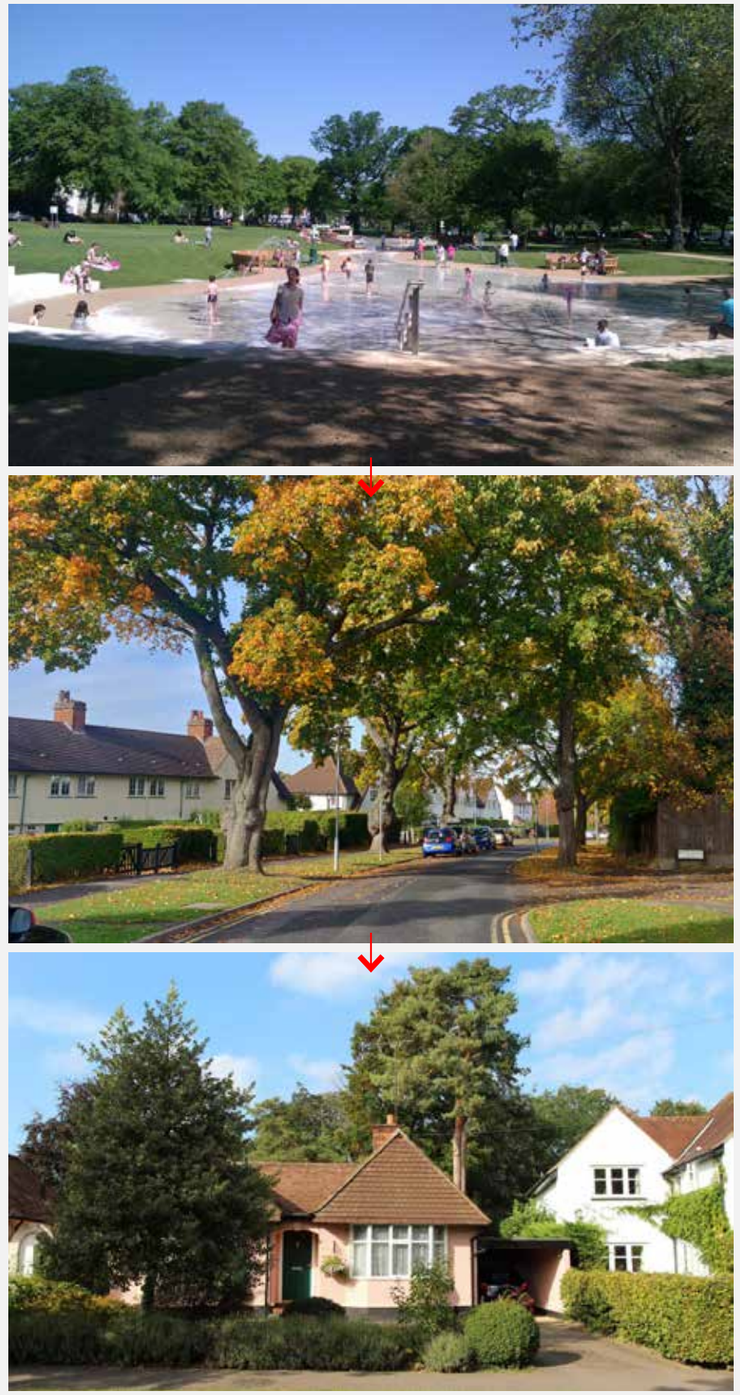


Fig. 8.5: Integration of landscape across multiple scales (green infrastructure networks, streets and plots), Letchworth.

Fig. 8.3: Letchworth: Tree-lined streets with verges and soft boundary treatments at Grange Estate. Source: EcoResponsive Environments

Fig. 8.4: Letchworth: Picturesque building groupings and hedged plot boundaries at Westholm. Source: EcoResponsive Environments

Fig. 8.6: Urban design framework plan

Key

	Site boundary
	Existing trees, hedges and vegetation
	Attenuation basin (SUDs)
	Green open space
	Development blocks
	'Reserve' 2FE primary school site
	Primary access
	Primary frontage
	Landmark buildings
	Marker buildings
	Key groupings
	Primary views
	Secondary views
	Opportunities to frame views from the development using landscape
	Primary public open space
	Secondary public open space
	Focal point
	Activity hotspots / pop-up event space
	Primary gateway
	National Cycle Network (NCN) 12

8.10 Corner plots, in particular, will relate to the street in terms of active frontage, natural surveillance and contribute to enhancing local legibility and wayfinding through architectural characteristics, aligned with Garden City's principles. Combined with landscape-integrated multi-modal street typologies (see section 6.0), LG1's underlying layout will contribute as the cornerstone of a sustainable landscape-led extension to Letchworth, setting robust foundations for a modern-day Garden City.

8.11 There is also an opportunity to explore the viability of secure communal spaces within residential and/or mix-use development blocks as part of the next design development stages. Studies show a range of examples in Letchworth where secure communal spaces are presently used for a diverse range of uses, opening up opportunities for allotments and local food production, outdoor learning and sports, doorstep play and socialisation.

Public open spaces

8.12 The proposed open space network protects, strengthens and enhances the setting of LG1's existing landscape structure and key movement desire lines in relation to its wider context, in particular, along main activity corridors such as the Greenway, NCN 12, Etonbury Green Wheel and the existing Rec.

8.13 LG1's primary open spaces as highlighted in Fig. 8.6 are integrated as part of the site's wider green infrastructure network and strategically located to support wayfinding and orientation, integrate mature trees within the proposed layout, create opportunities for interaction and gathering along natural movement routes and provide 'breathing space'. For example, the open space adjacent to the south western corner of the existing Grange Recreation Ground located at a critical junction of busy active travel routes (The Greenway/ NCN12/ Etonbury Green Wheel) and the Rec can also be defined as an extension to the linear park with capacity to accommodate additional play facilities should these be required. It draws on the characteristics of existing public green spaces in Letchworth bounded by housing e.g. Westholm, Eastholm, Lammas Way. The south-facing square is aligned with the opportunity for a new north-south link through the Rec, and the eastern open space defines an arrival square from Norton Road access and the peripheral landscape.

8.14 The proposed secondary open spaces mark key nodes, intersections and gateway points with opportunities for framed views and drawing in the countryside deeper into the masterplan layout. These act as focal points and are distributed throughout the development to aid legibility and reinforce key spaces, junctions and nodal points. This will contribute in creating a hierarchy of open spaces within this 'edge of town' site to support picturesque transitions from town to country.

8.15 Proposed play areas within the public open space and green infrastructure network are located to facilitate equitable access to residential amenity, for example, two of the three proposed Local Equipped Areas of Play (LEAPs) are located in proximity to the Grange Estate for easy access by existing and new residents.

8.16 Development blocks with active frontage onto open spaces will ensure its safe use and encourage life in public space, whilst providing visual amenity for the surrounding homes. An inclusive and pedestrian priority design approach with use of high-quality materials will further contribute to its attractive setting.

8.17 The wider peripheral landscape buffer around LG1 and the north-south alignment of street starting from the new square along Rec's northern edge upto the Greenway framed by the double hedgerow, also provides opportunities for an improved understanding of cultural assets discovered from archaeological investigations through interpretation using art and heritage trails anchored around new public realm.

8.18 At the closest focus, the next design development stages will distinguish particular identities of LG1's individual streets and open spaces through further development of the character areas, design principles and a joint design code with the appointed development partner. This will include a wide range of place-making elements including the relationship with key building elements (height, on-plot setbacks, boundary treatment etc..) and landscape species.

Edges and interfaces

8.19 To facilitate the integration of existing and new residents, it is important for LG1's edges and interfaces with the Grange Estate and the Grange Recreation Ground to act as seams and not barriers. This has three implications for LG1's strategic masterplan.

8.20 Firstly, the strategic masterplan framework proposes relevant activity spaces around the Grange Rec fronted by built form. This includes the proposed enhanced Greenway Linear Park along the Rec's western edge, a new south-facing public space and the east-west primary active travel route along the Rec's northern edge, and a more naturalistic and recreational setting of an attenuation basin and LEAP along the Rec's eastern edge. Cumulatively, this provides the setting for a wide range of activities along natural movement desire lines and reinforces the focal role of the Grange Recreation Ground as a Central Park for North Letchworth. This will contribute in cultivating a shared sense of community and is required to be supported by opportunities for enhanced and improved facilities and amenities within the Rec itself, as currently being explored and led by NHC.

8.21 Secondly, the southern and western interface where Grange Estate properties back onto LG1 are characterised by existing mature landscape and native habitat including grassland, hedgerows, scrubland, shelterbelts and mature trees. These will be retained and enhanced where possible, forming part of the wider green infrastructure network and fronted on by new housing. These interfaces form

important privacy thresholds between the existing Grange Estate and LG1 development. New housing will therefore be sensitive and respectful of existing residents' privacy needs, in terms of its form and layout, using existing landscape features as a positive buffer for privacy screening between existing and new homes.

8.22 Thirdly, new homes will front onto the countryside accessed through tertiary streets providing 'eyes on the street' and natural surveillance onto the peripheral linear buffer. See Section 9.0 on character areas for further detail.

Nodes and gateways

8.23 The masterplan layout establishes three key gateways to/from LG1 into the wider context. Firstly, the primary vehicular access route from Norton Road, secondly the link from Western Way and thirdly the potential new north-south link through the Grange Rec integrating the new neighbourhood into Grange Estate. A hierarchy of nodes along LG1's primary street and public open space network link these gateways for easy way-finding and legibility. The Norton Road and Western Way gateways include vehicular access, whilst the potential link through the Rec will be for pedestrians and cyclists only.

8.24 Learning from the original master planning of the Garden City, the Norton Road gateway celebrates a parkway-inspired multi-modal northern entrance into LG1 and wider Letchworth, whilst the link from Western Way to LG1, should be designed to maximise the sense of integration with the Grange estate: the masterplan should seek a seamless transition between them through built form and landscape defining this threshold.

Framed views and vistas

8.25 The masterplan layout frames key views towards the countryside and prominent landmarks (west towards Fairfield, and east towards St. Nicolas Church in Norton) to support legibility and locally-distinctive townscapes. These are directed along key streets and public open spaces. Where linear routes establish a vista within the layout, it ends either in a defined public space, a visual building marker and key frontage or framed by landscape features along LG1's peripheral buffer. This buffer also serves to screen sensitive views towards the site.

Building heights, landmarks and frontages

8.26 The character and density of built form will vary across the masterplan (Fig. 8.9), from being strong and fairly continuous along the primary and secondary streets to more informal and looser along tertiary streets. Buildings heights will generally be upto 3 storeys, stepping up to 5 storeys at key nodes, with height variance where taller buildings are included. See Section 9.0 for details.

8.27 LG1's built form will use this variation in character to maximise legibility, with key community facilities foregrounded as landmarks of appropriate relative significance and street intersections given memorability through corner buildings designed as minor landmarks. All buildings located at junctions will need to be designed to turn the corner appropriately, through use of building form and architectural features including roof profiles, entrances and carefully considered fenestration to add visual interest and diversity to an otherwise fairly coherent streetscape, in particular, along the main avenue.

8.28 This is reflected in the framework plan (Fig. 8.6) as a hierarchy of frontages: primary frontage along the avenue, secondary marker buildings in corners, potentials for landmark building around LG1's local centre and building groupings around key nodes. Landmark buildings will vary in height, density, form and/or materials from the surrounding development to create a clear focal point.

8.29 Learning from Garden City principles, key nodes and open spaces present the opportunity to be framed by building groupings as visual markers reflecting consistent building line, order, repetition and rhythm and high degree of enclosure. This may also include consideration of set piece symmetrical arrangements, as an integrated part of the overall townscape.

8.30 Cumulatively, these urban design elements (development blocks, open spaces, edges, nodes, gateways, views, landmarks and frontages) set a robust foundation for the creative reinterpretation of the original Garden City principles for 21st century.

Fig. 8.7: Trumpington Meadows, Cambridge: Vista to historic local landmark along streets, example for LG1's streets. Source: Peter Neal

Fig. 8.8: Buildings and hedges reinforcing the line of the roads at Pixmore Way, Letchworth. Source: EcoResponsive Environments

Fig. 8.9: Density and building heights framework plan

Key

	Site boundary
	Density zone 1 (approx. 30 dph)
	Density zone 2 (approx. 45 dph)
	Density zone 3 (approx. 70 dph)
	'Reserve' school site
	upto 4-5 storeys. Note: there will be variation in building heights even in zones marked for higher density housing. We envisage the taller sections at the end of the blocks forming corner features, rather than a single unbroken mass.
	upto 3 storeys
	2-2.5 storeys (remaining massing)

Urban design and masterplan layout - Precedents

Fig. 8.10: Hampstead Garden Suburb: Building groupings fronting open space, example for LG1's public spaces. Source: EcoResponsive Environments

Fig. 8.11: Derwenthorpe, York: Homes overlooking landscaped activity spaces, example for LG1's key open spaces. Source: Peter Neal

Fig. 8.12: Derwenthorpe, York: Mature trees integrated within masterplan layout, example for LG1's open spaces. Source: Peter Neal

Fig. 8.13: Alconbury Weald, Cambridgeshire: Outdoor areas for dwell activities, example for LG1's Greenway linear park. Source: Peter Neal

Fig. 8.14: Fairfield Park: Active frontage overlooking play areas, example for LG1's green open spaces. Source: EcoResponsive Environments

Fig. 8.15: Trumpington Meadows: Village green with residential fronts, example for open space south of the school. Source: Peter Neal

9

Character areas and design principles

9. Character areas and design principles

Overview

Area 1: Grange Rec/ Central Park

9.1 Focuses on the central role of the existing Grange Recreation Ground and its surrounding edges (within LG1) as a means to integrate existing and new residents: cultivating a shared sense of community. To this end, whilst the Rec itself is outside the LG1 boundary, it needs to be considered as an integrated part of the design development process through collaboration with NHC.

Area 2: Grange Meadows

9.2 Characterised by the presence of existing mature landscape and native habitat including grassland, hedgerows, scrubland, shelterbelts and mature trees, it interfaces between the LG1 site boundary and the existing back gardens of residential properties within the Grange Estate.

Area 3: The Avenue

9.3 With its strong approach to structural planting and prominent street trees, this area seeks to be the unifier of the masterplan, embodying key Garden City planning principles of vista, accent, closure and groupings.

Area 4: Countryside Periphery

9.4 Characterised by a predominantly suburban-rural character, it interfaces the countryside and the surrounding agricultural estate. Opportunities for framing views towards historic local landmarks are key.

Area 5: Parkway Approach

9.5 Learning from the original master planning of the Garden City, this area celebrates a parkway-inspired multi-modal northern access gateway into LG1 and wider Letchworth.

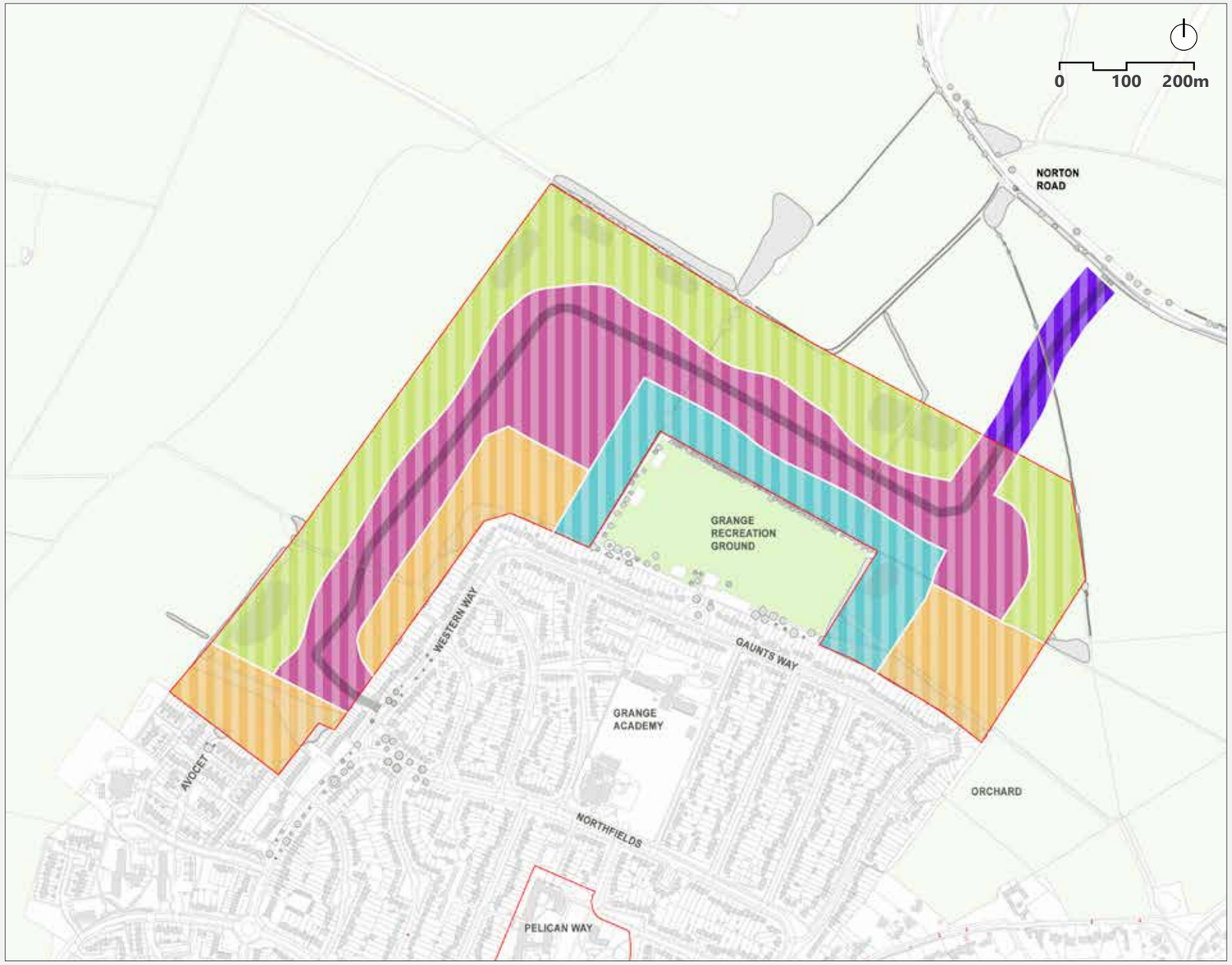


Fig. 9.1: Character area framework plan

	Area 1: Grange Rec/ Central Park		Area 2: Grange Meadows		Area 3: The Avenue
	Area 4: Countryside Periphery		Area 5: Parkway Approach		Site boundary

Variation in character areas

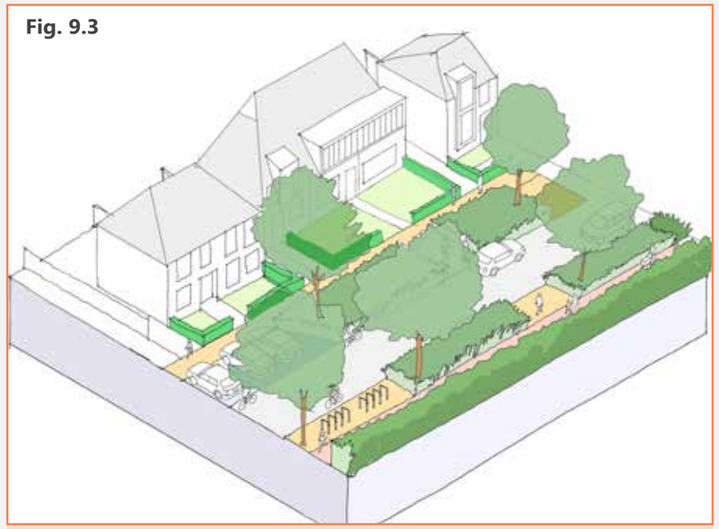
9.6 The character areas will vary in density (Fig. 8.9), massing, building heights and in its relationship with the wider landscape setting (Fig. 9.2-9.6).

Fig. 9.2

Area 1: Grange Rec/ Central Park

Net density: approx. 70 dph (see, Fig. 8.9, p.85).
Building Heights: 3-5 storeys

Fig. 9.3



Area 2: Grange Meadows

Net density: approx. 30 dph (see, Fig. 8.9, p.85).
Building height: 3-4 storeys

Fig. 9.4

Area 3: The Avenue

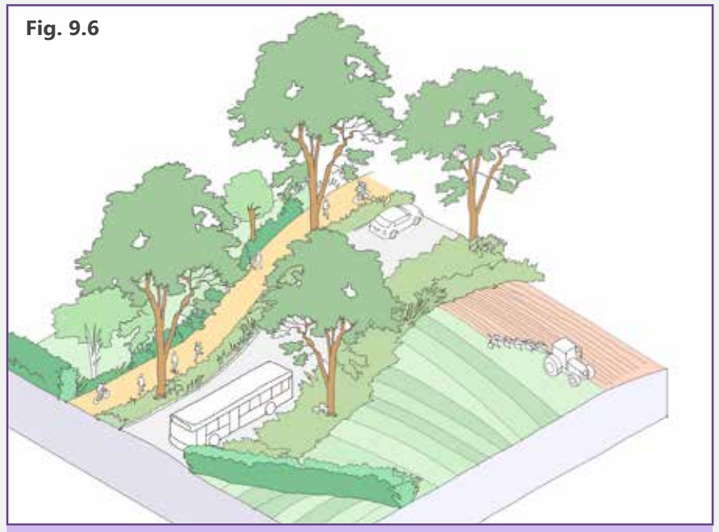
Net density: Generally approx. 45 dph and upto approx. 70 dph around the local centre (see, Fig. 8.9, p.85).
Building height: 3-5 storeys

Fig. 9.5

Area 4: Countryside Periphery

Net density: approx 30 dph (see, Fig. 8.9, p.85).
Building height: 2-2.5 storeys

Fig. 9.6



Area 5: Parkway Approach

Net development density: n/a
Building height: n/a

Note: Please read the information on net development density in conjunction with the 'density and building height' framework plan (Fig. 8.9, p.85).

Landscape as the unifier

9.7 As illustrated in the site-wide sections (Fig. 9.7-9.9), the mediation between character areas will be through picturesque townscape transitions: with gradual shifts in massing, and the overall landscape structure as the glue that knits the masterplan together across its phased delivery, where a mix of character areas might be delivered in the same phase.

Fig. 9.7: Section A-A

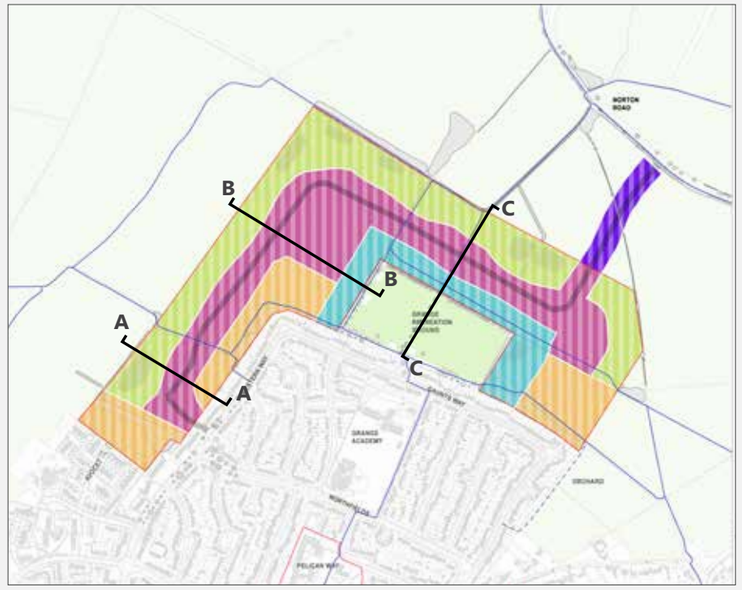


Fig. 9.8: Section B-B

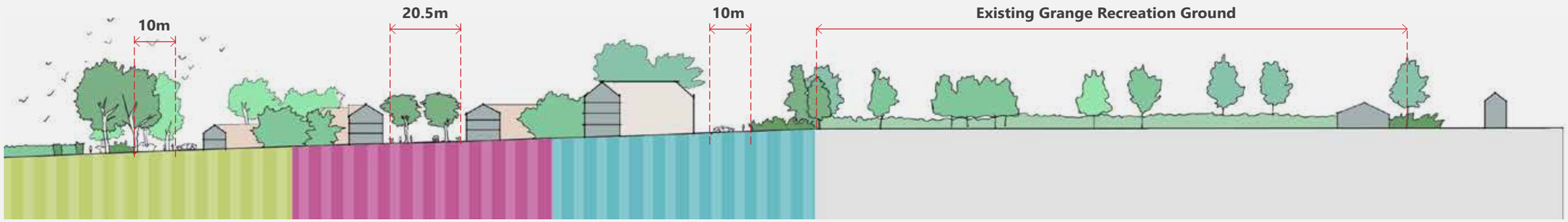


Fig. 9.9: Section C-C

Area 1: Grange Rec/ Central Park

Key informants and design principles

Landscape and open space

9.9 A series of activity focused spaces (to the north, west and east of the Rec) will form the seam between LG1, the Rec and wider Grange Estate. Each space will vary in character, whilst providing the space and aspect needed for the existing tree and hedgerows. The choice of tree species will complement the existing native planting and the role and function of each space.

9.10 On the north side, a more formal set of rectilinear spaces including a focal 'south-facing' square aligned with Rec's existing tree line and the potential north-south central link will create the setting for a strong built edge frontage.

9.11 On the west side, a generous corridor (approx. 20-25m on either side of existing hedgerow) will establish a Linear Park along the existing Greenway route with new planting to strengthen the existing tree and hedgerows, as well as providing seating, play and recreational facilities.

9.12 On the east side, a generous and wilder recreational space will form the seam to the residential edge behind. This will include a significant drainage feature as well as natural play spaces.

Density and building heights

9.13 Net development density: Approx. 70 dph (see density and building height framework plan, Fig. 8.9, p.85).

9.14 Building heights: Generally 3 storeys, stepping up to 5 storeys at key nodes.

Building form and character

9.15 All buildings will front onto the Rec and active travel routes, supporting active frontage to maximise natural surveillance.

9.16 The northern edge, in particular, should present a strong, active and picturesque building frontage and groupings in relation to the proposed public realm and open spaces, aligned with the Garden City town planning principles.

9.17 The western edge frontage is currently related to the 'reserve' school site, aligned with the car-free zone along the enhanced Greenway Linear Park. Should the reserved school site be adapted for residential development, the building frontage and housing typologies should maximise natural surveillance onto the Linear Park and the Grange Rec.

9.18 The eastern edge frontage should continue the strong framing of the open spaces. Housing typologies will focus on larger family dwellings (larger terrace grouping and semi-detached houses).

Transport

9.19 Primary active travel routes will run east-west to the north of the Rec (aligned with existing PRoW) and north-south to the west of the Rec (aligned with the existing Greenway). The existing pedestrian and cycle only route along the southern edge of the Rec (part of the Greenway) will be supported.

9.20 Following existing movement desire lines, a new north-south pedestrian-cycle link through the centre of the Rec connecting Grange Estate with LG1's neighbourhood centre and further north with the existing Greenway will be supported. It will align with the new 'sunny square' along the Rec's northern boundary, and be designed in relation to existing drainage sensitivities for this area.

Area 1: Grange Rec/ Central Park - Precedents

Fig. 9.10: Fairfield Park: Strong frontage overlooking a green park, example for Rec's northern edge. Source: EcoResponsive Environments

Fig. 9.11: Upton, Northampton: Higher density housing fronting a green park, example for northern edge. Source: Peter Neal

Fig. 9.12: Mill Road, Cambridge: Higher density terraced homes at 3 storeys, an example for northern edge. Source: Allies and Morrison

Fig. 9.13: Alconbury Weald, Cambridgeshire: Frontage along green route, example for Rec's western edge. Source: Peter Neal

Fig. 9.14: Alconbury Weald, Cambridgeshire: Buildings framing a tree-lined open space, example for eastern edge. Source: Allies and Morrison

Fig. 9.15: Zaanhof, Amsterdam: Strong building frontage with terraced housing onto recreational/play space, example for Rec's northern edge. Source: EcoResponsive Environments

Area 1: Grange Rec/ Central Park - Illustrative sketch

Fig. 9.16: Proposed Greenway Linear Park alongside the western boundary of the Grange Recreation Ground, aligned with the car-free zone of the 'reserve' school site.

Area 2: Grange Meadows

Key informants and design principles

Landscape and open space

9.21 The existing landscape features (mature shelterbelts, hedgerows, native grassland habitat and mature trees) will be retained and enhanced where possible, forming part of the wider green infrastructure network.

9.22 The south-western parcel is enclosed by a mature shelterbelt to its north and existing mature trees interfacing back gardens of houses along Avocet. It also has drainage sensitivities, which will be considered in the next stages of design.

9.23 The western edge is lined by some existing mature trees along some of the back gardens of the Grange Estate. This will be extended upto the proposed access at Western Way, and enhanced to include allotments and a play space serving existing and new residents.

9.24 The eastern parcel has a belt of trees and native hawthorn scrub interfacing gardens of houses along Gaunts Way, which will be retained. The landscape character will also respond to the proximity with Norton Village and the Community Orchard with potentials for allotments in the peripheral open spaces.

Density and building heights

9.25 Net development density: Approx. 30 dph (see density and building height framework plan, Fig. 8.9, p.85).

9.26 Building heights: Generally up to 3 storeys, stepping up to 4 storeys at key nodes.

Building form and character

9.27 The form and character of new homes will create continuous building lines fronting onto existing trees, shelterbelts and associated new public realm. Housing typologies will be a mix of terraces, semi-detached and apartments.

9.28 These areas form important privacy thresholds between the existing Grange Estate and LG1 development. New housing will therefore be sensitive and respectful of existing residents' privacy needs, in terms of its form and layout, using existing landscape features as a positive buffer for privacy screening between existing and new homes.

Transport

9.29 Streets will be shared surface to support walking and cycling (refer Street Type 2, p.58-64). The existing pedestrian and cycle only route along the southern edge of the Rec will be supported and continued through this character area.

9.30 The access road into the south-western area will be aligned to minimise impact on the existing shelterbelt to the north of this land parcel. No vehicular access from Avocet, link for pedestrian and cyclists only.

Area 2: Grange Meadows - Precedents

Fig. 9.17: Fairfield Park: Continuous building frontage overlooking landscape, example of western edge. Source: EcoResponsive Environments

Fig. 9.18: Derwenthorpe, York: Strong yet varied building line overlooking landscape, example for western edge. Source: Peter Neal

Fig. 9.19: Derwenthorpe, York: Housing fronting onto local tree-lined street, example for S-W parcel. Source: Peter Neal

Fig. 9.20: Letchworth: Homes at Hartington Place front onto local street, example for S-W parcel. Source: EcoResponsive Environments

Fig. 9.21: Marleigh, Cambridge: Mid-density homes along active travel route/ open space, example for eastern area. Source: Allies and Morrison

Fig. 9.22: Hampstead Garden Suburb: Homes front a strong landscape edge, example for eastern edge. Source: EcoResponsive Environments

Area 2: Grange Meadows - Illustrative sketch

Fig. 9.23: Grange Meadows is characterised by the sensitive integration of existing landscape features (mature shelterbelts, hedgerows, native grassland habitat and mature trees) with houses fronting onto them. This also provides privacy screening to existing properties on Grange Estate.

Area 3: The Avenue

Key informants and design principles

Landscape and open space

9.31 Structural planting, prominent street trees and SUDs features will be key elements of this character area, acting as unifiers for the masterplan.

9.32 There will be variance between the east-west and north-south sections of this character area, reflective of its land uses and the wider context it responds to.

9.33 The east-west section will be tree-lined with a strong linear quality, punctuated by generous landscape moments that establish a sense of arrival from Norton Road, support the integration of existing hedgerows and SUDs in areas with drainage sensitivities, enable people-centric intersections with active travel routes (e.g. the proposed enhanced Linear Park along existing Greenway) and frame key corners that open up to long-distance views (e.g. N-W views towards Biggleswade and surrounding countryside).

9.34 The north-south section will be a series of tree-lined street segments integrated with structural planting that frame long-distance views west towards Fairfield Park with secondary streets to support local distinctiveness and define the gateway from Western Way.

Density and building heights

9.35 Net development density: Generally approx. 45 dph and up to approx. 70 dph around the local centre (see density and building height framework plan, Fig. 8.9, p.85).

9.36 Building heights: Generally 3 storeys, stepping up to 5 storeys near local centre and key nodes.

Building form and character

9.37 Overall, the built form will support a continuous, strong and regular building line with high-density housing typologies. It will provide active frontage and frame and accentuate vistas and serial views terminating in building groupings and/or landmark spaces where appropriate.

9.38 The residential character of the east-west section will be punctuated by non-residential uses e.g. neighbourhood centre uses (retail, mobility hub, commercial space) and the school (should it come forward), resulting in a variation in the townscape. In contrast, the north-south section will predominantly be residential with a mix of higher density typologies contributing to variation in character.

9.39 Several local streets will stem from the main avenue contributing to further variation in 'street pictures'. Strong building frontage along these local streets will be a mediator between adjacent character areas for picturesque townscape transitions. All variations in built form character will be united by a strong approach to structural planting, prominent street trees, SUDs and, in particular, soft hedged plot boundary treatments.

Transport

9.40 The Greenway will cross through this character area, providing north-south cycle access to the wider area. The main street will support bus access, emergency access and shared usage by cyclists on the carriageway (refer Street Type 1, p.55-57).

9.41 Locations where the main avenue/ primary street intersects with walking/cycling routes or hedgerows, speed management measures will be incorporated to slow cars and mitigate rat-running through the development, prioritising active travel and ecology.

9.42 All secondary streets stemming from the main avenue will be shared surface, functioning as homezones (refer Street Type 2, p.58-64)

Area 3: The Avenue - Precedents

Fig. 9.24: Broadway, Letchworth: Tree-lined street creating a strong sense of enclosure and vista, example for main avenue. Source: LGCHF

Fig. 9.25: Cambourne, Cambridge: Tree-lined streets with green verges soften impact of cars, example for main avenue. Source: Peter Neal

Fig. 9.26: Meadow Way, Letchworth: Prominent street trees and soft hedged plot boundaries, example for main avenue. Source: LGCFH

Fig. 9.27: Upton, Northampton: Swale street with strong frontage, example of local street stemming from main avenue. Source: Peter Neal

Fig. 9.28: Hampstead Garden Suburb: Vista along tree-lined residential streets, example for LG1 layout. Source: EcoResponsive Environments

Fig. 9.29: Hampstead Garden Suburb: Building corners, nodes and groupings, example for overall layout. Source: EcoResponsive Environments

Area 3: The Avenue - Illustrative sketch

Fig. 9.30: The main avenue as a landscape-integrated multi-modal street with structural planting, prominent street trees and active fronts to support active and healthy lifestyles.

Area 3: The Avenue - Illustrative sketch

Fig. 9.31: A local residential street type stemming from the main avenue integrated with swale and structural planting, and framing views of the peripheral landscape buffer and countryside.

Area 4: Countryside periphery

Key informants and design principles

Landscape and open space

9.43 Views across the open countryside and towards historic local landmarks (Fairfield Hall, Norton Village and Church) are key to the character of this area.

9.44 The peripheral buffer will be integrated with areas of native planting and the sustainable urban drainage network, following the site's land form and natural drainage pattern.

9.45 A trail will weave through the landscape buffer space overlooked by houses fronting onto it and integrated with viewing and resting spaces at strategic points. It will also be dotted with opportunities for 'play on the way' incorporating natural play, with one dedicated play space as an activity anchor along the northern edge adjacent to the Greenway.

Density and building heights

9.46 Net development density: Approx. 30 dph (see density and building height framework plan, Fig. 8.9, p.85).

9.47 Building heights: 2-2.5 storeys

Building form and character

9.48 The homes will front onto the peripheral landscape buffer contributing to active frontage and natural surveillance of public realm for a sense of safety. They will be accessed by edge streets that are rustic and naturalistic in character.

9.49 In contrast to the other character areas, the building line along the periphery will be more informal with soft plot boundaries, contributing to picturesque serial views along the route framed by landscape. Together with the character of edge streets, they would create 'street pictures' that complement and add to the area's rural charm.

9.50 Most homes in this area will be larger family dwellings (semi-detached, detached and/or larger terrace groupings) with generous plots.

Transport

9.51 Periphery routes giving access to housing properties will be tertiary streets - more of a lane than a street. It will be a shared surface supporting cycling and walking as well as vehicular access (refer Street Type 3, p.65-67).

9.52 A pedestrian trail will weave through the peripheral landscape buffer and link up to wider active travel routes and street networks.

Area 4: Countryside periphery - Precedents

Fig. 9.32: Barton Park, Oxford: SUDs integrated within wider landscape setting, example for peripheral attenuation ponds. Source: Peter Neal

Fig. 9.33: Derwenthorpe, York: SUDs integrated within wider landscape setting, example for peripheral attenuation ponds. Source: Peter Neal

Fig. 9.34: Trumpington Meadows, Cambridge: Countryside interface with active frontage, example for edge streets. Source: Peter Neal

Fig. 9.35: Alconbury Weald, Cambridgeshire: Trail route linking 'play on the way', example for peripheral trail routes . Source: Peter Neal

Fig. 9.36: Alconbury Weald, Cambridge: Countryside interface with SUDs and naturalistic streetscape, example for edge streets. Source: Peter Neal

Fig. 9.37: Derwenthorpe, York: Framed views filtered through landscape, example for peripheral buffer. Source: Peter Neal

Area 4: Countryside periphery - Illustrative sketch

Fig. 9.38: Proposed peripheral landscape buffer overlooked by houses fronting the edge streets and integrated with sustainable urban drainage, leisure and recreation trails incorporating 'play on the way', resting spaces and viewing decks at strategic points.

Area 5: Parkway approach

Key informants and design principles

Landscape and open space

9.53 Sinuous/naturally planted and semi-formal tree lined corridor with a strong landscape structure reflecting the characteristics of the original Letchworth Garden City gateways and the immediate rural context of this location.

9.54 Potential for wildflower meadow verges including chalk grasslands where possible to reflect prevailing National and North Hertfordshire landscape character profiles and objectives.

9.55 Potential for the landscape alongside the access road to contribute to SUDs, to be considered in the next stages of design.

Density and building heights

n/a

Building form and character

n/a

Transport

9.56 The approach road will be a multi-modal route with shared pedestrian and cycleway that will run parallel to the carriageway, separated by landscaped verge. (refer Street Type 4, p.68-70)

9.57 This road will support bus access and emergency access. Car and cycle parking provision are assumed as not required.

Area 5: Parkway approach - Precedents

Fig. 9.39: Minneapolis Parkway, US: Strong tree-lined access road with green verges defining spaces for vehicles and people. Source: Peter Neal

Fig. 9.40: Minneapolis Parkway, US: Strong tree-lined access road with green verges defining spaces for vehicles and people. Source: Peter Neal

Fig. 9.41: Cambourne, Cambridgeshire: Landscape integrated access route with soft spaces on either side of the road. Source: Peter Neal

Fig. 9.43: Letchworth: Generous landscaped verges, mature trees and informal planting along the route. Source: Peter Neal

Fig. 9.42: Letchworth: Generous landscaped verges, mature trees and informal planting along the route. Source: Peter Neal

Area 5: Parkway approach - Illustrative sketch

Fig. 9.44: Learning from the pioneers, we propose a parkway-inspired gateway from Norton Road into LG1 and wider Letchworth.

Illustrative block configuration

9.58 This is a sample block illustrating the translation of design principles associated with relevant character areas into spatial layout. Aligned with the strategic masterplan, it is the most irregular and tightest block in terms of its form and configuration, hence chosen for this exploration.

Fig. 9.45: Sample block illustrating the translation of design principles associated with relevant character areas into spatial layout.

Area 3: The Avenue	
Landscape and open space	
3.1	Tree-lined street
3.2	Swale (SuDS)
3.3	Framing key corners that open up to long-distance views (N-W views towards Biggleswade)
Density and building heights	
3.4	Building heights: upto 3 storeys
3.5	Net density: approx. 45 dph
Building form and character	
3.7	Continuous, strong and regular building line with active fronts.
3.8	Higher density typologies including terraces and flats.
Transport	
3.9	Primary streets with bus access, emergency access and shared usage by cyclists.
3.10	Mix of on-plot and on-street car parking for houses.
3.11	On-street parking in clusters punctuated by structural planting and trees soften visual impact.
3.12	Cycle parking within garages or in secure on-plot cycle storage units (integrated with bin stores) adjacent to the front door.

Area 4: Countryside periphery	
Landscape and open space	
4.1	Views across countryside, west towards Fairfield Park.
4.2	Peripheral buffer with integrated sustainable urban drainage.
4.3	Pedestrian-cycle trail through peripheral buffer overlooked by houses fronting onto it.
Density and building heights	
4.4	Building heights: upto 2.5 storeys
4.5	Net density: approx. 30 dph
Building form and character	
4.7	Informal building line with active fronts along the periphery with soft plot boundaries.
4.8	Semi-detached and detached houses with generous plots.
Transport	
4.9	Houses accessed by informal rustic edge lanes
4.10	On-plot car parking for houses.
4.11	On-street parking clusters punctuated with landscape
4.12	Cycle parking within garages or in secure on-plot cycle storage units (integrated with bin stores) adjacent to the front door.

10

Sustainability

10. Sustainability

10.1 Sustainability is at the heart of the Garden City model and LG1 takes a whole site approach encompassing the principles set out in Fig 10.1. It is of importance that when discussing sustainability this does not solely focus on building technologies, but a wider range of determinants. This is demonstrated by Fig 10.2 and underpinned by community engagement over many years. This approach to sustainability for LG1 development will align with LGCHF's Sustainability policy (November 2023) and the adopted Local Plan (2011-2031) policies, in particular, Policy SP9: Design and Sustainability and NHC's Sustainability SPD (updated March 2024).

Future Homes Standard

10.2 A new standard for energy-efficient homes will come into force in 2025 onwards. Homes built under the Future Homes Standard are expected produce 75-100% less carbon emissions compared with 2019 standards. The LG1 development will work towards being zero carbon ready in discussions with NHC and the appointed development partner as part of the next project stages. This would include consideration of opportunities where 'Future Homes Standard' benchmarks might be exceeded aligned with the commercial viability assessment for the development and potential for certifications within the development (e.g. BREEAM, BHL Commendation, and other emerging wellbeing assessment accreditations).

Key topic areas

10.3 To provide further guidance on adopting a holistic multi-scalar approach to integrating sustainability within the LG1 development as part of the next work stages, eight topic areas (Fig. 10.1) have been summarised for further development and exploration. These have been outlined in further detail setting out a high-level approach to design (Fig. 10.2, overleaf).

Fig. 10.1: LG1's approach to sustainability within the overall scheme viability for the development.

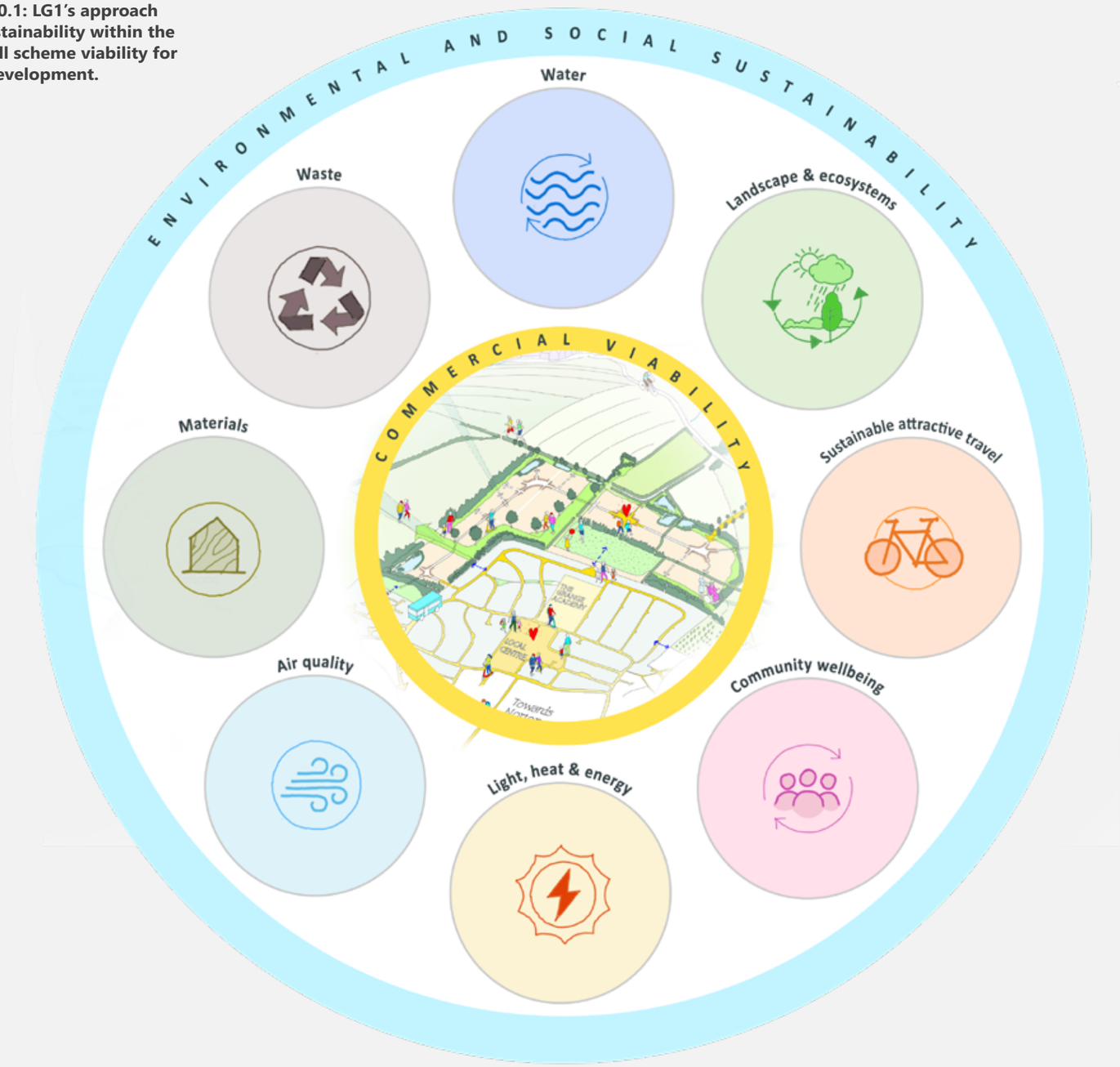


Fig. 10.2: LG1 sustainability topic areas for further development and exploration

Water

Support ground water recharge through the management of surface water.

Manage and mitigate surface water flood through sustainable urban drainage.

Explore opportunities for reuse and recycling of wastewater, through grey water and rainwater harvesting.

Light, heat and energy

Optimise indoor health and wellbeing: well lit and ventilated homes and thermal comfort.

Design energy efficient building form, following the energy hierarchy to minimise operational energy.

Integrate renewable energy technologies e.g. PVs, ASHP as relevant and explore opportunities for resource sharing (e.g. micro-grids) for energy efficiency.

Enable low energy travel via EV charging.

Waste

Adopt circular principles in design and delivery including; construction waste management policies to minimise waste sent to landfill and consideration of modern methods of construction.

Landscape & ecosystems

Use the co-benefits of blue and green systems (e.g. SUDs) to support habitat creation and ecological value.

Create connected nature-rich network of green spaces using native, climate-resilient and adaptive species linking from the wider countryside. Use sensitive construction and management methods (e.g. timing of works) to avoid and mitigate seasonal constraints. Create new habitats achieving atleast 10% biodiversity net gain and 2,000 new trees.

Explore opportunities for local food production and for natural infrastructure to function as social learning systems.

Air quality

Create an extensive network of green open spaces and street typologies integrated with structural planting and trees.

Promote active travel for everyday life needs, minimising vehicular emission and impact on air quality.

Design homes for good ventilation to support occupant health and wellbeing, in particular for summer months.

Sustainable & attractive travel

Create safe and attractive active travel networks, effectively linking into the surrounding wider context and develop a robust public transport strategy, in discussion with NHC/ HCC.

Create permeable landscape-integrated streets that minimises detours and dead-ends for walking and cycling. Integrate traffic/ speed management measures through the avenue to prioritise active travel, slow cars and prevent rat-running.

Maximise co-location of facilities accessible by walking and cycling, to support natural exercise.

Enable opportunities for a sustainable mobility hub e.g. EV, car club, bike share from early phases, to support at least 10% modal shift. Should car use reduce over time and the demand for parking fall as a result of a change in habits and/or the sustainable travel strategy, there will be the option to re-use these spaces for alternative uses.

Materials

Explore opportunities to incorporate low embodied carbon materials.

Explore a circular approach to construction materials, including creating and engaging with local supply chains.

Community wellbeing

Support mixed and balanced communities with mix of housing types and tenures in each phase including tenure-blind homes, including provision of resilient, accessible and adaptable homes.

Co-locate local centre uses (retail, school, community facilities) in most accessible location to maximise walkable interactions. Ensure the delivery of training and apprenticeship programmes for local people in partnership with North Herts College, the LEP and appointed developer partner. This will include consideration of the temporary use of the 'reserve' school site for training and associated meanwhile activity.

Working with NHC and Settle, understand the need for community space within the Grange and LG1 development, in order to create a co-ordinated approach to providing flexible community space that meets the needs of existing Grange residents and the LG1 scheme.

Create extensive green open space networks as spaces to 'dwell' aligned with active travel routes and integrated with play to support outdoor intergenerational interaction.

Explore opportunities for food production e.g. allotments, community garden in public realm.

Incorporate opportunities for communal spaces within residential development parcels to combat social isolation, enhance social interactions and support doorstep play.

11

Housing need and diversification

11. Housing need and diversification

Introduction

11.1 In its approach to bringing forward this site, LGCHF has taken a data-led approach, influenced by the founding principles of the Garden City, a strong desire to create a great quality place and the need to be attractive to future commercial investors in order to provide a return to reinvest for the benefit of the wider local community.

11.2 In 2012, to inform the community conversation about whether LGCHF should support the potential allocation of land for housing in the emerging Local Plan, sessions with the community were facilitated by the University of Hertfordshire. This was supported by a series of background studies that were shared with the local community in order that they had available the same information that the Foundation's Trustee and Governor group were privy to.

11.3 This included a report by Lichfields that sets out the economic and housing implications of various growth scenarios. These reports were subsequently updated to support submissions to the Local Plan and the Public Examination and informed LGCHF's Housing Strategy.

11.4 In order to inform the strategic master planning process, LGCHF commissioned a further update in 2022 (Appendix A) that focused on the housing components of the initial report. This is also supported by a town wide survey undertaken by Lichfields on behalf of LGCHF in 2019 (Appendix B). This was undertaken due to the specific circumstances in Letchworth differing from that of the remainder of North Herts and the absence of data to understand this in more detail. Previous studies also influenced LGCHF's published Housing Strategy 2018-21, which will shortly be updated.

North Herts and Stevenage Joint Strategic Housing Market Assessment

11.5 Reference is made below to the North Herts and Stevenage Joint Strategic Housing Market Assessment[1] (SHMA) updates (the most recent being in 2023), for the reasons stated above this is of less relevance due to the unique circumstances found in Letchworth compared to the remainder of these two districts.

11.6 Key messages from the SHMA are as follows:

11.7 The overall housing requirement for North Herts is 11,600 (excluding Luton), with 7,888 required in the remaining plan period.

11.8 There are 1,908 households in North Herts living in unsuitable housing, whilst being unable to afford their own housing. Of these, 681 occupy affordable housing that does not meet current needs, highlighting the need to be able to provide additional accommodation to enable them to vacate in order that a more suitable tenant can be found. This leads to a net need of 1,227 households in North Herts.

11.9 In the period 2022–31 it is projected an annual increase in households able to afford housing costs in North Herts will be 144, with 482 new households a year unable to afford housing costs. The total North Herts affordable housing need combining those unable to afford private homes and those in affordable housing need aspiring to home ownership is 6,877 (Fig. 11.1-11.3).

References:

1. See: https://www.north-herts.gov.uk/sites/default/files/2024-03/2024%2003%2005%20North%20Herts%20and%20Stevenage%20Final.pdf.

Fig. 11.1: Total need for affordable housing 2022-31

North Herts	Affordable Housing Need Households unable to afford	Affordable Housing Need Households aspiring to home ownership	Overall Affordable Housing Need
Current housing need in 2022	1,227	3,212	4,439
Future housing need 2022-31	1,292	1,147	2,439
Total Housing Need	2,519	4,358	6,877

Source: SHMA 2023

11.10 When broken down, this shows the greatest need for 3-bedroom units and is summarised below:

Fig. 11.2: Overall affordable housing need 2022-31 in North Herts

North Herts	Affordable Housing Need Households unable to afford	Affordable Housing Need Households aspiring to home ownership	Affordable Housing (Households)
1 bedroom	242	190	432
2 bedrooms	671	279	951
3 bedrooms	1,307	122	1,429
4+ bedrooms	299	-	299
Total Housing Need	2,519	591	3,110

Source: SHMA 2023

11.11 The SHMA considers the overall need for market and affordable housing, incorporating those able to afford First Homes with the 30% or 50% discount.

Fig. 11.3: Overall need for market and affordable dwellings 2022-31

	Unable to afford market rents	Unable to afford market ownership but able to afford First Homes with a 50% discount, but not a 30% discount	Unable to afford market ownership but able to afford First Homes with a 30% discount	Affordable Housing	Total Market Housing	Total Housing
1 bedroom	**244**	**77**	**132**	**453**	**335**	**787**
2 bedrooms	**676**	**86**	**221**	**983**	**677**	**1,660**
3 bedrooms	**1,317**	**134**	**-**	**1,451**	**2,191**	**3,642**
4+ bedrooms	**301**	**-**	**-**	**301**	**1,343**	**1,644**
Dwellings	**2,538**	**297**	**353**	**3,190**	**4,540**	**7,734**
Dwellings to reconcile population and households	**-**	**-**	**-**	**-**	**154**	**154**
LHN	**2,538**	**297**	**353**	**3,190**	**4,694**	**7,888**

Source: SHMA 2023

11.12 The SHMA highlights the need for older person accommodation, with a projection that 398 specialist older person dwellings would be needed.

Letchworth Garden City

11.13 Letchworth has seen little population growth, with it reaching a peak of circa 35,000 in 2017 before this declined. It has seen a slower growth rate compared to the remainder of North Herts and there is a clear trend of ageing and with a high proportion of older residents. Although there is a prevalence of in wealthier cohorts, there are areas within Letchworth that have high levels of deprivation. Households are typically larger and there is a high proportion of socially rented accommodation, a larger proportion of over 65s and a smaller proportion of single households. There is evidence of under-occupation and overcrowding. House prices have increased at a high rate over the past 10 years, but are lower than the North Herts averages, whilst there is some evidence of rents being higher. There is declining affordability as prices rise disproportionately to wages.

11.14 Letchworth currently represents approximately a quarter of North Herts' population and has seen a growth 4.4% between 2012 and 2022 to 34,308, although this represents a slight drop from the peak of 34, 697 in 2017.

11.15 The trend is that recent additional housing has seen more families moving into Letchworth, but a decline in the 19-44 age group reflects the number of young adults that have moved out, linked to higher education and seeking employment.

Population

11.16 Letchworth has seen an increase of 12.6% in the above 65 age group between 2010 to 2020, which is reflective of national trends, but should be compared against a population growth of 3% in the same period and reflects an ageing of the Letchworth community (Fig. 11.4, 11.5).

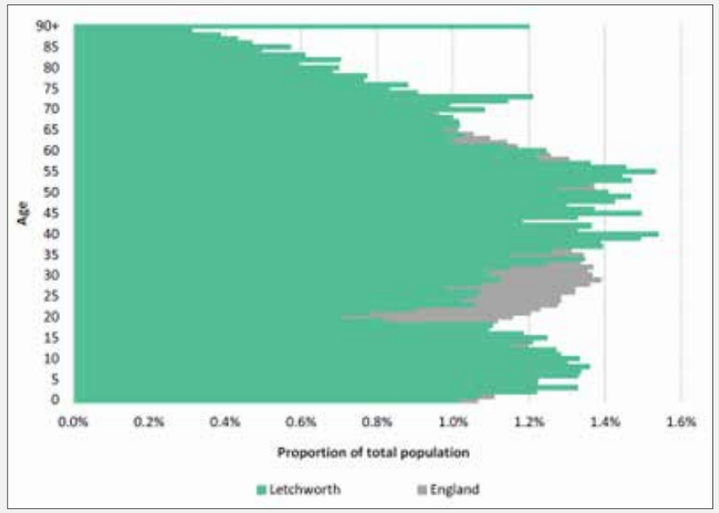
Fig. 11.4 Letchworth's age profile

Age	Letchworth	North Herts	England
0-18	23.3%	22.8%	22.5%
19-44	29.9%	30.7%	33.4%
45-64	26.2%	27.2%	25.6%
65+	20.7%	19.4%	18.5%

Source: Lichfields based on ONS estimates

11.17 This is shown in the following diagram (Fig. 11.5):

Fig. 11.5 Age structure 2020



Source: Lichfields

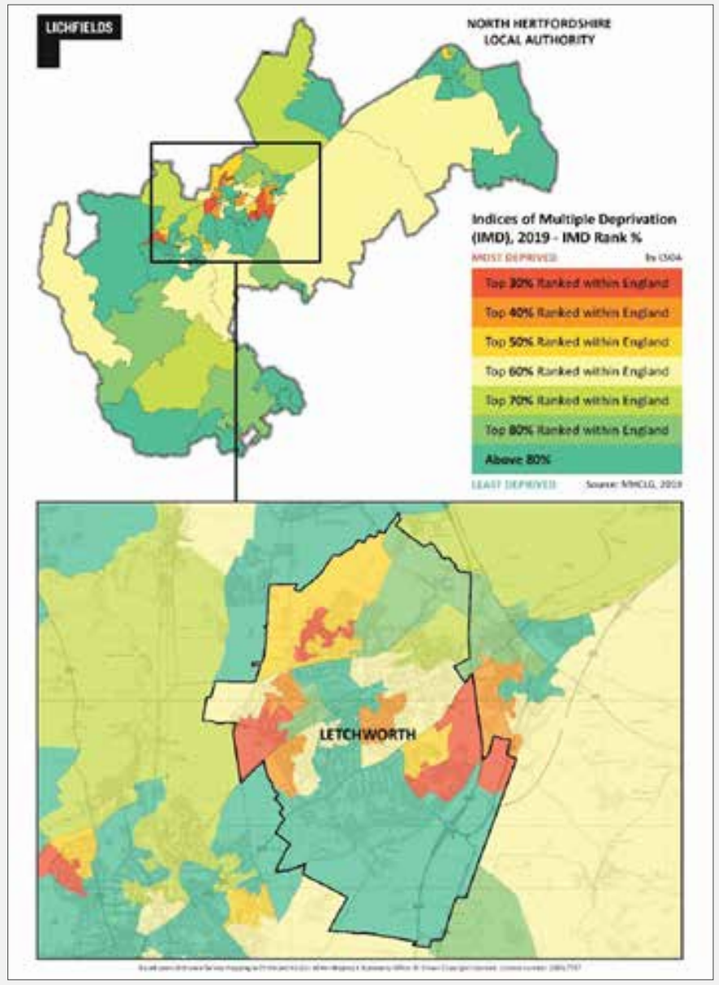
11.18 It could be argued that the reduced amount of this part of the population can have a negative impact on the vibrancy and vitality of the town and its commercial attractiveness.

11.19 Mosaic data shows that 'Domestic Success', 'Prestige Positions' and 'Aspiring Homemakers' score highest in North Herts, but in Letchworth there is also a greater representation of 'Family Basics' and 'Transient Renters', which reflects the higher proportion of affordable housing.

11.20 With respect to deprivation (Fig. 11.6), Letchworth contains pockets of deprivation including areas that are within the top 30% most deprived in England, as well as areas that are 20% least deprived.

11.21 Single people over 65 are some of the most likely to live in affordable accommodation in Letchworth (over 40%), 31% of which have long term medical conditions or disability.

Fig. 11.6 Indices of deprivation



Source: Lichfields based on IMD 2019

11.22 The above identifies clusters of deprivation, which includes parts of the Grange Estate, Wilbury and Jackmans, with southern and central areas being the least deprived. This emphasises the view that Letchworth is a tale of two towns in terms of deprivation. This is also reflected by the tenure split, where although house size and types generally align with North Herts and England, there is a significant difference in terms of socially rented accommodation in Letchworth compared to North Herts and England, with Letchworth having 31% of households falling within this category, compared to 19% in North Herts and 18% in England.

11.23 The number of homes owned outright or subject to a mortgage in Letchworth combined is 59%, notably lower than North Herts (67%) and England (64%).

11.24 There is also a lower private rented sector at 10% of homes in Letchworth, compared to 14% in North Herts and 18% in England. This suggests a reduced choice, particularly for younger people.

Housing stock

11.25 56% of dwellings in Letchworth are smaller (flats or terraced housing), higher than North Herts and England at 45%. This is primarily due to a high proportion of terraced homes (35%) - higher than North Herts and England by approximately 10%.

11.26 The highest proportion of homes is 3 bedroom (46%) a little higher than North Herts and England (41%), whilst there is the lowest proportion of 2-bedroom homes at 23%, lower than North Herts and England (25% and 28% respectively).

11.27 Letchworth does also have a higher proportion of over 65 residents and a lower proportion of single households.

11.28 There is in part a mismatch between stock and need. This represented by the issue of overcrowding, with 352

families and 251 other households living in overcrowded accommodation, whilst data also shows that there is an issue of under-occupancy with 868 single people living in homes with 3 or more bedrooms and a further 978 in homes with 2 bedrooms.

11.29 The Lichfields survey in 2019 flagged that there is an issue with the lack of adaptability of existing homes to meet existing and future needs, with 46% of respondents raising this as an issue.

Cost of housing

11.30 Letchworth's median house price in 2021 was £372,000, higher than the national and regional average, but of importance is that prices have over the previous 10 years risen by 44% (compared to 42% in North Herts and 37% in England).

11.31 In terms of affordability, according to the ONS North Herts employees can expect to spend 12 times their salaries (in 2012) in purchasing a home, 50% more than the average in England.

11.32 For private rental property Letchworth is higher than other parts of North Herts, although this may be as a result of a limited supply. In 2022 it was found on average 1 bed private rental properties were £60 to £100 a month more expensive and circa £500 more expensive for 4-bedroom houses.

Housing growth

11.33 In the period up to 2035, it is expected that there will be in the region of 1600 new homes arising from the Local Plan. This will lead to a population growth of approximately 7% to 36,683, which will address the decline highlighted previously.

11.34 It is however estimated that due to demographic trends (life expectancy, birth rates etc.), the ageing population and number of over 65s will continue to grow (Fig. 11.7).

Fig. 11.7 Letchworth's projected population age profile

Age (yrs)	2020	2035	Change	Change (%)
0-4	2,002	1,979	-23	-1%
5-11	3,143	2,851	-292	-9%
12-18	2,833	2,846	13	0%
19-64	19,237	20,494	1,257	7%
65+	7,093	8,513	1,420	20%
Total	34,308	36,683	2,375	7%
Median age	42.6	44.3	+1.7	+4%

Source: Lichfields analysis

11.35 It is projected that Letchworth's population will continue to see a reduction in the number of children and although there will be some growth in the 25-35 from new housing, the trend of out-migration of young adults will continue along with patterns of ageing.

11.36 Using the existing occupancy pattern as a guide, along with interviews with local agents as part of the 2019 survey and further contextual analysis, following sensitivity testing an initial mix assessment is summarised (private housing only, Fig. 11.8):

Fig. 11.8 Private housing mix

	Flat 1 bed	Flat 2+ bed	House 2-3 bed	House 4 bed	House 5+ bed
Market assessment	6%	8%	64%	18%	5%
	1 bed	2 bed	3 bed	4+ bed	5 bed
Sensitivity - North Herts	12%	25%	42%	16%	5%
Sensitivity - Letchworth	15%	23%	45%	13%	3%

Source: Lichfields analysis

11.37 This leads to the following initial suggested range:

	1 bed*	2 bed*	3 bed	4+ bed
Suggested range	0-10%	10-20%	50-60%	15-20%

Source: Lichfields analysis - *can include flats and houses.

11.38 Consideration will also be required on the role of older people, where there is scope to release family housing if suitable accommodation for older residents becomes available.

11.39 The above was produced in 2022, so in 2023 a further review was undertaken by land agents, who found the broad ranges to continue to be acceptable, subject to further testing and the input of a future commercial partner.

11.40 In developing the strategic master plan, we have incorporated these ranges, but this is in the absence of a developer partner who will undertake their own market review.

11.41 Furthermore, in response to comments regarding the ageing population and lack of availability of suitable accommodation, we are intending to provide a 50 – 60 sheltered housing scheme as part of the private housing mix to meet this identified need.

Affordable housing

11.42 The Foundation is committed to providing 40% affordable accommodation as part of the housing mix, with the Council having sole nomination rights.

11.43 As indicated previously, there is a disproportionate amount of socially rented accommodation in Letchworth, which could be reflected in the final affordable housing mix to give a broader range of opportunity to meet local need.

11.44 In addition to the assessment of local need, discussion has been held with Council's Housing Supply Team to understand their aspirations.

11.45 Our initial review found that based on a maximum spend of income on housing being 35% in 2020 there is a need for 6,935 affordable homes in Letchworth (Fig. 11.9), although if a lower income of 30% threshold this increases to 7,975.

11.46 This also indicates that 84% of single person households are in need of affordable rented housing and data suggests that single people and couples without children are less able to access affordable housing, whilst a large proportion of families in need (consisting of couples or lone parents with children) are currently being housed in affordable housing, although a clear need for this accommodation continues to exist in Letchworth and North Herts. In the 2019 survey, a lack of adaptability of existing dwellings was also raised and the limited size of accommodation, meaning that evolving needs cannot be simply met and reflecting the age of much of the stock in Letchworth

11.47 This also flags that approximately half of the Letchworth population are unlikely to be able to afford entry level rent.

Fig. 11.9 Estimate of current affordable housing need in Letchworth

	No. of households in 2020	Of which unable to afford at...			
		30% threshold		35% threshold	
Single person	4,389	84%	3,686	73%	3,204
Couple	3,933	39%	1,534	34%	1,337
Couple w. children	2,763	38%	1,050	33%	912
LP w. children	977	80%	782	69%	674
Other	2,309	40%	923	35%	808
Total	14,370	55%	7,975	48%	6,935

Source: Lichfields using PopGroup, Census, ONS, CACI

Fig. 11.10 Estimated future need

	At 30% income threshold			At 35% income threshold		
	Households unable to afford in 2020	Households unable to afford in 2035	Change	Households unable to afford in 2020	Households unable to afford in 2035	Change
Single person	3,686	4,178	492	3,204	3,631	427
Couple	1,534	1,713	180	1,337	1,494	156
Couple w. children	1,050	1,128	78	912	979	68
LP w. children	782	840	58	674	724	50
Other	923	1,026	103	808	898	90
Total	7,975	8,886	910	6,935	7,727	792

Source: Lichfields analysis

11.48 The Lichfields assessment of housing need in Letchworth shows 2,600 to 3,600 households, but this is quite a crude calculation and based on a gross need, but a more appropriate calculation is based on household growth as set out below (Fig. 11.10), and suggests an additional need of circa 800 to 900 affordable homes in the period between 2020 and 2035. This is however still in excess of the delivery in Letchworth expected in the Local Plan.

11.49 This does not however meet existing unmet need and after the projected developments in the Local plan, in 2035 it is expected that unmet need will be between 4,541 (30% income threshold) to 3,383 (using 35% income threshold).

11.50 In the 2022 Lichfields report the existing waiting list was assessed and this found the highest proportion of those on the waiting list are smaller households (Fig. 11.11).

11.51 The estimated need factoring in household growth has been calculated and again shows a need for a high proportion of smaller dwellings (Fig. 11.12).

Fig. 11.11 Affordable housing waiting list - Letchworth 2022

	Total	1-bed	2-bed	3-bed	4-bed
Number of households	778	422	220	88	48
Mix	-	54%	28%	11%	6%

Source: NHC (households that have expressed a preference for Letchworth)

Fig. 11.12 Estimated need for affordable housing by size

	Current need Total - 3,630	Future need Total - 910	Total Total - 4,541
Single person	56%	54%	55%
Couple	25%	20%	24%
Couple w. children	8%	9%	8%
LP w. children	3%	6%	4%
Other	8%	11%	8%
1-bed	80%	74%	79%
2+ bed	20%	26%	21%

Source: Lichfields

11.52 This does not acknowledge that some smaller households may have a need for an additional room but shows the high level of need for smaller accommodation in Letchworth.

11.53 In order to meet Letchworth's specific needs, the following mix has been calculated, which differs from District wide needs (Fig. 11.13).

Fig. 11.13 Letchworth's affordable housing projected need in new developments

1-bed	2-bed	3-bed	4-bed
60-80%	20-30%	0-5%	

Source: Lichfields

11.54 It is also important to factor that there is a proportion of over 65s with long term health conditions and disabilities and across the whole of the Letchworth community 11% fall into this category.

Discussions with North Herts Council

11.55 In 2023 the Heritage Foundation engaged with the Housing Supply Team at North Herts Council to get an initial indication of the Council's opinion on the mix of affordable housing that should be provided.

11.56 The initial response sought the following rented mix of accommodation (Fig. 11.14, 11.15):

Fig. 11.14 NHC rented accommodation proposed split

Accommodation	Percentage
1-bedroom flats	21%
2-bedroom flats	12%
2-bedroom houses	26%
3-bedroom houses	35%
4+bedroom houses	6%

Source: NHC

Fig. 11.15 NHC intermediate proposed split

Accommodation	Percentage
1-bedroom flats	8%
2-bedroom flats	8%
2-bedroom houses	20%
3-bedroom houses	54%
4+bedroom houses	10%

Source: NHC

Community Land Trust and Self-Build

11.57 The North Herts Local Plan has a requirement for 1% of plots on strategic sites to be allocated for self-build and Policy SP15 specifies 9 such plots for LG1. The accompanying text for Policy HS2 confirms that affordable housing can be provided by co-operative housing schemes and Community Land Trusts.

11.58 112 respondents to the 2019 Housing Needs Survey indicated an interest in CLT or self-build. The Foundation has also reviewed the number of people who have registered for self-build which includes over 100 residents and partnered with Eastern Community Homes who specialise in community housing models to investigate this opportunity further.

11.59 An event was held earlier this year to explore this further, attended by 28 local people which highlighted an interest in this type of project.

11.60 Community housing models was one of the founding principles attached to Garden Cities and in Letchworth there are a series of developments from its founding years by co-operatives. We also believe that this creates an opportunity for investigating innovation in part of the development site, which may be of wider interest.

Summary and masterplan approach

11.61 Letchworth Garden City's socio demographic circumstances differ from the remainder of North Herts as can be seen from a comparison of the SHMA and the Letchworth specific data. It is however clear that there is a need for housing across tenures to meet existing and emerging need, both in North Herts and more specifically Letchworth. The legacy of slow or a lack of delivery has seen issues of under supply exacerbate existing challenges for both the local community and economy, particularly with regard to access to housing and affordability.

11.62 In order to understand Letchworth's challenges and opportunities, the Foundation has commissioned a series of studies on the local housing market and housing need and in order to respond to an absence of Letchworth specific data undertook its own Housing Needs Survey in 2019.

11.63 Letchworth has seen an increase and then decline in population since 2017 and is set for growth linked to the Local Plan.

11.64 In determining the Foundation's approach to private housing and LG1 in particular, this will be market led, alongside an understanding of local need and existing socio demographics.

11.65 From the data, it is our understanding that Letchworth has a disproportionate amount of socially rented accommodation, which is valued, with pockets of high earning, high value homes and areas of relatively high deprivation. There is an ageing population and many homes that exceed the requirements of occupiers in terms of rooms, whilst a growing issue of overcrowding.

11.66 There is a need for homes across tenures and affordability remains a significant issue, particularly for existing residents and households forming during the Local Plan period up to 2031. This creates a requirement for smaller households, particularly in the affordable housing sector, which will help meet existing and emerging need, as well as providing opportunity for voluntary re-location from tenants of under-occupied homes.

11.67 Issues of affordability also highlight the need to ensure that homes are affordable to live in and energy efficient, both from an environmental and affordability context.

11.68 We are also of the view the self-build and community housing models create an opportunity to help meet some of the need for the growing group who do not qualify for affordable housing but cannot afford to purchase or privately rent.

Proposed Approach

11.69 Our strategy will be subject of market and viability testing and will be reviewed when a partner is appointed, however for the purposes of the strategic master planning process we are incorporating an initial approach that comprises the following:

11.70 The Foundation will comply with the policy requirement for 40% of homes to be allocated for affordable purposes. We will however continue to engage with NHC to promote the specific need of Letchworth communities, accepting that the Council has obligations to meet District wide needs.

11.71 In order to meet local needs, we will seek to include a higher proportion of small household/single person units as part of the affordable provision as part of the development in line with our assessment in this section. This may also help reduce the leakage of a younger age cohort out of the town. This would require further analysis and we appreciate will require some balancing with North Herts wider needs.

11.72 We will seek to include private elderly accommodation within the market component of the development. We understand that the Policy SP15 requirement for a care home has been met elsewhere, so the master plan is being formulated on the basis for a 50-60-unit senior living scheme. This is in order to meet the identified need and provide possible re-location opportunities for existing residents. This will not be an extra care facility, but a private developer led scheme with self-contained units for the over 60s.

11.73 5% of the development will be linked to an innovation quarter for the development. This will be in order to provide alternative tenures including for self-build, co-operative and Community Land Trust, providing a range of opportunities for the local community to participate in community led housing

11.74 Subject to further review, the private housing provision will sit broadly within the following parameters: 1 bed (0-10%), 2 bed (10-20%), 3 bed (50-60%), 4+ bed (15-20%).

11.75 There is an inherent issue of adaptability of homes in Letchworth to meet future needs, which was a particular issue in the 2019 survey. We will therefore work with our developer partner to ensure that homes are adaptable for future needs.

11.76 We will continue to review Building Regulations, emerging national advice and guidance, the advice of consultant team and partners to ensure that homes are net carbon zero ready and affordable to live comfortably, particularly in terms of energy and water use and cost.

11.77 For further details refer to the following appendices: Appendix M: Lichfields Housing Needs Assessment Update 2022, and Appendix N: Lichfields Housing Needs Survey 2019.

12

Implementation, stewardship & infrastructure delivery

12. Implementation, stewardship and infrastructure delivery

12.1 The LG1 development will support the delivery of a comprehensive, sustainable and well-connected new community with each phase functioning as a place in its own right.

12.2 The Heritage Foundation is yet to appoint a development partner who will undertake the detailed design and delivery of the site. This, along with uncertainty over the timing of the school, commercial centre and senior living components of the scheme, means we are unable to be precise over the phasing of the development at this stage. We have, however, produced the parcels of land that we believe will form the phases of the development (Fig 12.1), but the timing of these will be the subject of future discussion and set out in more detail in a future outline planning application and/or design code. Each phase is likely to be between 200 and 300 dwellings.

Fig. 12.1 The plan below indicatively sets out parcels of land that will form the phases of the development for LG1. The timing of these will be subject to future discussion and set out in the outline application.

12.3 The key principles which will underpin the future phasing strategy are outlined below:

Phasing principles

- All phases of the development should be part of a comprehensive master and delivery plan. Each phase should be formulated in order that it will integrate the existing context and in particular the Grange Estate as well as the new development to ensure LG1 is delivered as a socially cohesive extension to Letchworth Garden City, with a positive experience for residents as part of the settlement from the day of first occupation.

- As part of the first phase, we will provide construction via a new access from Norton Road, minimising disruption to existing Grange Estate residents as part of a construction methodology to be agreed in the outline planning application.

- The first phase will include the Greenway extension, to ensure that a continuous route remains available should the existing Greenway be disrupted during construction activity. We will work with ParkRun and other users to provide safe temporary routes and connections that allow valued community activities to continue where possible.

- All phases will ensure that built infrastructure and measures for sustainable travel modes (bus, walking and cycle access) are available for residents and workers on the site. This will include access to existing primary and secondary schools. This will be developed in partnership with the District and County Councils, bus operators and other partners, and may include a temporary travel hub/bus stop before the completed facility is in place. This will also include pedestrian and cycle links into the Grange Estate and key destinations, attractive for all-day and all-year round use, based on a strategy to be agreed with the Councils.

- We will work with the District and County Councils to agree the timing of off-site highway improvements, including those that promote active travel and incorporate this into the detailed phasing plan that will be part of the outline planning application.

- Early phases of the development will carefully incorporate a positive relationship with the Grange Recreation Ground reinforcing its focal role as 'central park' and linking into the existing social infrastructure of the Grange Estate (facilities, open spaces, active travel routes towards Letchworth town centre).

- The phasing plan will support advanced structural landscaping, tree and hedgerow planting to enable early establishment of green infrastructure networks and native buffer planting for the phased delivery of new open spaces and SUDs aligned with phasing boundaries. This will require further discussions on drainage and precautionary working methods to avoid impact on ecological receptors.

- Each phase will deliver a mix of housing type/tenures.

- Each phase will provide access to new and existing open space and recreational facilities.

- The site reserved for a potential primary school will be retained and not transferred to HCC until this is formally drawn down. This may mean that it will be included in a later phase of the development to ensure that it can be comprehensively planned and laid out. The location of the reserve site does also facilitate an

earlier implementation of the school if needed, due to its siting in relation to the spine road. By retaining ownership of this land, it provides opportunities for meanwhile uses such as a training and apprenticeship centre and productive landscape. These uses will be solely linked to the construction phase of the development and are not be based on a longer-term requirement. As such any activities or associated buildings will be removed from the reserve site prior to the development of a primary school, if required.

Community reinvestment, stewardship and management strategy

12.4 The Heritage Foundation reinvests surplus from its portfolio of investments for the benefit of the communities in Letchworth Garden City by way of its charitable commitments. The development of LG1 creates opportunities for long term income streams for reinvestment back into the local community.

12.5 As well as securing long term income, the LG1 development presents opportunities for wider community benefit. This will be through Section 106 contributions covering a wide range of community investment and working with local partners such as Settle and North Herts Council to facilitate enhancements to the Grange Estate. This will also be the case with the Letchworth Greenway, owned and maintained by the Heritage Foundation.

12.6 A key component of the Foundation's reinvestment strategy is in training and development. This aspiration is set out in more detail in the Letchworth Garden City Heritage Foundation Strategic Plan 2028, which includes priorities for the Foundation over the next five years to 2028:

- To provide opportunities for local people to develop skills and,
- that Letchworth becomes a great place to grow up.

12.7 In order to maximise the benefit of the development, it will be a requirement for a developer partner on this site to enter into a formal agreement to provide training and apprenticeship programmes for Letchworth residents, working with North Herts College and the Hertfordshire LEP. This will initially focus on 16 to 18-year olds, but also create opportunities for those residents on Job Seekers Allowance and Universal Credit. There will also be a requirement for the appointed partner to attend local secondary schools to promote careers and training opportunities.

12.8 This reinvestment will be at cost to the Foundation by reason of a reduced land value.

12.9 Stewardship is at the heart of the Garden City model and of significance to the Foundation.

12.10 A site wide stewardship strategy is also being developed to ensure a coordinated and sustainable approach to the management of green spaces, public realm and community spaces that delivers the planning and design objectives set out in the Strategic Masterplan. The tenets of the stewardship for the site will be:

- The maintenance of the non-adopted highways, footpaths, open spaces and landscape/ecological attributes, ensuring that the core aspirations of the strategic masterplan are protected and retained;
- Work with partners and stakeholders, such as North Herts District and Herts County Councils and Settle Housing Association on areas of shared interest;
- Provide a cost-effective solution for residents across tenures; and
- Ensure that the development does not have a disproportionate impact on the Foundation's community reinvestment for the whole of the Garden City Estate.

12.11 A comprehensive Outline Residential Travel Plan is seen as an important stewardship tool. This will be submitted as part of the planning application, with a Detailed Travel Plan to be produced pre-occupation. This will be secured by S106 agreement. The Travel Plan will promote sustainable travel modes to the site through an extensive integrated package of measures and by setting mode share targets, that will be informed by post occupation multi-modal transport surveys. The surveys will be undertaken 6 months (or at 75% occupation of units), two years and five years post occupation to monitor progress against targets. The Travel Plan surveys could also be used to monitor the uptake of car parking spaces within the Masterplan and used to determine whether any spaces can be converted to other uses in the future.

12.12 The content of the Outline Travel Plan and associated strategy will be agreed at planning application stage with HCC and NHC.

Next Steps

12.13 The Heritage Foundation has appointed CBRE to assist with the selection of an appropriate partner. In order to support this process, the Foundation will be producing a development brief that will set out the requirements for a potential partner.

12.14 The development brief will include the Foundation's more detailed provisions, some of which will be beyond the remit of planning policy. This will include the training and apprenticeship programme, an approach to sustainability and building technologies, a modern interpretation of Garden City design, the inclusion of an innovation quarter component to the development and of importance to this document, compliance with this strategic masterplan. Submissions by shortlisted companies will be expected to provide their architectural concept for the site for consideration.

12.15 It is expected that this marketing process will commence Autumn 2024, with an initial selection several months later, followed by detailed contractual discussions and the confirmation of the appointment. This will be based on compliance with the development brief and the Foundation's adopted vision, as well as price in order to provide best consideration for reinvestment back into the local community.

12.16 The partner will then work with the Foundation in consultation with NHC and HCC to agree a joint design code that will be adhere to the design principles and place making objectives incorporated into this document. This will then form the basis of a planning application, which will be a joint submission with the Foundation in accordance with the design code. To this end, it will entail further discussions, in coordination with NHC, HCC and CBC on a wide range of aspects including offsite improvements, community consultation strategy and design development regarding landscape character, open spaces, sustainable transport and built form. It is hoped that this application will be submitted in 2025, with work commencing on site the following year.