LDĀDESIGN

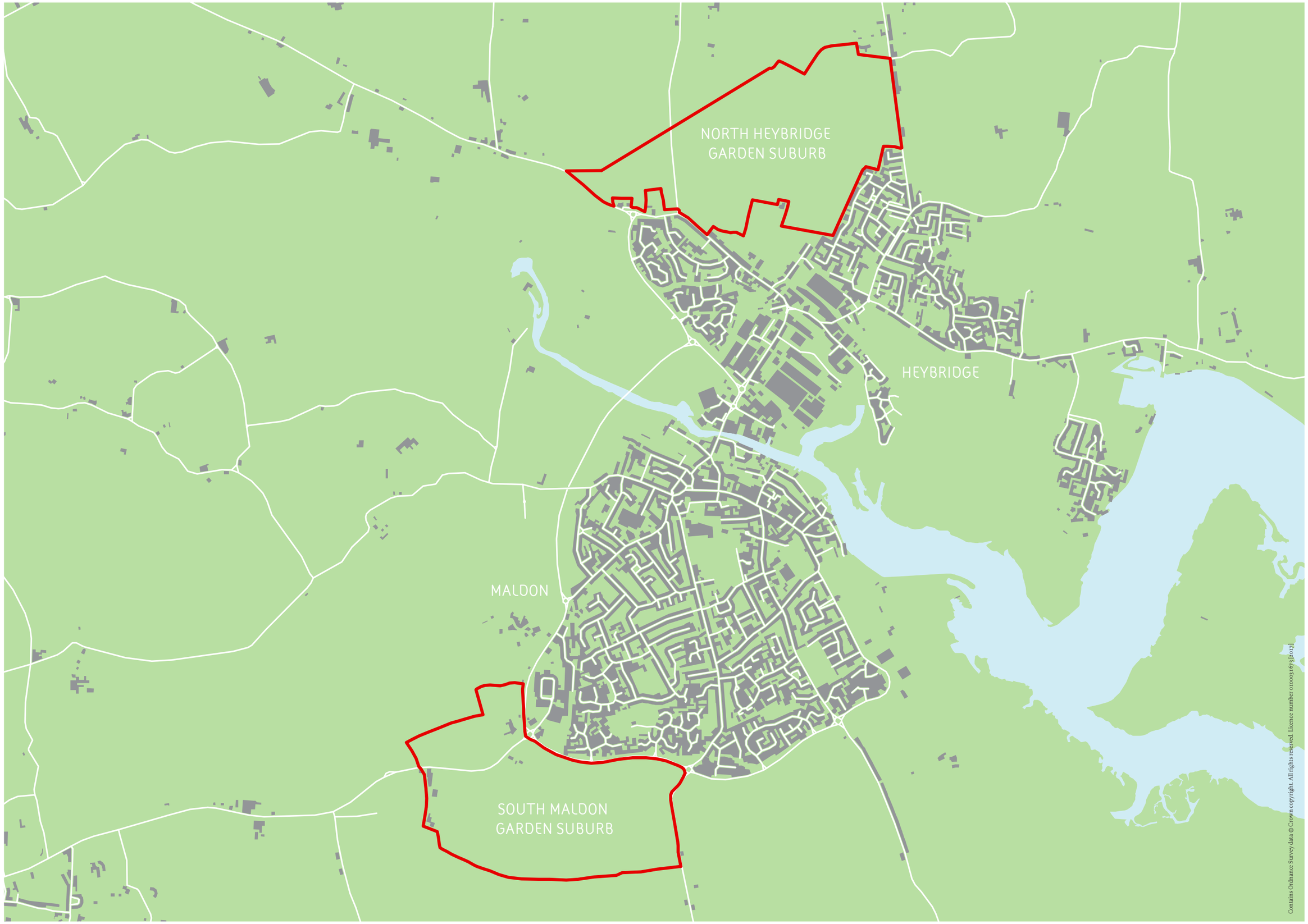
STRATEGIC DESIGN CODE

Maldon District

NORTH HEYBRIDGE GARDEN SUBURB

FEBRUARY 2017

CONTENTS


NORTH HEYBRIDGE
GARDEN SUBURB
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PREFACE

The creation of a great place does not require a singular architectural vision; it requires a beautifully conceived physical framework to determine form and transform the assets of a site into a living, thriving and sustainable place. It requires clear and simple standards that can be applied consistently over decades to provide houses, shops and work environments that people want to invest in, use and look after whilst at the same time building character, coherence and richness.

The Strategic Design Codes will facilitate the creation of a high quality, vibrant and distinctive neighbourhood based on garden suburb principles. By adhering to the framework and codes set out in this document, the layout and identity of the North Heybridge Garden Suburb will set it apart as a contemporary sustainable garden suburb and establish Maldon District at the forefront of successful place making.

SECTION 1.0 INTRODUCTION

The Maldon District Local Plan (LDP) 2014-2029 sets out how growth can be accommodated in the District up to 2029 including two large allocations in the main settlements of Maldon and Heybridge. It outlines the aspiration to achieve a garden city character and spatial attributes in two new garden suburbs. The LDP sets out important development principles to ensure they are planned as developed as:

- High quality neighbourhoods which are well integrated within existing settlements
- Enhance the character of the District
- Protect and enhance the environmental qualities of the surrounding area

Strategic Masterplan Frameworks (SMFs) have been prepared to set the context for more detailed planning applications and establish design principles which will need to be resolved at reserve matters stage. The SMFs set out how garden city principles could be applied within Maldon District to create two new Garden Suburbs. The SMFs have been endorsed by the Council and are a material consideration for development management purposes and in the determination of planning applications within the designated Garden Suburbs. Outline consents will be conditioned to require submission of any reserved matters applications to accord with Design Codes developed in conjunction with and approved by the Local Planning Authority. They will take full account of the principles of the approved SMFs and the subsequent reserved matters applications will need to accord with the approved design codes in all respects.

SITE ALLOCATION AND POLICIES FOR EACH AREA

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SMF SETS THE STRATEGIC DESIGN AND MASTERPLANNING FRAMEWORK

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OUTLINE APPLICATIONS - DESIGN PARAMETER PLANS AND DESIGN AND ACCESS STATEMENTS WORK WITHIN THE SMF'S

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STRATEGIC DESIGN CODES FOR MAIN STRUCTURING ELEMENTS AND INCLUDE STRUCTURING PLANS WHICH REFLECT CONSENTED SCHEME PARAMETERS

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RESERVED MATTERS APPLICATIONS

PURPOSE

Codes have been developed to address the specific challenge of residential development delivery on green field land over 15-20 years. Both the South Maldon and North Heybridge garden suburbs are also in multiple land ownership and will be developed in phases by several different developers or site promoters. The Strategic Design Codes have been developed as two documents - one for each suburb at South Maldon and North Heybridge to ensure that within each garden suburb each land parcel and development phase is coordinated with the one adjacent to it, and ensure that when both garden suburbs are completed they have a strong and recognisable identity. The SMFs will be elaborated on in the respective Design and Access Statements. Those that have already been produced have been considered in the production of this document.

The creation of great places in this context requires a strong vision and a beautifully conceived physical framework which is capable of transforming the assets of a site into a distinctive, living, thriving and sustainable place. It requires clear and simple standards than can be applied consistently over time to provide houses, shops and work environments that people want to invest in, use and look after whilst at the same time building a garden suburb character, coherence and richness.

Many design codes in the past have focussed on the architecture and have been very prescriptive about design outcomes, often working against commercial realities and even buildability. Such codes have often proved time-consuming, expensive to implement, inflexible and stifled creativity at the design stage. This Strategic Design Code has been prepared to complement the North Heybridge SMF, setting the design parameters for fundamentally important aspects of the new communities relating to quality of place. However, it leaves significant flexibility with regard to housing product and architectural design.

The vision and the framework contained in the North Heybridge SMF sets the overarching physical structure for the new community; it was formed through a process of collaboration and consultation and encapsulates Maldon District Council's aspirations for the Garden Suburb community. The purpose of the Strategic Design Code is to provide a greater degree of certainty to all involved on the aspirations for the design and quality of these structuring elements of the plans. The Strategic Design Code will also provide a level of guidance which can be used to ensure coherence and consistent high standards of design across the new community, irrespective of when it is built out or by whom.

SCOPE

The Strategic Design Code covers the North Heybridge Garden Suburb. A Structuring Plan is presented to establish the basic framework of the place – it is not a new plan but drawn from the SMF, parameter plans of consented schemes, and emerging information from non-consented schemes into a robust plan to establish the basic urban framework of the place. The structuring plan is fixed in order to deliver development in line with the SMF.

The Strategic Design Code is split into 'design codes' and 'design guidance'. The design codes will be mandatory; they set minimum requirements and prescriptive standards and rules for strategically important aspects of the plan. The design guidance is less prescriptive; it describes the design intent of elements of the development, effectively setting the design brief and allowing a degree of flexibility in the specific design outcome. Design statements submitted alongside planning applications will need to explain how designs comply with both the design code and the guidance.

The design code has been written to cover the strategically important items of infrastructure which will be central in defining the garden suburb character of North Heybridge. The following elements of the plans will be covered by the Strategic Design Code:

- Street Codes will set out objectives, core functions and design criteria for the primary network
- Green Edge Codes will set out objectives and design criteria for how buildings overlook green edges
- Green Space Codes will set out objectives and design criteria for how buildings overlook and enclose greenways and green fingers
- Built Edge Codes will set out objectives and design criteria for how buildings overlook or relate to existing streets and development

The design guidance has been written to cover other elements of the plan which are central to achieving the vision for North Heybridge or are of significant importance in local planning policy. They are not specifically coded but will require particular attention at outline application. The following elements will be covered by the Design Guidance:

- Character Context Areas & Gateways & Entrances
- Car Parking
- Materials and Public Realm
- Bin Storage

HOW TO USE

The intention of the code is to provide simple and clear coding for strategically important aspects of the plan. The diagram at the start of each code should be referred to for the location of the area which each code applies to. This document provides the design parameters for each of these elements of the plans, they still require good design at all stages of work to ensure the desired outcome is achieved. There is therefore a degree of flexibility within the code and guidance to allow a full design response to be developed at an appropriate stage.

The document will be used in different ways by different parties.

PLOT DEVELOPER:

Each developer will bring forward their scheme on individual plots within the context of the overarching Structuring Plan including key pieces of primary infrastructure. The Structuring Plan provides the indicative layout of primary infrastructure including main forms of access and strategic green space provision. It also shows how the various land uses should be arranged across the site and densities envisaged. In designing primary infrastructure the plot developer will locate primary infrastructure elements, including primary streets and strategic green infrastructure in accordance with the framework plans.

Each plot developer will use this document to:

- Design primary infrastructure elements in line with the design codes for streets, spaces and edges;
- Understand how their plot relates to the overarching vision and framework for the development of the site and the requirement to achieve a positive relationship between different landholdings and that the site is unified through a constant design approach to primary infrastructure and development edges
- Identify whether the framework plan has implications for their plot, for example the incorporation of strategic green infrastructure.
- Understand what character context area their plot falls within and how it should be developed to respond to that character. Reference should be made to the character context area statement and guidance on urban form, materials and planting.
- Refer to the coding plan to determine which elements of the design code are relevant to their plot and ensure proposals meet the mandatory requirements
- Plan development in accordance with the principles set out in the design guidance and demonstrate how this design intent has been translated into detailed design
- Determine parking arrangements in accordance with the parking design guidance and Essex County Council parking standards
- Ensure bin storage is fully considered in line with design guidance

DEVELOPMENT MANAGER:

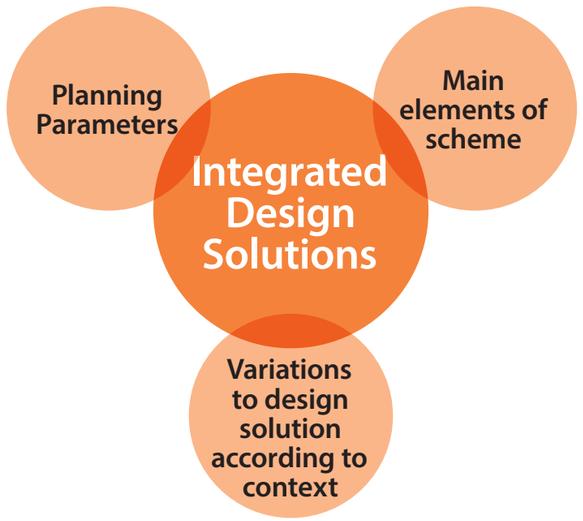
Development management processes will ensure development proposals come forward in line with this document. In practice this means ensuring that:

- Infrastructure and plot development reflects the spatial distribution of elements as defined by the structuring plan;
- Street cross sections for primary streets are compliant with the mandatory design codes with reference to the coding plan;
- Green spaces are designed in accordance with the mandatory requirements set out in the green space code
- Edge treatments are compliant with the built edge and green edge codes;
- Proposals for individual plots reinforce the identity of the character context area in which they sit
- Parking, materials and bin storage arrangements take due regard to the design guidance

CODES KEY ELEMENTS

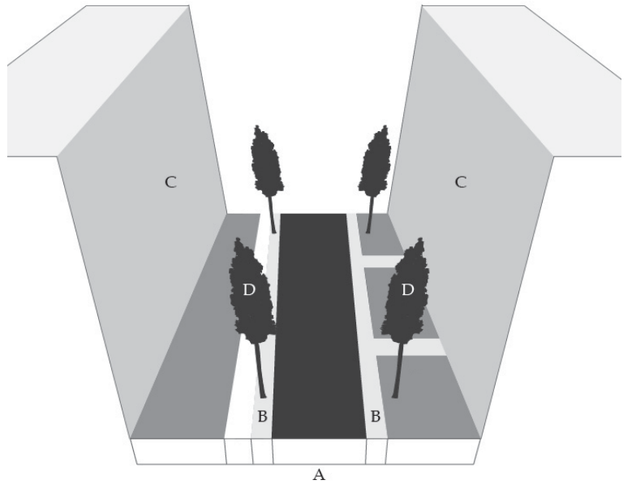
Whilst architecture is important to any scheme identity, the wider quality and coherence of any scheme requires a clear strategy for dealing with a relatively small number of key elements. The approved SMF is intended to accommodate schemes which are visionary and well-conceived with regard to its context and site characteristics. The key elements are:

- Ensuring the design of development is guided by a clear vision that is applied over time.
- The design of streets and spaces between buildings will have a key role to ensure that they have a sense of hierarchy and accommodate all functions, such as movement and parking, whilst also creating an attractive, high quality and comfortable environment. Well-thought through street cross sections, which give clarity to the role and function of all areas of the public domain will be an essential part of this. This document will illustrate how the design of streets and spaces can fulfil their potential to add value to the various character context areas and development opportunities at Heybridge.
- The treatment of edges (frontage development) so that they support the overall garden suburb aspiration, for example; ensuring that the scale, massing, rhythm and setback of a street frontage supports the character and hierarchy of the street. The document includes generic street sections for Primary Streets to demonstrate how the development parameters can be met through an integrated design solution. These are supported by a number of variations that illustrate design responses to different conditions across the development.



PHOTOGRAPH EXAMPLES

The photos opposite show good examples of where key coding principles promoted at Heybridge have been delivered elsewhere.



CODING: WHAT MATTERS

A: GETTING THE STREET SECTION RIGHT
B: CONFIGURING THE PARKING
C: DEFINING EDGES
D: USING THE RIGHT LANDSCAPE, MATERIALS AND FURNITURE

I. WELL THOUGHT OUT STREET SECTION

A - DEFENSIBLE ZONE
B - GENEROUS FOOTWAY
C - VERGE AND TREE PLANTING
D - ON STREET PARKING

2. BUILDINGS ADDRESSING LINEAR GREEN SPACE

A - LIVELY, ARTICULATED EDGE
B - DEFENSIBLE ZONE
C - FOOTWAY
D - OVERLOOKED LINEAR LANDSCAPE

3. FLEXIBLE COMMUNITY STREET

A - FLEXIBLE PARKING
B - SHARED SURFACE FRIENDLY STREET
C - LEAFY ENVIRONMENT UNIFIES ARCHITECTURE

4. PEDESTRIAN FRIENDLY COMMUNITY STREET

A - DIVERSE EDGES OF CONSISTENT SCALE
B - SHARED SPACE WITH DEFINED FLEXIBLE PARKING CREATE PEDESTRIAN FRIENDLY STREET
C - VERGE PROVIDING BUFFER TO STREET AND TREE PLANTING ZONE

SECTION 2.0 VISION

"The Garden Suburbs at Maldon and Heybridge will be planned as high quality, vibrant and distinctive neighbourhoods that will complement and enhance the character of the District and protect and enhance the environmental qualities of the surrounding area" *(Policy S3 LDP)*

The Maldon District Development Plan sets out proposals for two new 'garden suburbs' at South Maldon and North Heybridge. The vision is contained in full in Policy S3: Place Shaping and further developed in each SMF; it is intended to be an expression of what the garden suburbs will be like. The vision, along with accompanying high level objectives, sets Maldon District Council's aspirations for South Maldon and North Heybridge and what the new community must achieve.

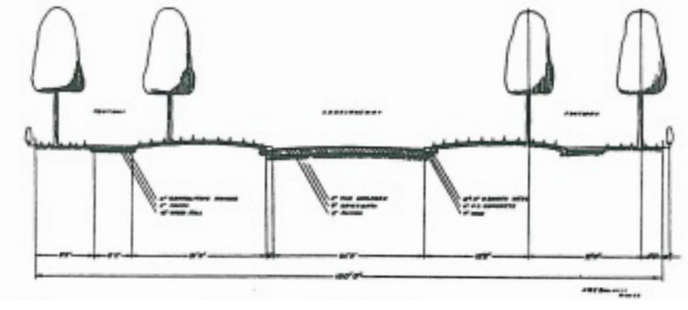
The Strategic Design Code has been prepared to sit alongside the vision, it provides a greater degree of certainty to all involved on the aspirations for the design and quality of the structuring elements of the plan which are central to achieving the vision.

2.1 PRINCIPLES OF GARDEN SUBURBS

National planning policy makes reference to the benefits of garden cities and garden suburbs of the past and the opportunities these highlight for new communities in the future. The Town and Country Planning Association (TCPA) set out the key principles for achieving this in their original report "Creating Garden Cities and Suburbs Today" and have refined their thinking in subsequent publications. The original Garden Cities were borne of a desire to tackle the social and environmental issues of the late 19th and early 20th centuries. The garden suburbs today must equally address the challenges of the 21st century. The garden suburb vision will combine the best of town and country living and creating healthy homes in vibrant communities. The principles and vision that are set out in the SMF follow the key principles of Garden Suburbs.

Key principles of a successful Garden Suburb (as outlined within the TCPA's publication) include:

- A strong vision, leadership and community engagement;
- Capture land value for the benefit of the community;
- Community ownership of land and long-term stewardship of assets;
- Mixed-tenure homes that are affordable for ordinary people;
- High-quality design, combining the very best of town and country living to create healthy homes in vibrant communities;
- Generous green space linked to the wider natural environment, including a mix of public and private networks of well-managed, high quality gardens, tree lined streets and open spaces;
- Opportunities for residents to grow their own food, including generous allotments;
- Access to strong local cultural, recreational and shopping facilities in walkable neighbourhoods; Integrated and accessible transport systems – with a series of settlements linked by rapid transport providing sustainable access to destinations.



Reference to historic garden suburbs shows how key street sections were designed that help to structure the place and give a consistency to development. In this example from Letchworth the key sections and built street show the consistent street section and regular tree planting. In a similar way the focus of this Strategic Design Code is on coding key sections through the Garden Suburbs.

2.2 PHYSICAL QUALITIES OF GARDEN SUBURBS

The SMF sets out the key principles of Garden Suburbs. These are set out in Section 4.1 of the North Heybridge SMF. They are broad principles. Underlying these there are a number of special physical characteristics that make Garden Suburbs recognisable and that differentiate them from other towns or suburbs. These must form an integral part of the design approach that developers should achieve. A number of key qualitative features are identified as follows which the Strategic Design Code seeks to achieve and embody within each code section to ensure that fundamental characteristics of garden suburbs such as street trees are incorporated into the strategic infrastructure of each site:

- Traditionally tree lined streets
- Approach vistas which lead visitors to the most significant buildings or gateways
- Trees and grass are planted in the part of the road not required by traffic
- Front gardens on main streets
- Formal hedge boundaries
- Clear hierarchy of roads range from grand and formal to tight knit and intimate streets
- Landscape character is an integral part of the whole approach
- Natural environment is brought into the heart of the community through a network of linked green spaces and avenues giving views of the countryside
- Housing layouts respond to natural conditions and topography

PHYSICAL CHARACTERISTICS OF GARDEN SUBURBS

A - TREE LINED STREETS

B - TREES AND GRASS IN THE PART OF THE ROAD NOT REQUIRED BY TRAFFIC

C - FORMAL HEDGE BOUNDARIES

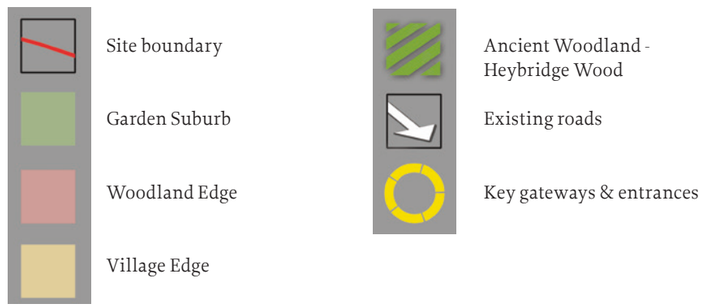
D - LANDSCAPE CHARACTER AN INTEGRAL PART OF THE WHOLE APPROACH

2.3 CHARACTER CONTEXT

A key part of the garden suburb model is the landscape led approach. This concept seeks to bring built form and landscape together harmoniously by allowing the site features to drive the physical form of the new neighbourhood. At North Heybridge the character of each of the different neighbourhoods which make up the new community is derived from an understanding of their landscape and built setting. The benefit of this will be a new community with an identity rooted in place rather than an anonymous 'anywhere development'.

NORTH HEYBRIDGE

Aerial Photography - Bing Maps Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community



North Heybridge will provide strong links with the surrounding landscape, incorporate natural features such as Heybridge Wood and other areas of ecological value, mature woodland and hedge, ditches and augmentation of the characteristic field boundaries supplemented with locally distinctive, substantial new planting and green spaces. These steps will combine to define a development character driven by landscape.

The character context areas identified are not development neighbourhoods as referred to in the SMF and consented DAS; they are broad areas that are influenced by their context, setting and landscape which should be reflected across the different residential neighbourhoods that the DAS identifies. For example the northern part of the site has a close physical relationship with the rural villages of North Heybridge which should be reflected in a looser grained urban edge comprising a range of dwelling sizes and arranged around informal and irregular shaped green spaces as can be found at villages such as Little and Great Totham and Tolleshint D'Arcy.

Towards the centre of the site the opportunity exists to create a more formal, planned layout clearly recognisable as a planned Garden Suburb. Building should be arranged in regular, formal street patterns with vistas and characteristic tree-lined streets and formally laid out open spaces. There is a distinction between this area and the edge of Heybridge Wood. Here a protective green buffer provides an opportunity for development to face towards the woodland with informal shared space creating a soft edge between the built area and woodland.

Three broad character context areas are:

- Village Edge
- Garden Suburb
- Woodland Edge

A description of the design and character of each area are explained within 5.0 Design Guidance section of the report, which sets out the expectations for the overarching elements used to convey consistency across the character context areas and aspects that overlay variation and distinctiveness.

SECTION 3.0 FRAMEWORK

3.1 STRUCTURING PLAN

The Structuring Plan underpins the North Heybridge SMF. It sets out the physical structure of development and defines areas of different character across the site. It explains the framework of each place. It defines broad areas of land use which are set by ecological, landscape, hydrological, noise, transport, viability and social constraints. It shows a strategic network of streets necessary to allow traffic movements and provide access to development blocks together with the green infrastructure connections which link the development with its surroundings and encourage sustainable transport choices.

The urban structure set by the Structuring Plan should be considered as fixed to ensure appropriate site development in line with the policies of the North Heybridge SMF. The content of the Strategic Design Code and guidance clearly set out the requirements for elements of the Structuring Plan but leave flexibility as to the detailed arrangement and alignment of these elements and how individual blocks and plots that lie within the framework may be developed.

The basic framework of the plan comprises:

- Strategic movement including strategic streets, public transport and pedestrian/cycle networks
- Distribution and nature of land uses, including the disposition of community facilities
- Green Infrastructure network
- Urban design and legibility principles
- Density/height parameters and development extents

NORTH HEYBRIDGE KEY

LAND USE

- Boundary of North Heybridge Garden Suburb
- Residential
- Mixed Use: Local Centre, to include employment, retail and community uses, primary school, early years facility, residential and infrastructure uses
- 2-3 — Number of storeys (n.b. max. height)
- Gateways and entrances

ACCESS & MOVEMENT

- Existing Roads
- Future relief road
- Primary streets - main vehicle, cycle & pedestrian route
- Primary streets -bus route (shown indicatively) from DAS
- Principle Vehicular Access Points
- Existing PROW/footpaths
- Key pedestrian and cycle routes / connections
- Existing Public Right of Way (to be realigned)
- Proposed Public Right of Way (Realigned)
- Potential strategic footpath routes
- Existing rail trail
- Permissive footpath

FRONTAGE

- Primary frontage along main streets
- Secondary frontage along streets and formal open space
- Green edges with more permeable layout

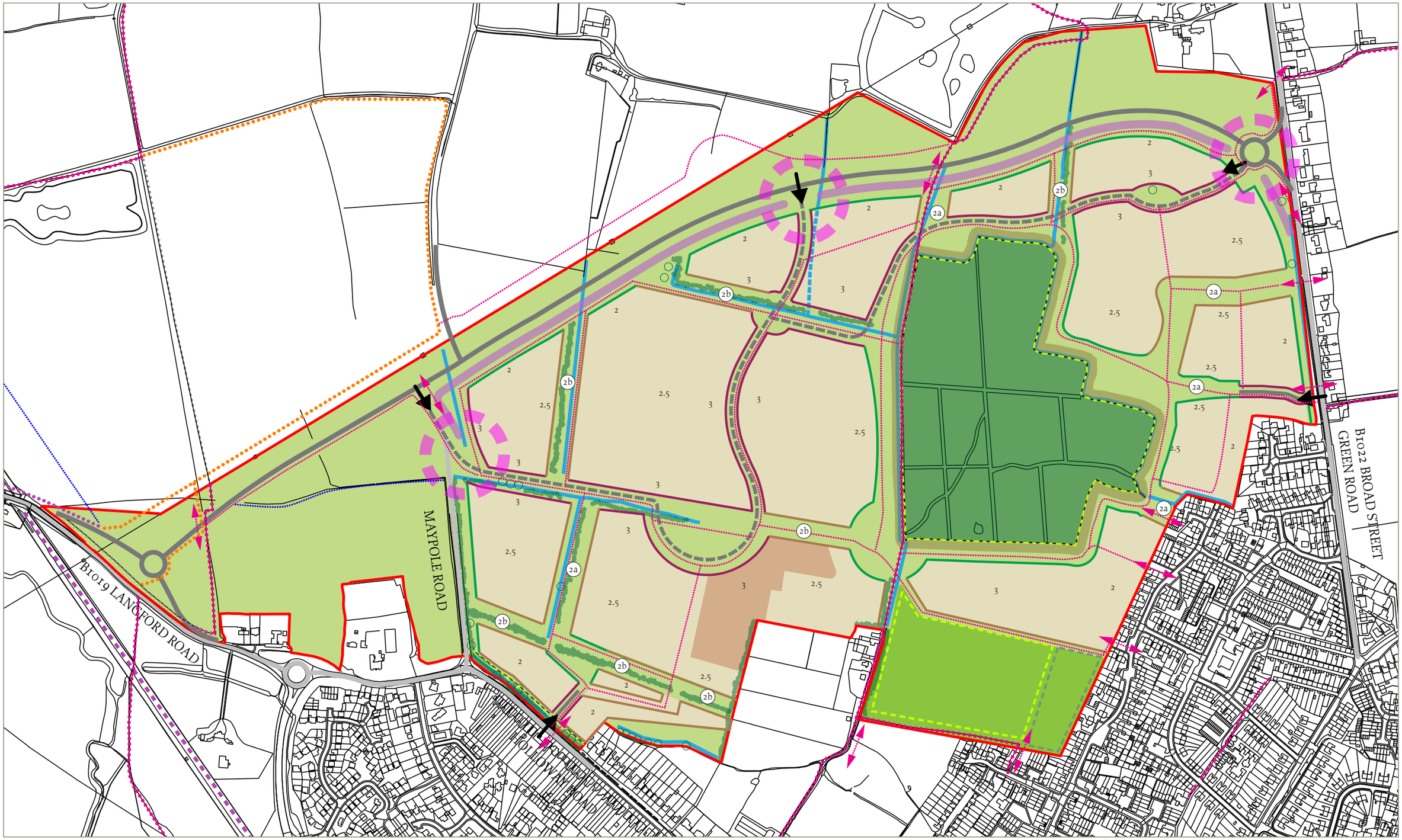
GREEN INFRASTRUCTURE

- Landscaping, Flood Alleviation and/or openspace.
- Heybridge Wood & 15m buffer
- Local wildlife site
- Sports pitches
- Allotment
- Existing hedge line
- 2a / 2b — Greenways / Green Fingers

WATER

- Existing waterbodies/watercourses
- Re-routed watercourse
- Noise attenuation bund

NORTH HEYBRIDGE STRUCTURE PLAN



SECTION 4.0 STRATEGIC DESIGN CODES

Design Codes are a set of specific rules or requirements to guide the physical development of a site or place. The aim of design coding is to provide clarity as to what constitutes acceptable design quality and thereby a level of certainty for developers and the local community alike that can help to accelerate the delivery of high quality new development.

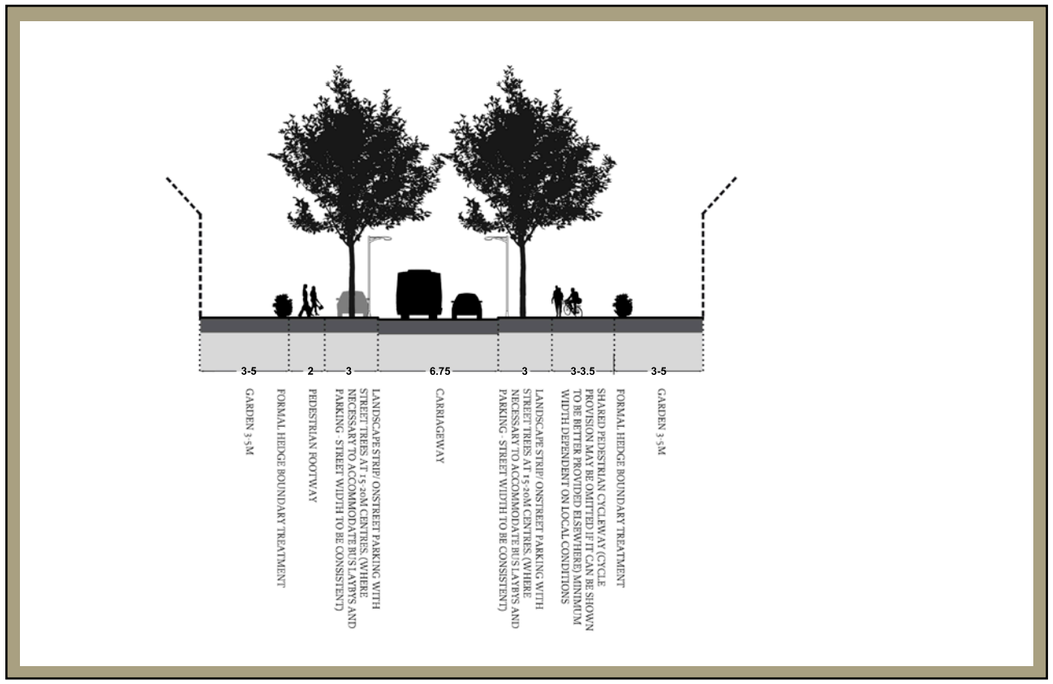
The design codes provide mandatory requirements for how buildings, streets and spaces relate to each other and the public realm. These mandatory requirements will, if consistently applied over time, ensure that the scheme is developed to achieve the aspirations set out in the vision whilst maintaining flexibility for each developer to decide how to bring forward individual plots. In this part of the document the strategic design codes that relate to main structuring elements that pass through and influence the development overall are addressed including:

- Roads and Streets
- Green Edges
- Green Space
- Development Edges

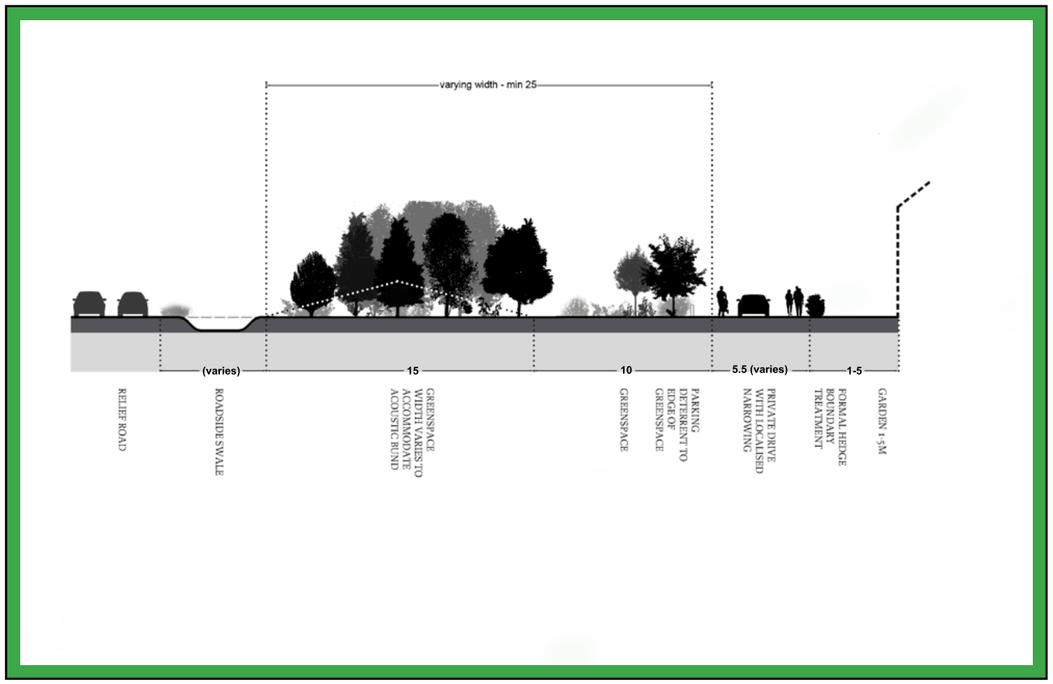
For each of the four main structuring elements there is a common basis for the design response set out on these pages. Each one is driven by an integrated approach to the key parameters of the approved North Heybridge SMF. Each code chapter has this design response set out first as the generic or 'typical' designed section with an associated table that summarises the key parameters and the design features incorporated to respond to them. It is followed by a number of illustrative variations.

The local context of the proposed development and the desired character will influence these structuring elements. For example a Primary Street will be different in a residential area to when it is within a mixed use area, and may include variations across North Heybridge because of the use, scale, functions and activities that these conditions need to accommodate. Variations to the typical design code are included that demonstrate that the design parameters can be met in given locations and with adaptations that ensure the local character and conditions are integrated.

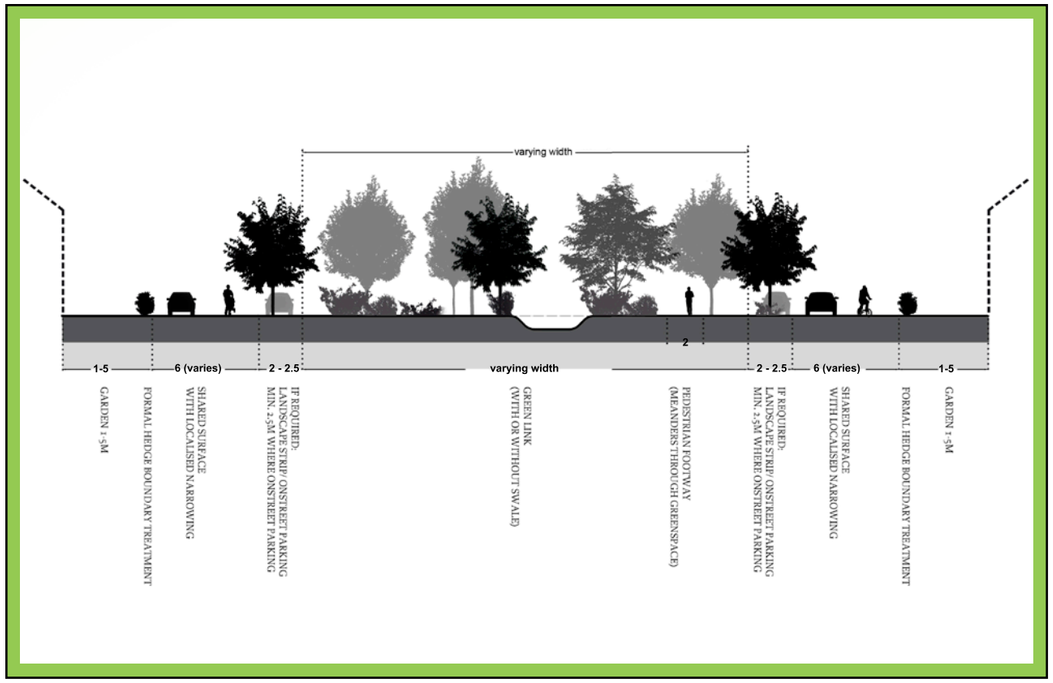
EXAMPLES:



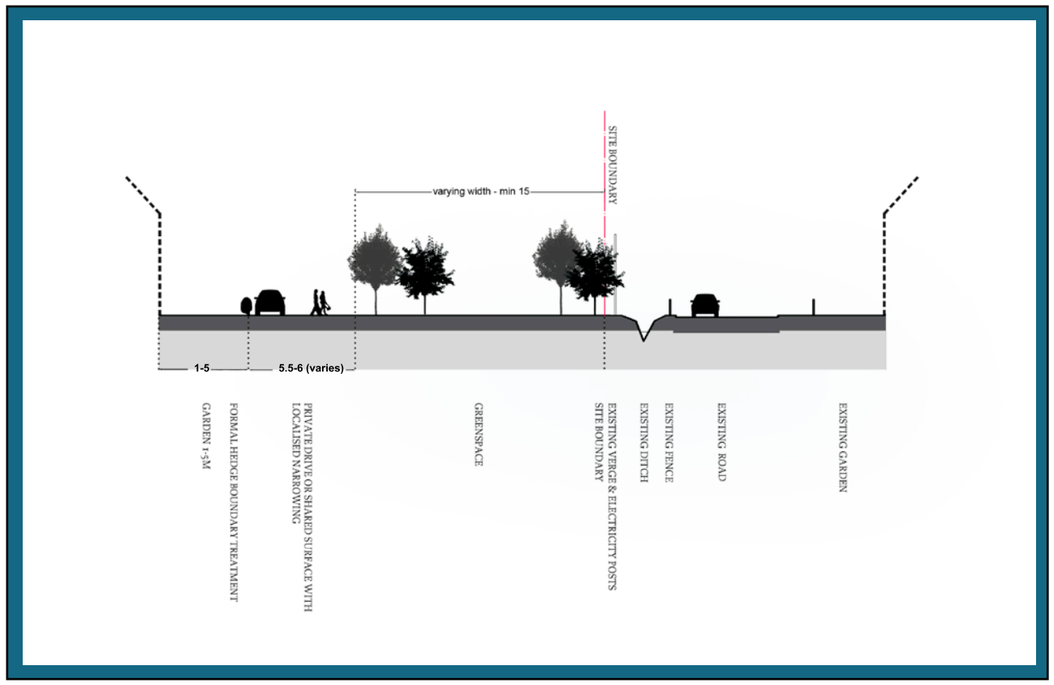
PRIMARY STREET CODE



GREEN EDGE CODE



GREEN SPACE CODE



BUILT EDGE CODE

4.1 STREET CODES:

DESIGN STREETS AS SPACES

The design of all streets at North Heybridge should comply with the design principles set out in the Manual for Streets (DfT 2007) , Manual for Streets 2 (CHIT 2012) and Essex Design Guide Road Types table (refer to Appendix A of this document) which will be adopted in April 2017. Design should equally contribute to the place making and movement functions of the street. The street cross section and the function of all parts of it in terms of providing for movement, parking, landscape, private gardens, drainage and so on should be agreed with the planning authority. There should be clarity as to the function of all parts of all streets.

The North Heybridge SMF will be elaborated on in the respective Design and Access Statements as development comes forward. Those that have already been produced have been considered in the production of the design codes.

CREATE A PERMEABLE NETWORK AND FACILITATE WAY FINDING

All streets and footways including private drives should be barrier free and lead directly to where people want to go. Footways should be overlooked and wide enough for two pedestrians to pass in comfort. Street design should incorporate frequent pedestrian crossings. The use of pedestrian barriers should be avoided. Existing Rights of Way should be incorporated into the site, as outlined in the North Heybridge SMF and the Structure Plan, with the details to be agreed with Essex County Council.

INTEGRATE TRAFFIC CALMING INTO THE STREET SCENE

The arrangement of buildings, spaces and activities can act as a natural traffic calmer and create a pleasant environment for pedestrians and cyclists. Design speeds on secondary and tertiary streets should be kept below 20mph.

REDUCE CLUTTER

The use of traffic signs and other street furniture should be considered carefully and the excessive use of lighting, kerbing, signage and road markings should be avoided. Examples of reducing clutter include:

- Using the minimum of highway design features necessary to make the streets work properly;
- Locating service inspection boxes within buildings or boundary walls;
- Specifying the location and orientation of inspection covers in the footway;
- Ensuring that household bins and recycling containers can be stored off the footway;
- Designing street furniture to be in keeping with its surroundings; and
- Avoid the use of guard railing unless a clear need for it has been identified.

Reference should be made to Local Transport Note 1/08 – Traffic Management and Streetscapes published by the Department for Transport in March 2008, which provides guidance on the de-cluttering of streets and the tightening up of junction layouts.

SELECT APPROPRIATE MATERIALS

One of the main purposes of the code is to ensure that the various development areas are coordinated through their public realm treatment to strengthen local identity and aid way-finding. In the same way, materials choice should reflect the position of each street in the hierarchy. Well-designed shared surfaces encourage low vehicle speeds and make it easier for people to occupy the space without feeling intimidated by motor traffic.

DESIGN FOR PUBLIC TRANSPORT

Streets defined for public transport use should be designed to allow for bus use. Pavements along strategic streets should be wide enough to accommodate bus stops and queues.

DESIGN FOR CYCLISTS

Cycling should be promoted as an alternative mode of transport. The green space codes set out a strategic network of routes which will be designed to be attractive to both cyclists and pedestrians. It is anticipated that these will form the primary provision; however cyclists should also be accommodated either on carriageway or on shared footway-cycle paths running alongside carriageways. Where possible the alignment of routes should avoid the need for cyclists to dismount. The headroom over routes used by cyclists should be 2.7m (min. 2.4m).

PRIMARY STREET CODE

The underlying principle of the code for the primary street is to immediately establish the garden suburb identity. It is a unifying feature which requires continuity of character and identity across plot boundaries. They design of this street should retain overall continuity to strengthen its character and legibility and role in the street hierarchy. The primary street code shows how the same basic street section can be adapted to reflect adjacent land uses. The elements of the cross section which must remain consistent include:

- Consistent landscape strip with formal tree planting parallel on both sides of the street to create an Avenue.
- Parallel pedestrian and cycle access provided
- Pedestrian and cycle access separated from the carriageway by a landscape strip or a verge which also accommodates parallel or bay parking
- A flexible strip adjacent to the carriageway which must be included as either parking, bus layby, additional lane on approach to junctions or extension of the landscape strip.

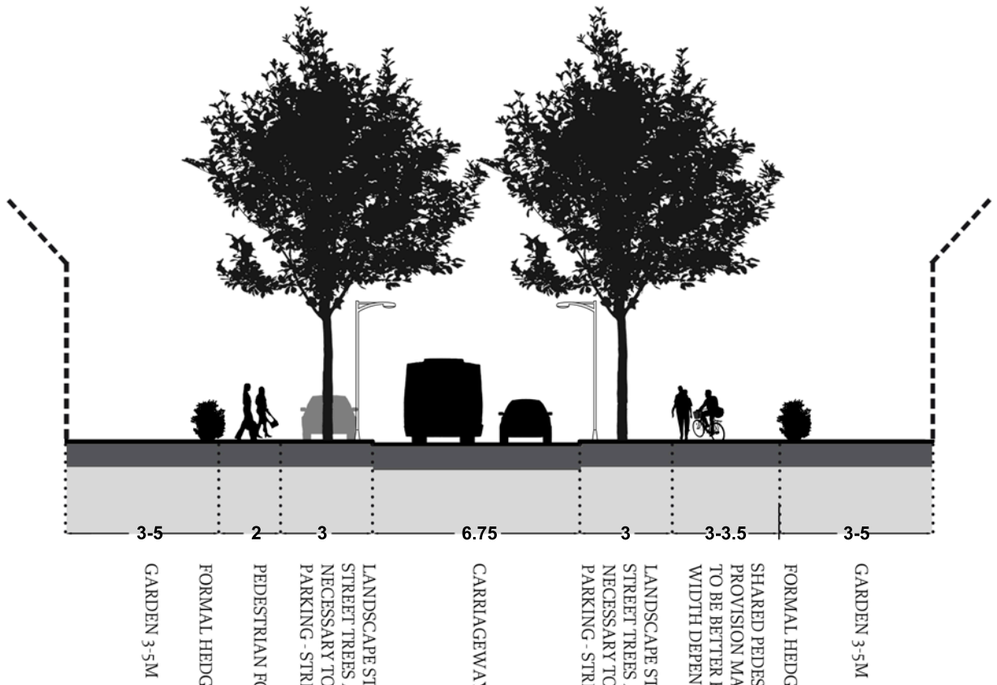
Primary Streets provide the strategic traffic movement function and link between the existing strategic routes. They link neighbourhoods and also serve non-residential or industrial uses. There is no parking except where off carriageway provision is made. They are wide and spacious streets with a strong landscape component with formal hedge lined boundaries.

The identity of the street is driven by the physical qualities of garden suburbs outlined in 2.2. It is about creating a spacious and elegant street with a significant landscape component including regular and evenly spaced avenue trees, landscape strips and a hedge boundary.

The landscape elements are key to the garden suburb identity. Formal hedges must be given sufficient space to allow them to flourish and survive as they provide a uniform element along each side of the street. Avenues must be achieved through regular spacing of trees mirrored on both sides of the street and interruptions such as street lighting, side roads, parking and bus laybys should not be prioritised over the regular spacing of trees. The trees must be of sufficient stature to achieve a presence within the street; the species must be selected to achieve the avenue affect whilst also considering the resilience of the trees. Species must be selected from the list included in the Performance Specification table or as otherwise advised by Maldon District Council. Trees will need to be managed under private licence within adopted areas.

Further information on the priorities for street character can be found illustrated on page 30.

NORTH HEYBRIDGE



PS PERFORMANCE SPECIFICATION	
Type	■ Primary Street - Essex Design Guide Road Type Table: C
Core Functions	■ Distribute vehicular traffic from the strategic route into and through the heart of the development at North Heybridge. ■ Adequate provision for the effective running of the bus route. ■ Provision of attractive pedestrian and cycle access including regular crossing points. ■ Links neighbourhoods.
Objectives	■ Create a spacious and elegant street with a strong and consistent character. ■ Contain a strong landscape component, to contribute to creating a garden suburb by creating a spacious green street with generous front gardens. ■ Achieve a strong relationship with the landscape that it goes through. Any driver or pedestrian using the street should have the sense of passing through a 'green designed' landscape. ■ Designed to be identifiable as a primary route in the hierarchy of internal streets within North Heybridge.. ■ To provide overlooking and activity along the street to make it feel safe and attractive to pedestrians. ■ To create a strong urban identity using high quality public realm materials which serve to strengthen the garden city identity. ■ To provide enclosure of the street and avoid 'back fence' development. ■ A simple, low clutter street. ■ Achieve parking standards.
STREET DIMENSIONS	
Carriageway	6.75m / 5.5m (possibility to reduce to 6.0m width, on Primary Streets indicated with dashed line on Structuring Plan, in agreement with council if a bus route were not to be provided) in accordance with Essex Design Guide Road Type table (refer to Appendix A of this document).
Landscape	A flexible strip adjacent to both sides of the carriageway which must be included. Potential for occasional use for parking or bus layby - 3m .
Footway	2m, set back and separated from carriageway by a parallel landscape strip directly adjacent to carriageway.
Cycleway	Shared cycle/footway 3-3.5m - minimum width dependent on local conditions, set back and separated from carriageway by a parallel landscape strip directly adjacent to carriageway. The shared cycle/footway adjacent to the road would provide a cycle route, but where it is demonstrated a better route (i.e. safer, more direct and pleasant) is possible this alternative will be considered. It is particularly important to have a dedicated (off carriageway) cycle route where buses use the road.
Private Curtilage to buildings	3-5m private curtilage clearly defined and enclosed - formal hedge boundary treatment. (Hornbeam or as required by Maldon District Council)
DESIGN CRITERIA	
Speed limit	20mph subject to appropriate traffic calming measures to be agreed with Essex County Council.
Vehicle types to be accommodated	All types allowed.
Direction of traffic	Two-way.
Priority	Vehicular.
Direct vehicular access to plots	Yes.
Traffic calming measures	To be integrated into the design of the street through the use of verge side tree planting / landscape to reduce dominance of traffic on the street, narrowing carriageway width, provision of regular crossing points, occasional parking and bus layouts.
Parking solutions	Permissible solutions - on street parallel, on street perpendicular, on plot. Allocated parking is not acceptable in adoptable areas.
PUBLIC TRANSPORT	
Bus access	Local bus service (except PS04).
MATERIALS AND LANDSCAPE	
Materials	Blacktop carriageway, standard 125mm highways kerb, resin bonded or blacktop footway. Materials in adoptable areas to be agreed with Essex County Council.
Street furniture	Lighting - in accordance with ECC Operational plan. Bus shelters. As per Section 5.3 Design Guidance (Materials & Public Realm Design Principles).
Street trees	Formal tree planting, equal spacing (15-20m c/c), single species, single stem, high canopy. Some recommended species: Acer Platanoides 'Emerald Queen', Tilia 'Brabant' or Tilia Cordata or as otherwise advised by Maldon District Council. Trees to be managed under private licence within adopted areas.
Hedges	No more than 50% of plot frontage of individual houses occupied by parking spaces. Single species clipped hedge to property boundary. Hornbeam or as required by Maldon District Council.

PS01; PRIMARY STREET THROUGH RESIDENTIAL AREA:

To be used where the primary street is lined by residential development on both sides. The basic primary street section remains consistent through all development areas.

Where this section is used adjacent development should still provide enclosure and natural surveillance of the street.

GARDEN 3-5M

FORMAL HEDGE BOUNDARY TREATMENT

SHARED PEDESTRIAN CYCLEWAY (CYCLE PROVISION MAY BE OMITTED IF IT CAN BE SHOWN TO BE BETTER PROVIDED ELSEWHERE) MINIMUM WIDTH DEPENDENT ON LOCAL CONDITIONS

LANDSCAPE STRIP/ ONSTREET PARKING WITH STREET TREES AT 15-20M CENTRES. (WHERE NECESSARY TO ACCOMMODATE BUS LAYBYS AND PARKING - STREET WIDTH TO BE CONSISTENT)

CARRIAGEWAY

LANDSCAPE STRIP/ ONSTREET PARKING WITH STREET TREES AT 15-20M CENTRES. (WHERE NECESSARY TO ACCOMMODATE BUS LAYBYS AND PARKING - STREET WIDTH TO BE CONSISTENT)

PEDESTRIAN FOOTWAY

FORMAL HEDGE BOUNDARY TREATMENT

GARDEN 3-5M

PS02; PRIMARY STREET THROUGH GREEN CORRIDOR

To be used where the primary street runs through a wide greenspace. The location of footpaths and cycle paths maybe altered from that indicated in this illustration provided this can be shown to provide a better solution. Any alternative solutions should not detract from the requirement to ensure continuity in the character of the primary street network.

In more urban areas such as the Local Centre the 3m landscape strip can be substituted with paving to provide a much wider section of footpath, street trees should still be provided along the same alignment within an urban tree pit.

PS03; PRIMARY STREET ADJACENT TO HEYBRIDGE WOOD

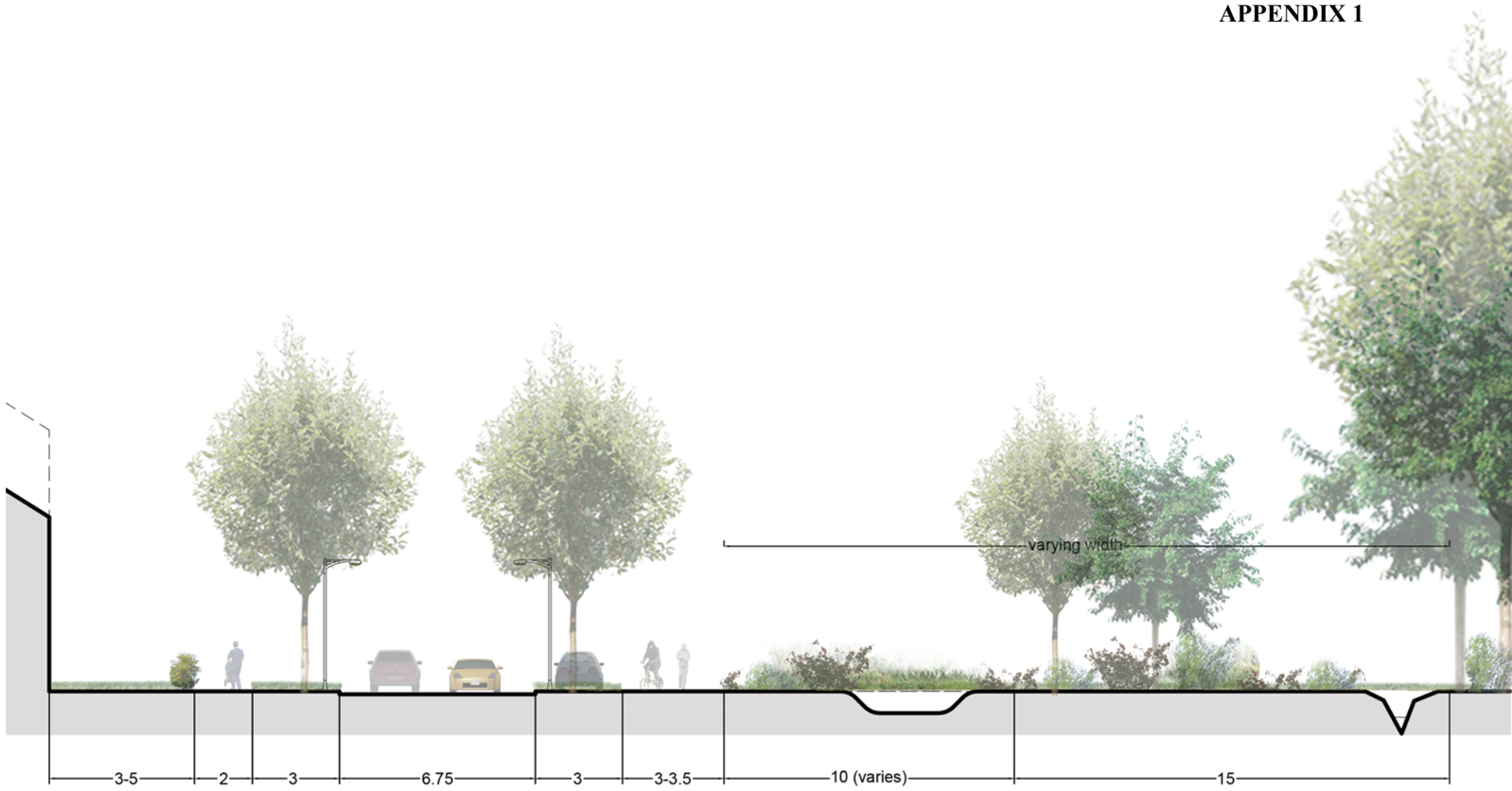
Use of the primary street section where development only runs alongside one side of the street should remain consistent to ensure continuity in the character of the primary street network. The street section can be adapted by providing the footpath and cycleway within the adjacent green buffer on the undeveloped side of the street adjacent to Heybridge Wood.

The minimum 15m buffer zone to Heybridge Wood (ancient woodland) is required by Natural England guidance and no footpaths or cycle paths should be created within this zone. Existing Public Rights of Way should be retained where they run through these areas.

The minimum width of greenspace provided should be sufficient to allow these spaces to provide for a range of functions such as surface water attenuation (swales/ditches), play (LEAPS, NEAPS, walking & cycling route) and planting (trees, hedges) outside of the minimum 15m buffer. The greenspace in conjunction with the minimum 15m buffer zone should provide an ecological buffer to protect the existing ecology and provide new habitats.

Reference should also be made to GE02 which provides an illustration of treatment around Heybridge Wood.

The location of footpaths and cycle paths maybe altered from those indicated provided it can be demonstrated that a better solution is provided . Any alternative solutions should not detract from the requirement to ensure continuity in the character of the primary street network.



HEYBRIDGE WOOD

(WITH OR WITHOUT EXISTING DITCH)

WHERE EXISTING PROW ENSURE RETAINED

MINIMUM 15M SEMI-NATURAL BUFFER ZONE TO ANCIENT WOODLAND AS NATURAL ENGLAND GUIDANCE

GREENSPACE TO PROVIDE SUFFICIENT SPACE FOR RANGE OF DESCRIBED FUNCTIONS AND NEW HABITATS (WITH OR WITHOUT SWALE OF VARYING WIDTH)

SHARED PEDESTRIAN CYCLEWAY (CYCLE PROVISION MAY BE OMITTED IF IT CAN BE SHOWN TO BE BETTER PROVIDED ELSEWHERE) MINIMUM WIDTH DEPENDENT ON LOCAL CONDITIONS

LANDSCAPE STRIP/ ONSTREET PARKING WITH STREET TREES AT 15-20M CENTRES. (WHERE NECESSARY TO ACCOMMODATE BUS LAYBYS AND PARKING - STREET WIDTH TO BE CONSISTENT)

CARRIAGEWAY

LANDSCAPE STRIP/ ONSTREET PARKING WITH STREET TREES AT 15-20M CENTRES. (WHERE NECESSARY TO ACCOMMODATE BUS LAYBYS AND PARKING - STREET WIDTH TO BE CONSISTENT)

PEDESTRIAN FOOTWAY

FORMAL HEDGE BOUNDARY TREATMENT

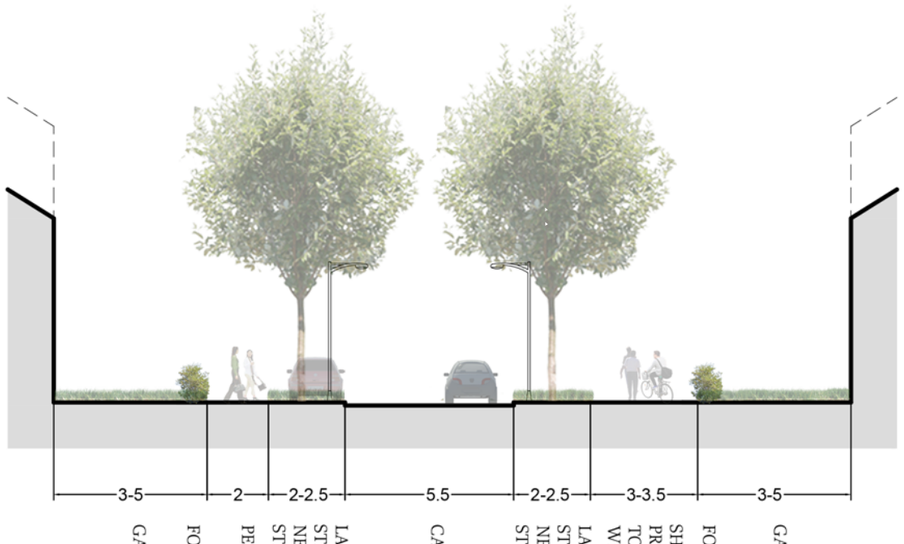
GARDEN 3-5M

PS04; PRIMARY STREET FOR ACCESS

To be used where the primary street provides access from Holloway and Broad Street Green and the primary street does not include a bus route.

To be used where the primary street is lined by residential development on both sides. The basic primary street section remains consistent through all development areas, this illustration allows for a narrower carriageway (as Essex Design Guide Road Type D, Access Road) of 5.5m.

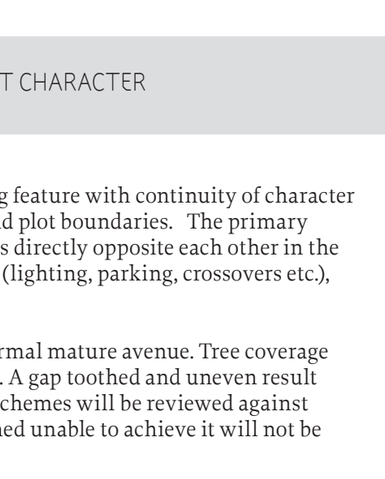
Where this section is used adjacent development should still provide enclosure and natural surveillance of the street.



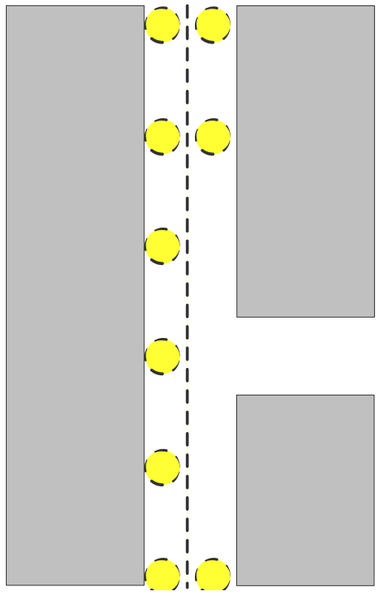
PRIORITIES FOR PRIMARY STREET CHARACTER

Primary streets are a unifying feature with continuity of character required across ownership and plot boundaries. The primary driver should be tree locations directly opposite each other in the street and the other elements (lighting, parking, crossovers etc.), have to fit around this.

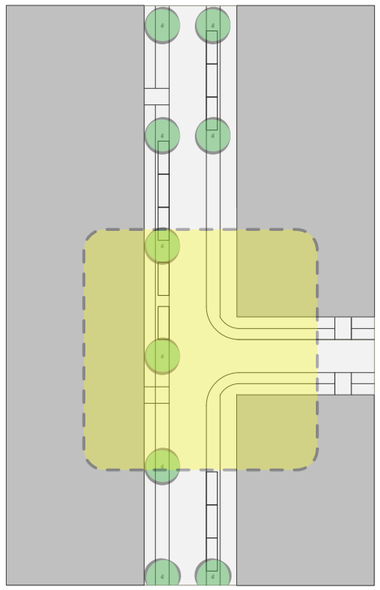
The priority is to achieve a formal mature avenue. Tree coverage must be even along the street. A gap toothed and uneven result will not be permitted. Note: Schemes will be reviewed against this principle and those deemed unable to achieve it will not be approved.



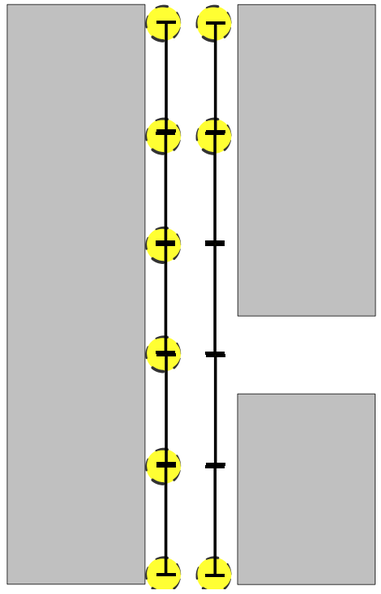
POSITION CROSSOVERS AND CONTROL THE NUMBER OF CROSSOVERS BETWEEN THE AVENUE STREET TREES



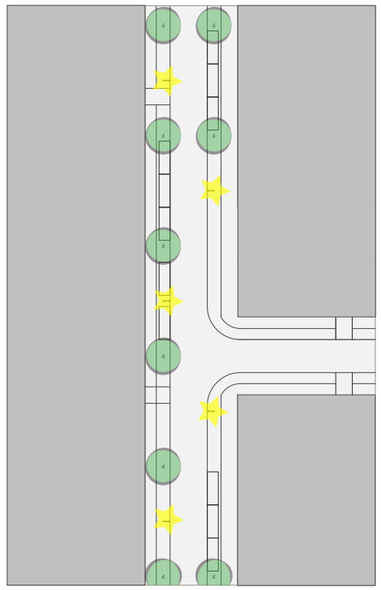
CONSISTENTLY SIZED TREES BOTH SIDES OF STREET, OPPOSITE EACH OTHER TO FORM AN AVENUE, ALONG THE LENGTH OF THE PRIMARY STREET



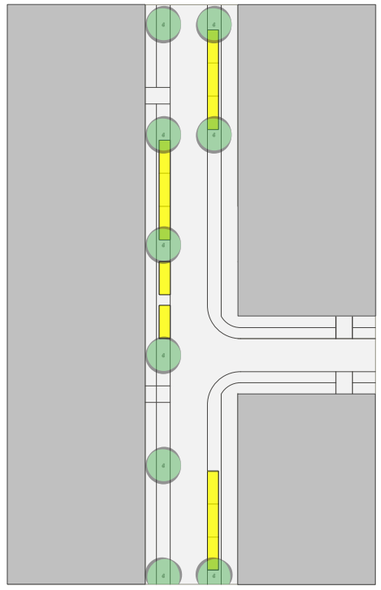
ENSURE CONSISTENT TREATMENT AND EQUALLY SPACED TREES AT ROAD JUNCTIONS



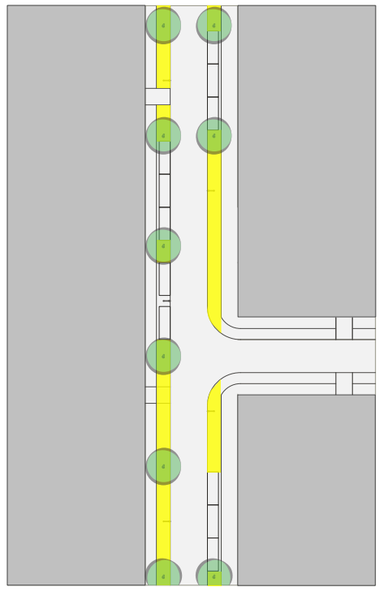
EQUALLY SPACED TREES, CONSISTENT CENTRES (BETWEEN 15-20M), ALONG LENGTH OF STREET WHERE POSSIBLE. REGULAR SPACING TO AVOID GAPS IN TREE COVERAGE



CONSIDER POSITION OF STREET LIGHTS AND FURNITURE WITHIN VERGES AND BETWEEN STREET TREES



MAXIMUM 3 PARKING SPACES BETWEEN STREET TREES, PARKING TO FIT BETWEEN THE AVENUE TREES



LANDSCAPE CHARACTER OF STREET IS ACHIEVED BY ENSURING MINIMUM 60% VERGE TREATED AS LANDSCAPE STRIP (PLANTED OR GRASS)

4.2 GREEN EDGE CODE

This section of the code should be applied to all areas where development meets the woodland buffer or the transition with open countryside. Because of the amount of countryside edge significant areas of housing will abut green space, it is therefore critical that the relationship between green space and development is well planned. There is flexibility as to how the juxtaposition of housing and green space will be managed provided that a number of key principles are adhered to:

AVOID REAR GARDENS BACKING ON TO GREEN SPACE

In principle green spaces should be overlooked by development. Rear property boundaries should not be used to enclose or delineate green space except in exceptional circumstances; measures must be taken to ensure regular points of access and overlooking are still provided to the green space.

ANIMATE THE EDGES

Ensure buildings along green ways or surrounding green space are enlivened by providing active uses and entrances overlooking the green space.

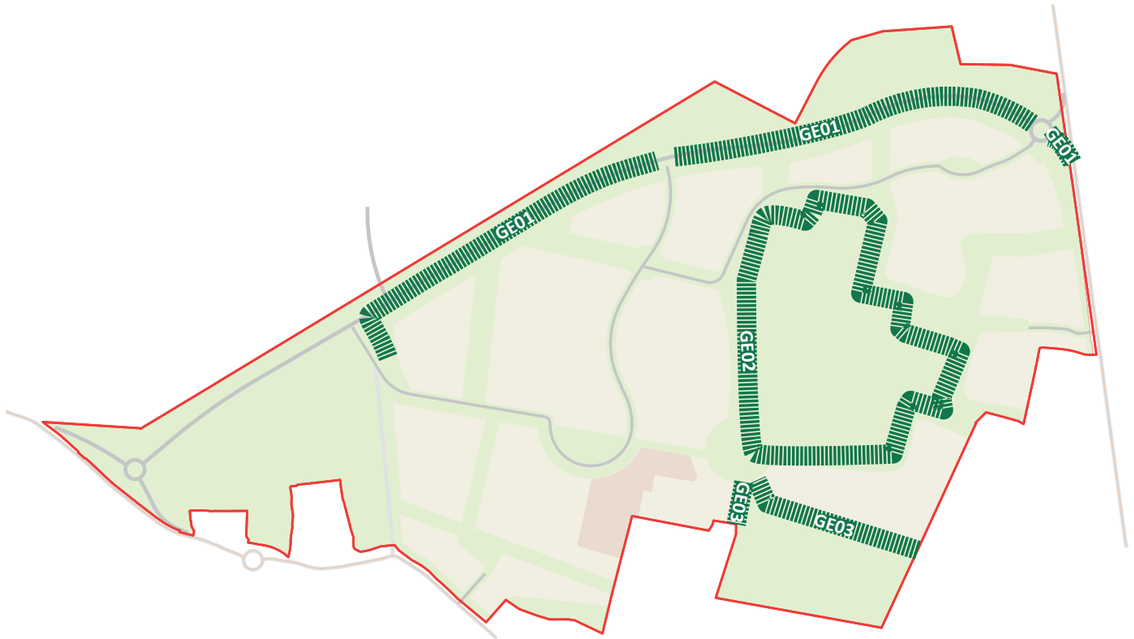
SAFETY AND SECURITY

Ensure the juxtaposition of green spaces and development is designed in accordance with the principles of 'Secured by Design'

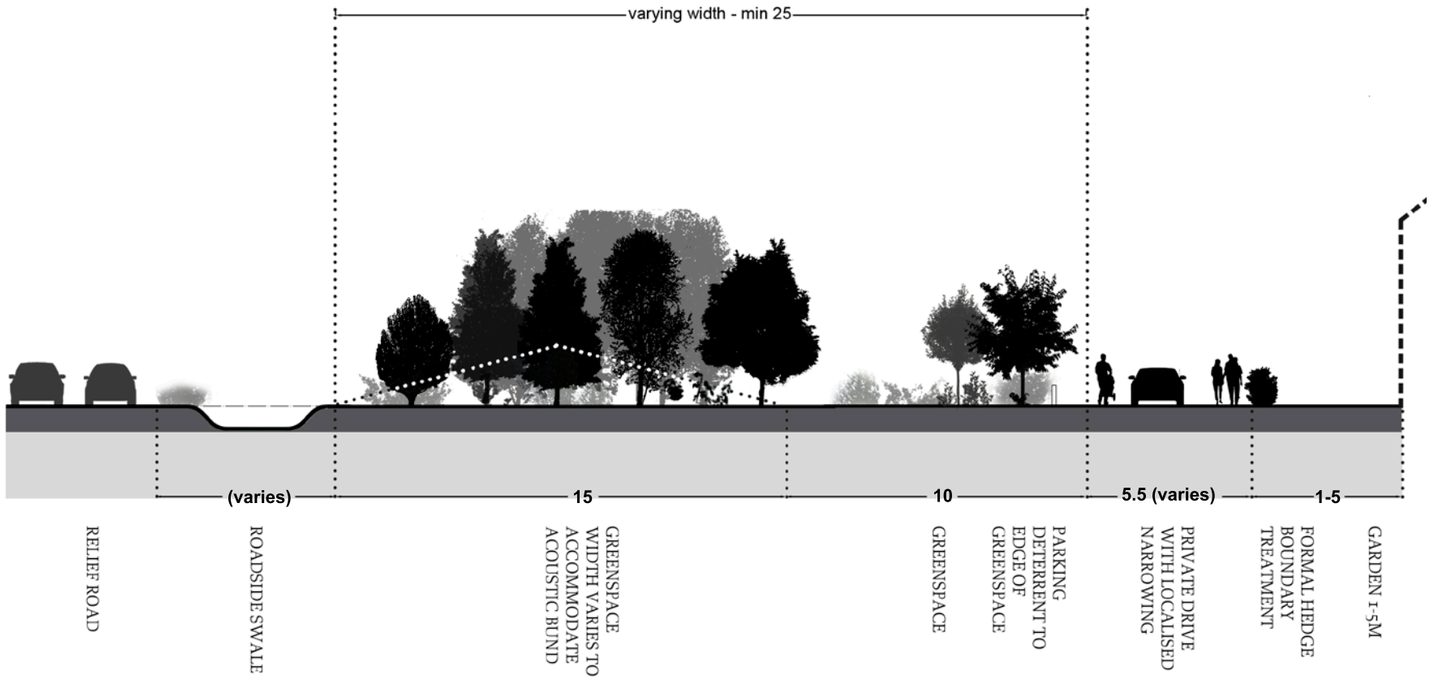
The Green Edge code is followed by a number of arrangements which illustrate these principles and the green edge conditions which will be acceptable.

NOISE MITIGATION

Orientating development so that buildings 'front' onto the Relief road edge will allow the buildings to offer a degree of noise mitigation (in combination with engineered solutions) to the private outdoor space to the rear of these properties and to development further into the site.



NORTH HEYBRIDGE



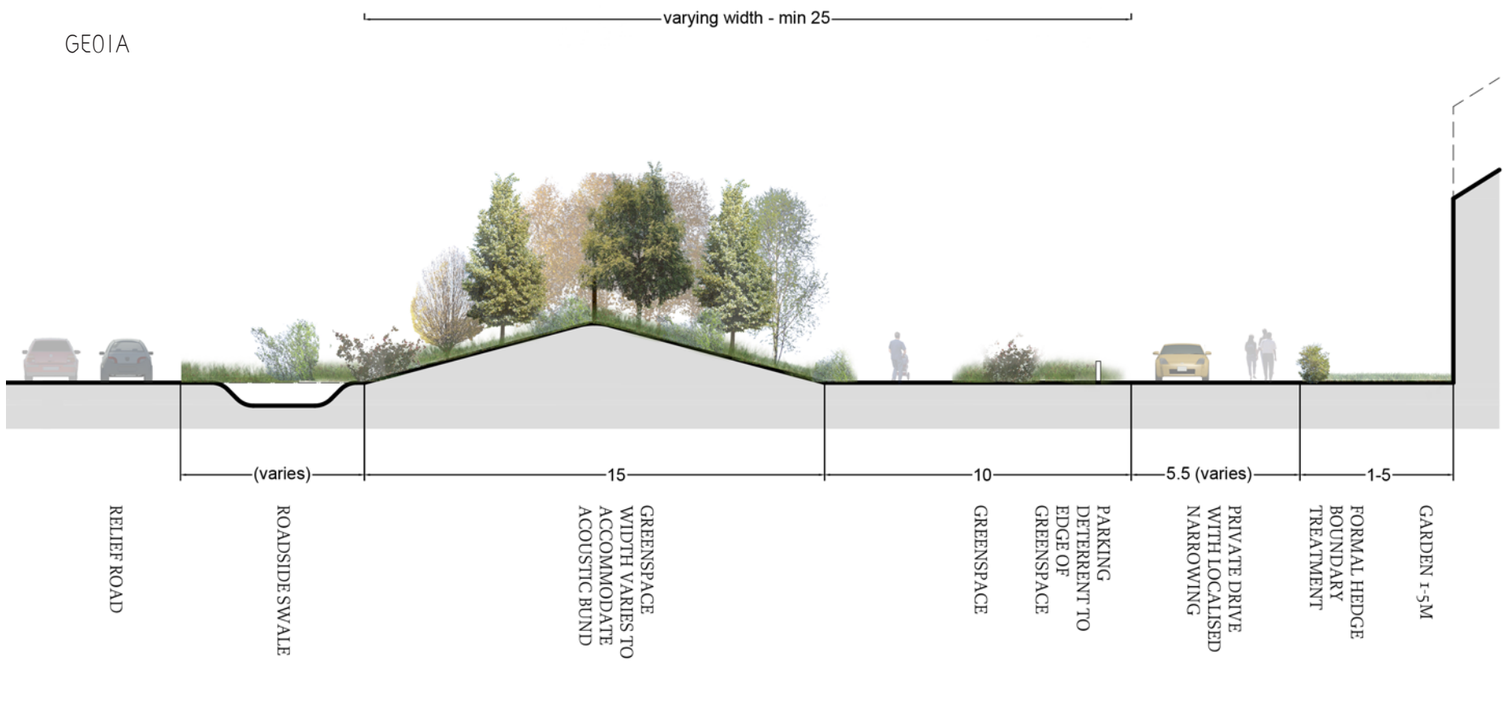
GE PERFORMANCE SPECIFICATION	
Type	■ Green Edge.
Core Functions	■ Present a development edge that relates to the countryside setting at the edge of the North Heybridge garden suburb and to Heybridge Wood, sports pitches and allotments. ■ Vehicular, pedestrian & cycling access to residential plots. ■ Informal shared space route. ■ Low level of traffic. ■ Support the delivery of open space and ecological enhancements.
Design Objectives	■ Present a positive development frontage addressing routes and green edges. ■ Support the appeal of shared surface streets as access and movement routes. ■ Provide an integrated landscape design that combines ecology, recreation and amenity with a semi natural character. ■ Protection to Ancient Woodland, green space / wildlife space.
STREET DIMENSIONS	
Carriageway	Private drive (Road Type G) 5.5m width for the first 6 metres but can taper down to a lesser width and/or with localised narrowing, in accordance with Essex Design Guide Road Type table (refer to Appendix A of this document).
Access	No dedicated footway or cycleway - shared surface.
Curtilage	1-5m garden with formal clipped hedge boundary treatment. Hornbeam or as required by Maldon District Council.
Landscape	Parking within the areas of open space must be deterred with the use of well integrated physical deterrents such as drainage ditches, planting and low bollards.
DESIGN CRITERIA	
Lighting	Low level lighting to be considered in agreement of Essex County Council.
Parking	None on street. Allocated parking not acceptable in adoptable areas.
Direct vehicular access to plots	Yes.
MATERIALS AND LANDSCAPE	
Materials	As per Design Guidance. Materials in adoptable areas to be agreed with Essex County Council.
Street trees	Occasional and informal. Trees to be managed under private licence within adopted areas.
Other landscape	Landscape treatment should reflect the relevant character context areas.

GE01; GREEN EDGE - RURAL EDGE

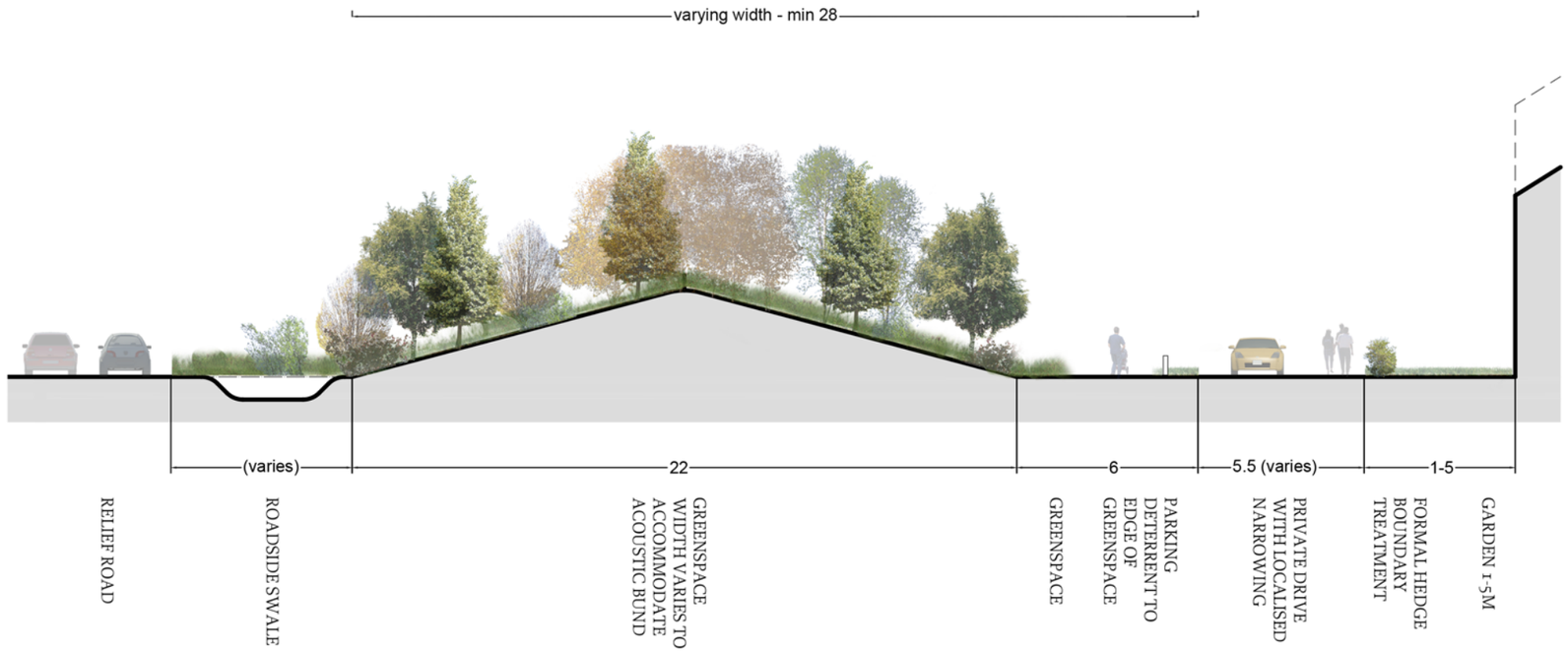
This arrangement allows for overlooking of the countryside edge through the provision of a shared access way alongside the green edge, and to provide vehicle access to parking in front of properties. It also allows for gable ends with regular access points in the form of side streets to encourage activity/use and provide an additional level of natural surveillance. The green edge codes encourage the use of this arrangement where quieter areas of open space would be advantageous in establishing attractive walking routes. Must include a clearly defined threshold between public and private land. Parking within the areas of open space must be deterred with the use of well integrated physical deterrents such as drainage ditches, planting and low bollards.

The minimum width of greenspace provided should be varies, relating to the different options of bund width, to allow these spaces to provide for a range of functions such as surface water attenuation (swales/ditches), play (LEAPS, NEAPS, walking & cycling route) and planting (trees, hedges). The greenspace also provides for the inclusion of an acoustic bund and fence as a buffer to the Relief road.

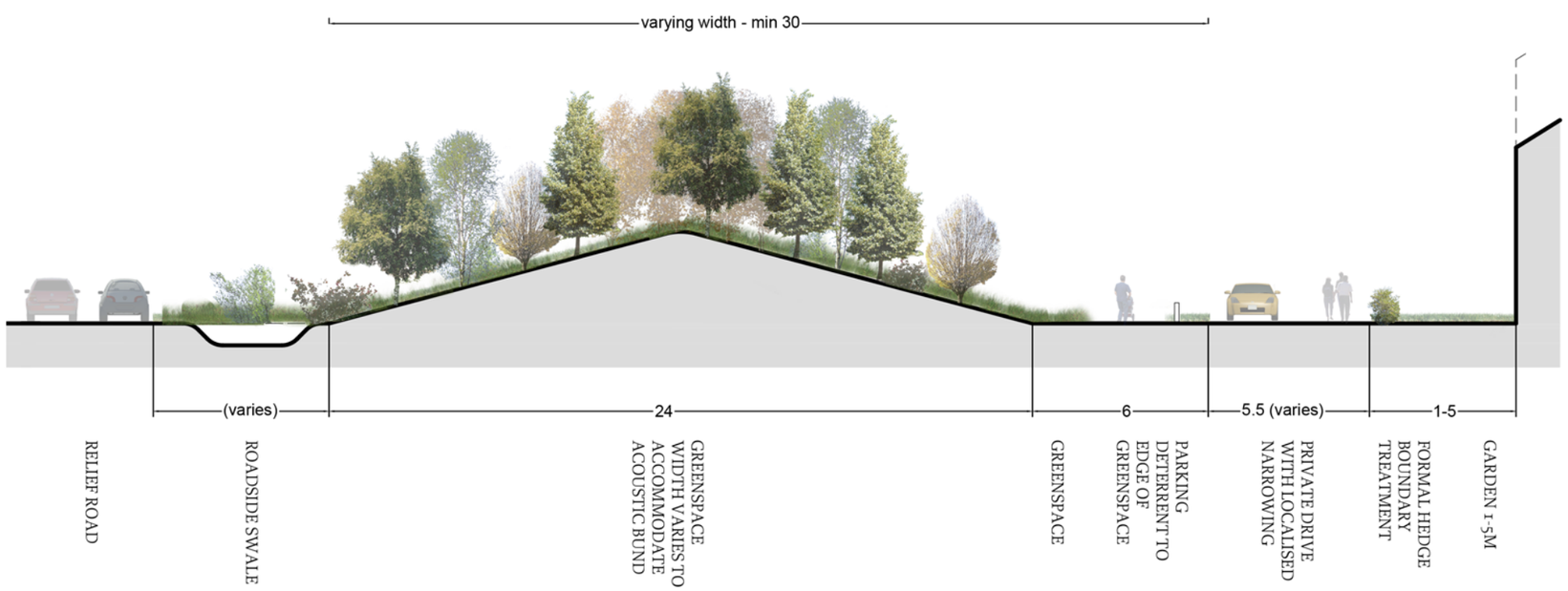
GE01A



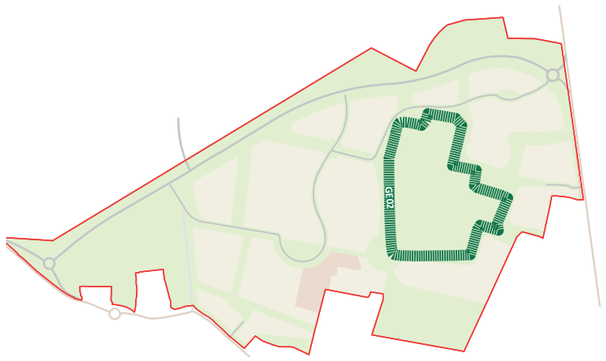
GE01B


varying width - min 28
(varies)
22
6
5.5 (varies)
1-5
RELIEF ROAD
ROADSIDE SWALE
GREENSPACE WIDTH VARIES TO ACCOMMODATE ACOUSTIC BUND
GREENSPACE
PARKING DETERRENT TO EDGE OF GREENSPACE
PRIVATE DRIVE WITH LOCALISED NARROWING
FORMAL HEDGE BOUNDARY TREATMENT
GARDEN 1-5M

GE01C


varying width - min 30
(varies)
24
6
5.5 (varies)
1-5
RELIEF ROAD
ROADSIDE SWALE
GREENSPACE WIDTH VARIES TO ACCOMMODATE ACOUSTIC BUND
GREENSPACE
PARKING DETERRENT TO EDGE OF GREENSPACE
PRIVATE DRIVE WITH LOCALISED NARROWING
FORMAL HEDGE BOUNDARY TREATMENT
GARDEN 1-5M

GE02; GREEN EDGE - ADJACENT TO HEYBRIDGE WOOD

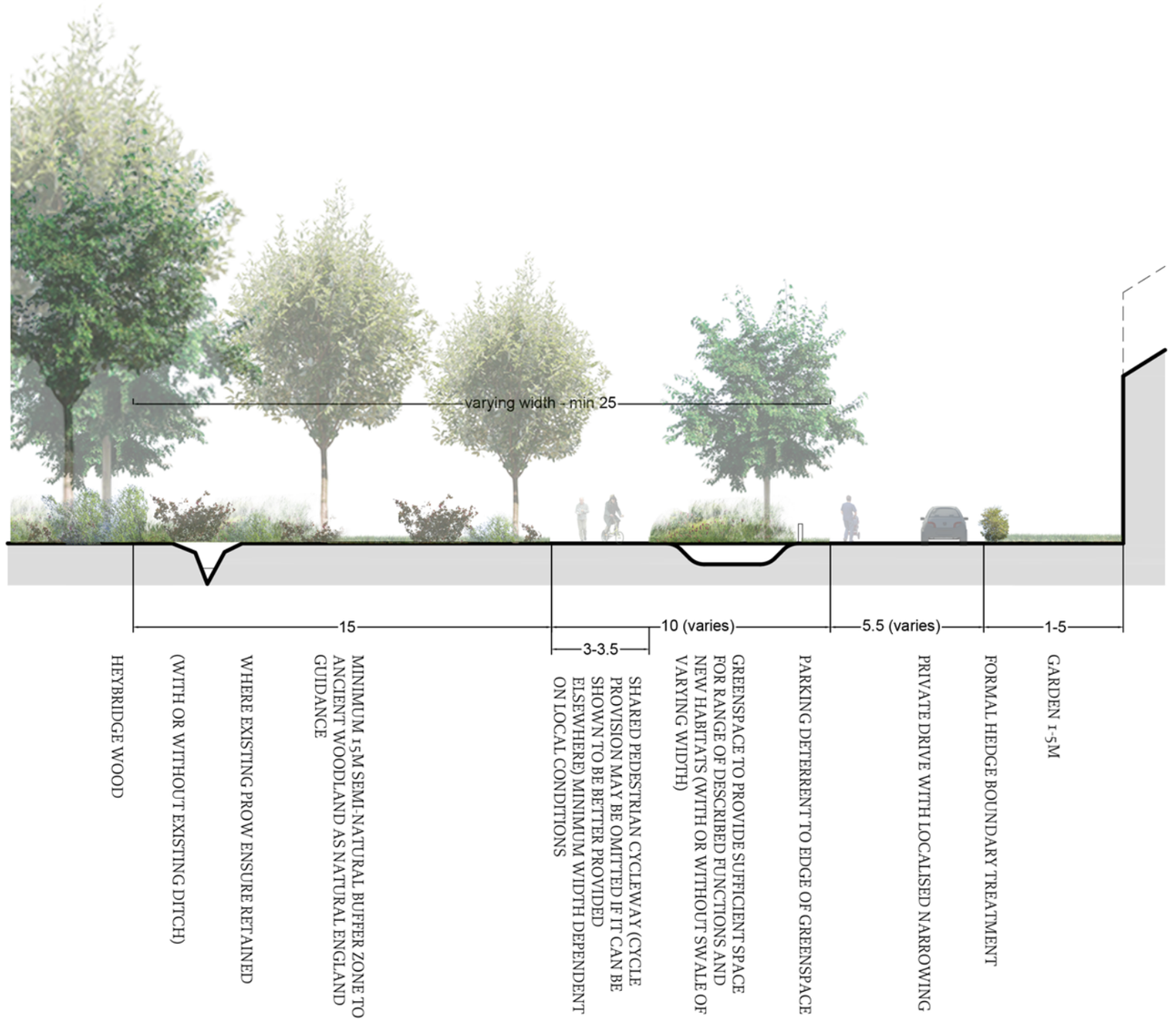


This arrangement addresses the location where development is located adjacent to Heybridge Wood. The minimum 15m buffer zone to the Ancient Woodland is required by Natural England guidance and no footpaths or cycle paths should be created within this zone. Existing Public Rights of Way should be retained where they run through these areas.

The minimum width of greenspace provided should be sufficient to allow these spaces to provide for a range of functions such as surface water attenuation (swales/ditches), play (LEAPS, NEAPS, walking & cycling route) and planting (trees, hedges) outside of the minimum 15m buffer. The greenspace in conjunction with the minimum 15m buffer zone should provide an ecological buffer to protect the existing ecology and provide new habitats.

Reference should also be made to PS03 which provides an illustration of treatment around the Ancient Woodland where the primary street runs adjacent to the woodland.

Where provided, the location of footpaths and cycle paths maybe altered from that indicated in this illustration provided this can be shown to provide a better solution.

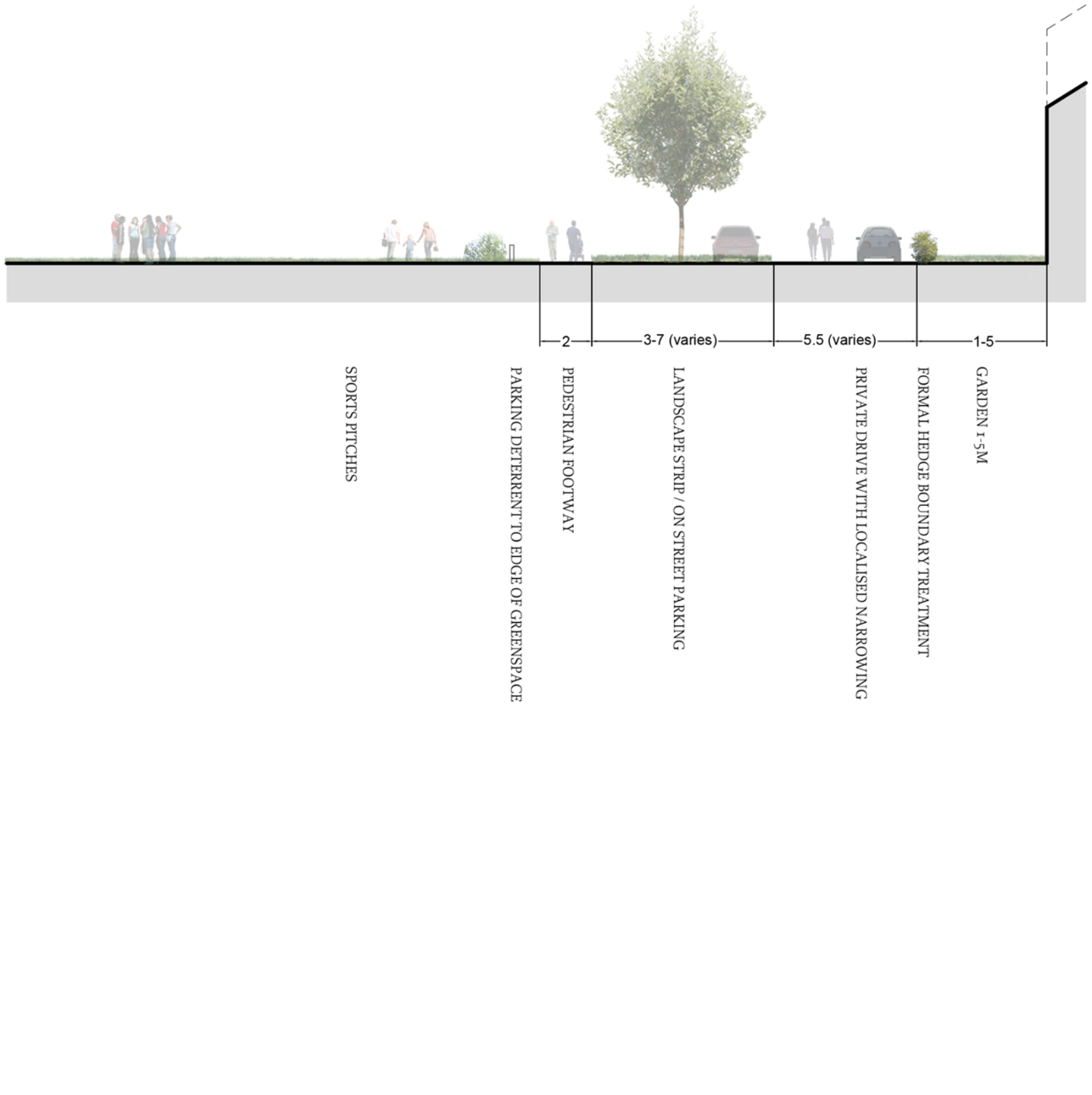


GE03; GREEN EDGE - ADJACENT TO SPORTS PITCHES / ALLOTMENTS

This arrangement requires overlooking of the sports pitches and allotments through the provision of a shared access way alongside the green edge to provide vehicle access to parking in front of properties. It also allows for gable ends with regular access points in the form of side streets to encourage activity/use and provide an additional level of natural surveillance. Must include a clearly defined threshold between public and private land. Parking within the areas of open space must be deterred with the use of well integrated physical deterrents such as drainage ditches, planting and low bollards.

On-street parking in this location may also be provided as perpendicular parking bays, as outlined where parking is required for the sports facilities and allotments.

As described in Section 5.2 Parking landscaping or other interventions work well to break up perpendicular parking bays, to reduce their dominance on the street. A maximum of six spaces should be provided in any group before being broken up by a landscape bay or street tree planting.



4.3 GREEN SPACE CODE

Green Infrastructure in North Heybridge needs to fulfil many important roles; it is essential for expressing the physical design principles of Garden Suburbs and providing new residents contact with nature. It will provide a buffer to residential areas and busy transport corridors, meet the majority of the recreational needs of new residents as well as providing opportunities for increased biodiversity, water management, amenity and shelter. In order to achieve these functions strategic green infrastructure corridors are identified in the North Heybridge SMF and set out in the Structuring Plan. The minimum requirements of these strategic elements are described in the following Green Space Codes. Masterplanning work which forms part of any development proposals will need to demonstrate how the strategic green spaces contained in the codes and the green infrastructure requirements set out in the North Heybridge SMF will be implemented. In addition to the strategic design codes, the following general principles should be applied to the design of green spaces within North Heybridge.

Connected: The strategic green spaces codes seek to provide a connected grid of greenways and green fingers, placing green space at the heart of all areas of development. This grid also connects into the surrounding landscape and neighbourhoods. It is essential that areas of development provide direct access into this network with a regular network of streets which lead to the green spaces. Road crossings to the strategic green spaces should be minimised to ensure that they are attractive to pedestrians and cyclists as continuous routes.

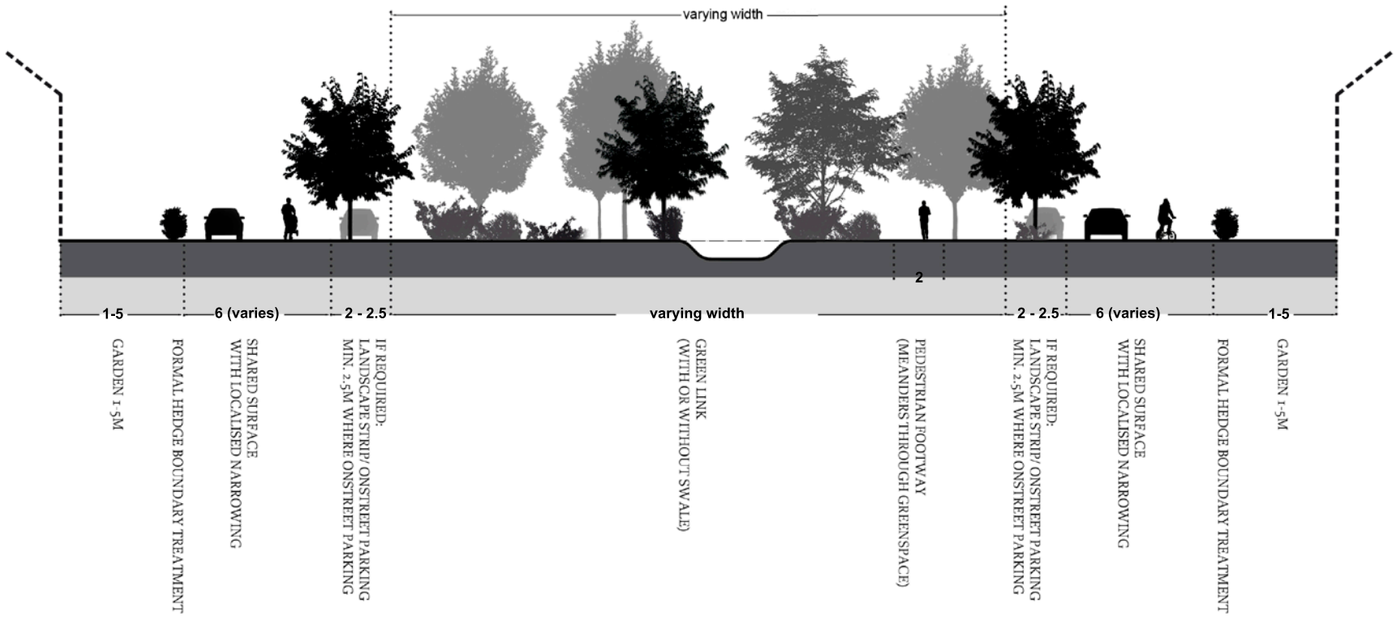
Multifunctional: This is one level of the green space required for North Heybridge. While it is anticipated that they will contribute towards meeting the green infrastructure requirement, additional types of green infrastructure will be required such as sports pitches, play areas etc. Where possible these areas should be provided in widened sections of the green infrastructure grid to ensure accessibility and that all green elements are connected and can provide multiple functions.

Overlooked: As set out in more detail in the green edge codes, the green spaces must be designed to be well enclosed and overlooked. This is fundamentally important in ensuring green spaces are well integrated into the built form which along with giving them a clearly defined role, will avoid provision of large areas of unneeded and unused open space.

Beautiful: Green spaces should be planned and designed as a central part of Garden Suburb concept offering value to surrounding development. Green spaces must be designed to be attractive and useable with the identity and materials being driven by the character of the area in which they sit.

The following illustrations provide a number of arrangements which illustrate these principles and the green space environments which will be acceptable.

NORTH HEYBRIDGE



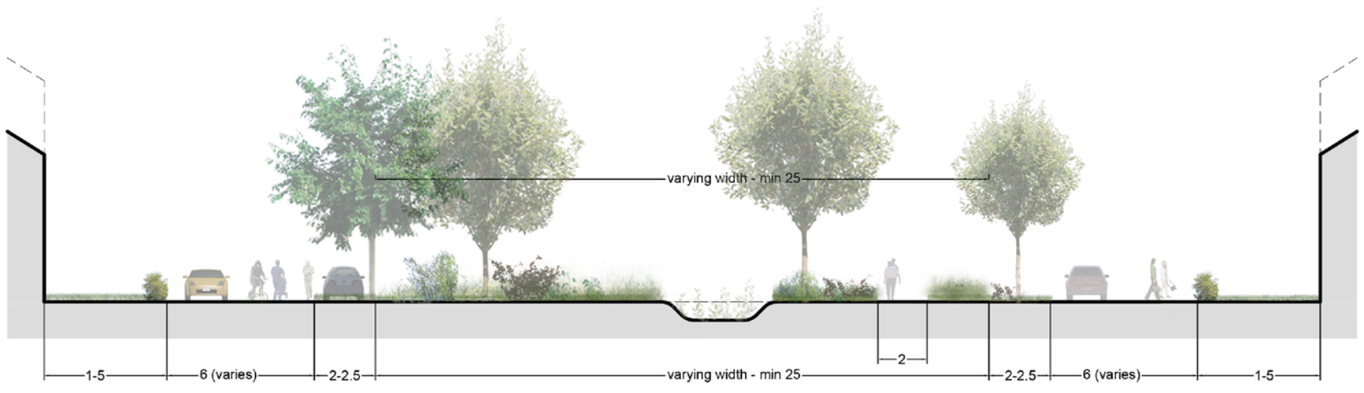
GS PERFORMANCE SPECIFICATION	
Type	■ Greenways and Green Fingers
Core Functions	■ Large scale green infrastructure feature which bring a robust and defining structure to the Garden Suburb. ■ Continuous and connected green corridors providing strategic pedestrian/cycle link with a wider network of walking and cycling. ■ Visual break to development and providing long views. ■ Connects people and nature. ■ Ensure landscape character, natural conditions and topography are integrated into the suburb.
Design Objectives	■ Use the existing landscape structure of the Ancient Woodland and existing watercourses anditches, hedges and trees to provide a safe convenient and overlooked routes through the main body of the site. ■ Active and vibrant multifunctional green corridor. ■ Opportunity for ecological enhancements and informal play spaces, ■ Corridor to have an informal, semi natural character to planting, ■ Sustainable transport routes for walking and cycling. ■ Accommodate SUDS. ■ To offer protection to existing green space / wildlife space.
DESIGN CRITERIA	
Scale	Width specified in code for design function. In exceptional circumstances a minimum width of 13-16m may be acceptable whereSUDs and swales are not included. Where this is the case it must be shown that this width does not impede the functions contained within the greenspace nor minimise the impact of the bold structuring role these greenspaces have within the Strategic Masterplan Framework.
Access	Pedestrian and cycle.
Lighting	Consider low level lighting close to connections to local centre/key landscape spaces, subject to agreement of Essex County Council.
MATERIALS AND LANDSCAPE	
Materials	As per Design Guidance. Pedestrian footways through parks, green spaces, greenways and green fingers to be self-binding aggregate or other porous surface dressing. Materials in adoptable areas to be agreed with Essex County Council.
Landscape	Landscape treatment should respond to the appropriate character context area.

GS01: GREENSPACE - GREENWAYS

The greenway is a multi-functional green corridor with a minimum width of 25m, with shared streets to both sides. The greenway may accommodate a number of uses and functions including accessible greenspace, planting, pedestrian and cycling routes, play space, SUDs and wildlife corridors. Planting to incorporate existing trees and hedges and maintain and enhance biodiversity.

This design code provides shared streets on both sides of the greenspace. This solution gives the opportunity to provide vehicle access to plots, on-street and on-plot parking and overlooking of the greenspace. Alternative solutions, such as a footpath in place of the shared surface, may be acceptable where it can be demonstrated that this would work and does not lead to reliance on rear courtyard parking and a poor relationship between the housing and greenspace.

This solution may be adapted to include other lower order roads (in place of the shared surface streets) that run alongside greenways.



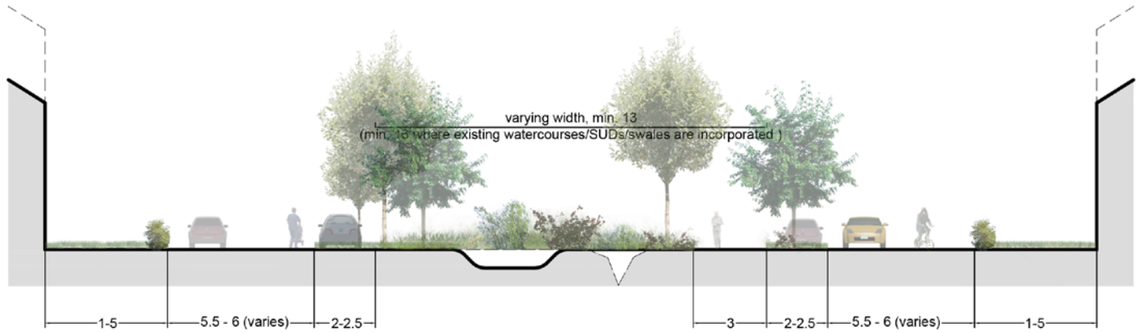
GARDEN 1-5M
FORMAL HEDGE BOUNDARY TREATMENT
SHARED SURFACE
WITH LOCALISED NARROWING
IF PROVIDED:
LANDSCAPE STRIP/ ONSTREET PARKING
MIN. 2.5M WHERE ONSTREET PARKING
GREEN LINK
(WITH OR WITHOUT SWALE)
PEDESTRIAN FOOTWAY
(MEANDERS THROUGH GREENSPACE)
IF PROVIDED:
LANDSCAPE STRIP/ ONSTREET PARKING
MIN. 2.5M WHERE ONSTREET PARKING
SHARED SURFACE
WITH LOCALISED NARROWING
FORMAL HEDGE BOUNDARY TREATMENT
GARDEN 1-5M

GS02; GREENSPACE - GREEN FINGERS

The green finger is a multi-functional green corridor with a minimum width of 16m (min. 13 where no SUDs/swale), with shared streets to both sides. The greenfinger may accommodate a number of uses and functions including accessible greenspace, planting, pedestrian and cycling routes, play space, existing watercourses, SUDs and wildlife corridors. The green fingers provide a second tier to the linear multifunctional space. The landscape will provide ecological enhancements and contain a significant proportion of native planting.

This design code provides shared streets on both sides of the greenspace. This solution gives the opportunity to provide vehicle access to plots, on-street and on-plot parking and overlooking of the greenspace. Alternative solutions, such as a footpath in place of the shared surface, may be acceptable where it can be demonstrated that this would work and does not lead to reliance on rear courtyard parking and a poor relationship between the housing and greenspace.

This solution may be adapted to include the higher order roads - shared space streets - (in place of the private drive) that run along green fingers.



1-5 GARDEN 1.5M
FORMAL HEDGE BOUNDARY TREATMENT
5.5 - 6 (varies) PRIVATE DRIVE OR SHARED SURFACE WITH LOCALISED NARROWING
2-2.5 LANDSCAPE STRIP/ ONSTREET PARKING (IF PROVIDED).
3 PEDESTRIAN FOOTWAY / CYCLEWAY
2-2.5 LANDSCAPE STRIP/ ONSTREET PARKING (IF PROVIDED).
5.5 - 6 (varies) PRIVATE DRIVE OR SHARED SURFACE WITH LOCALISED NARROWING
FORMAL HEDGE BOUNDARY TREATMENT
1-5 GARDEN 1.5M

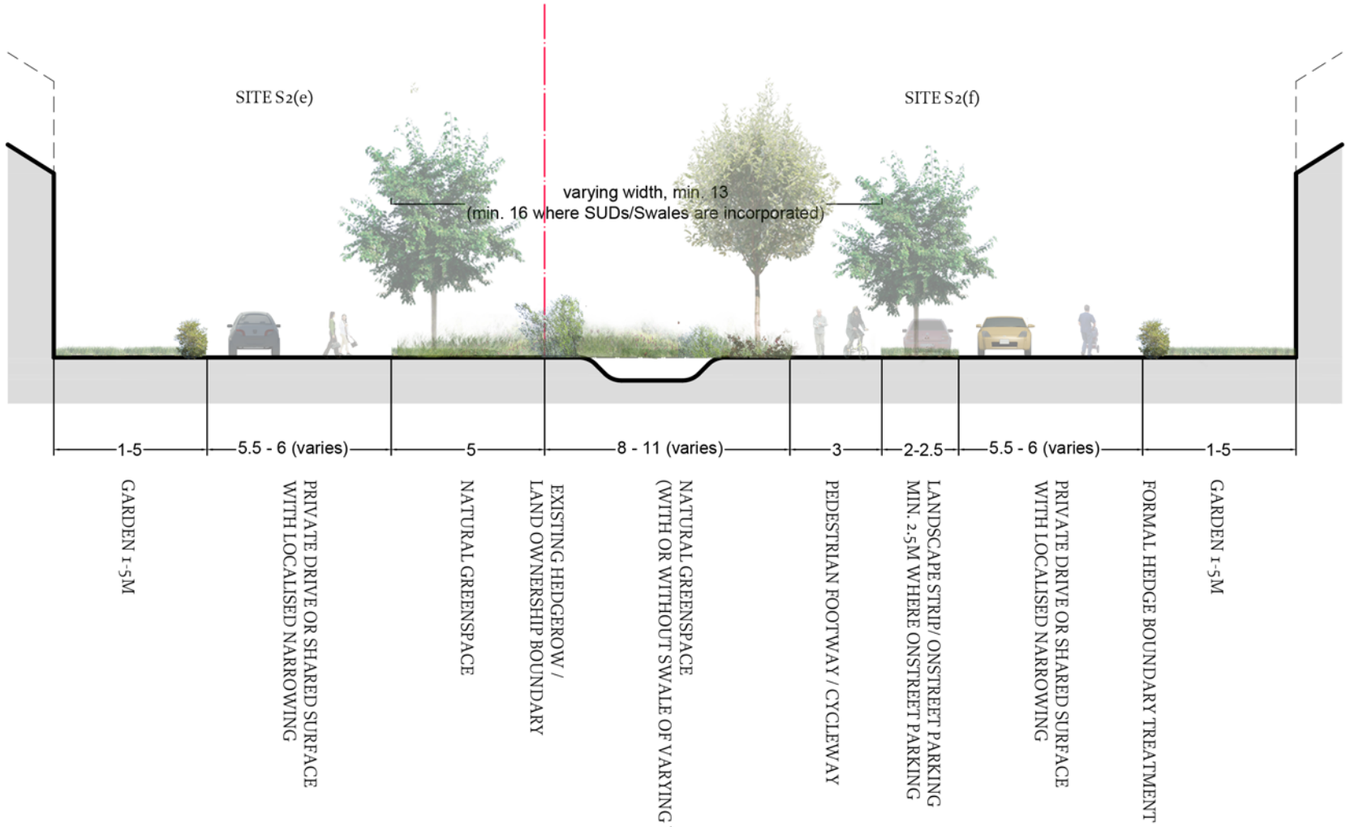
2-2.5 LANDSCAPE STRIP/ ONSTREET PARKING (IF PROVIDED).
5.5 - 6 (varies) PRIVATE DRIVE OR SHARED SURFACE WITH LOCALISED NARROWING
FORMAL HEDGE BOUNDARY TREATMENT
1-5 GARDEN 1.5M

varying width, min. 13 (min. 13 where existing watercourses/SUDs/swales are incorporated) NATURAL GREENSPACE (WITH OR WITHOUT SWALE OF VARYING WIDTH)
1-5 GARDEN 1.5M
FORMAL HEDGE BOUNDARY TREATMENT
5.5 - 6 (varies) PRIVATE DRIVE OR SHARED SURFACE WITH LOCALISED NARROWING
2-2.5 LANDSCAPE STRIP/ ONSTREET PARKING (IF PROVIDED).
3 PEDESTRIAN FOOTWAY / CYCLEWAY (WITH OR WITHOUT EXISTING DRAIN & EXISTING HEDGEROW - POSITION MAY VARY)
2-2.5 LANDSCAPE STRIP/ ONSTREET PARKING (IF PROVIDED).
5.5 - 6 (varies) PRIVATE DRIVE OR SHARED SURFACE WITH LOCALISED NARROWING
FORMAL HEDGE BOUNDARY TREATMENT
1-5 GARDEN 1.5M

GS03: GREENSPACE - ADJACENT SITE BOUNDARIES

This green finger is a multi-functional green corridor with a minimum width of 16m (min. 13 where no SUDs/swale), with shared streets to both sides. The greenfinger may accommodate a number of uses and functions including accessible greenspace, planting, pedestrian and cycling routes, play space and SUDs. The green fingers provide a second tier to the linear multifunctional space. The landscape will provide ecological enhancements and contain a significant proportion of native planting.

This design code provides shared streets on both sides of the greenspace. This solution gives the opportunity to provide vehicle access to plots, on-street and on-plot parking and overlooking of the greenspace. Alternative solutions, such as a footpath in place of the shared surface, may be acceptable where it can be demonstrated that this would work and does not lead to reliance on rear courtyard parking and a poor relationship between the housing and greenspace.



4.4 BUILT EDGE CODE

This section of the code should be applied to all areas where development meets existing routes at Broad Street Green Road and at the interface with existing development near Heywood Way / Scylla Close and Holloway Road and Maypole Road where it is important to achieve a particular built edge outcome. Active frontage is referred to and is defined as frontage development with main doors and windows overlooking the public realm. All frontage development must be orientated to face the street or public realm. The location plan opposite identifies the location of built edge codes.

AVOID FENCES BACKING ONTO MAIN ROUTES

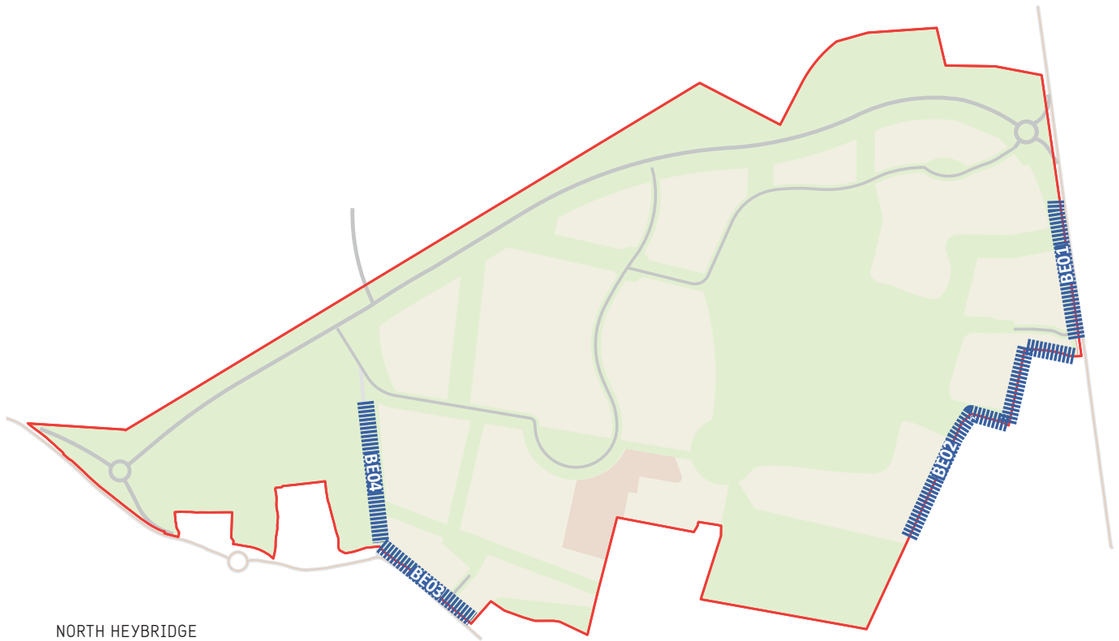
The perceived image of North Heybridge Garden Suburb will be greatly influenced by the appearance of development directly adjacent to Broad Street Green Road and Holloway Road. Buildings should therefore be set back but address these routes and provide a positive frontage.

ANIMATE THE EDGES

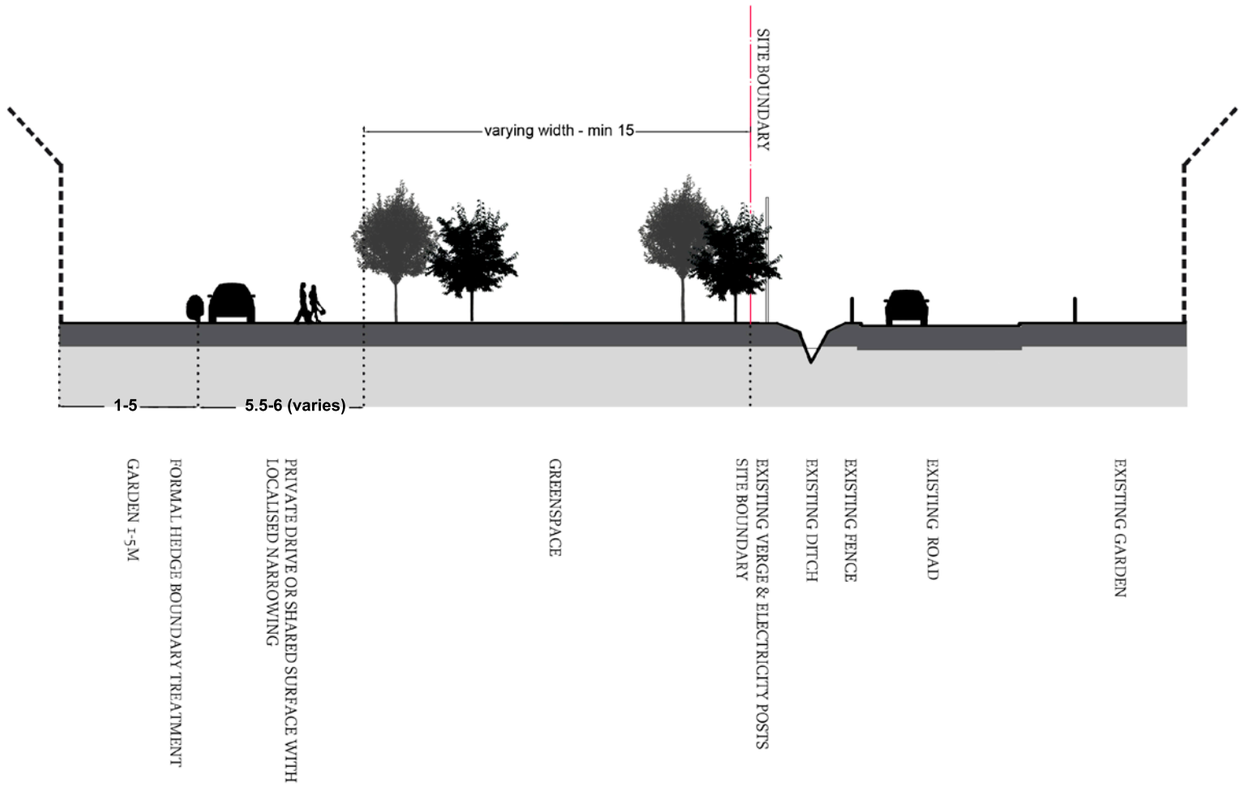
Ensure buildings along main routes are enlivened by providing active uses and entrances overlooking the routes.

EXISTING REAR GARDENS

Allowing new development to back onto existing rear gardens is usually the best way to deal with this situation.

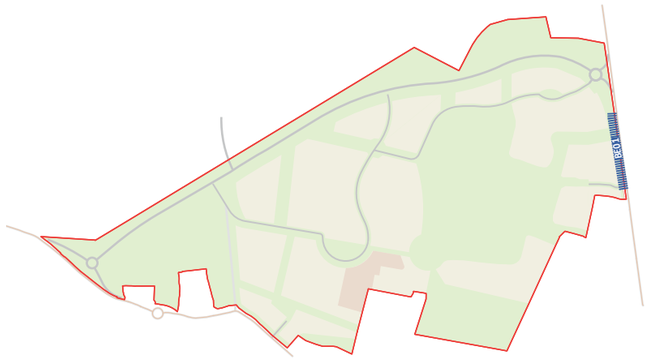


NORTH HEYBRIDGE

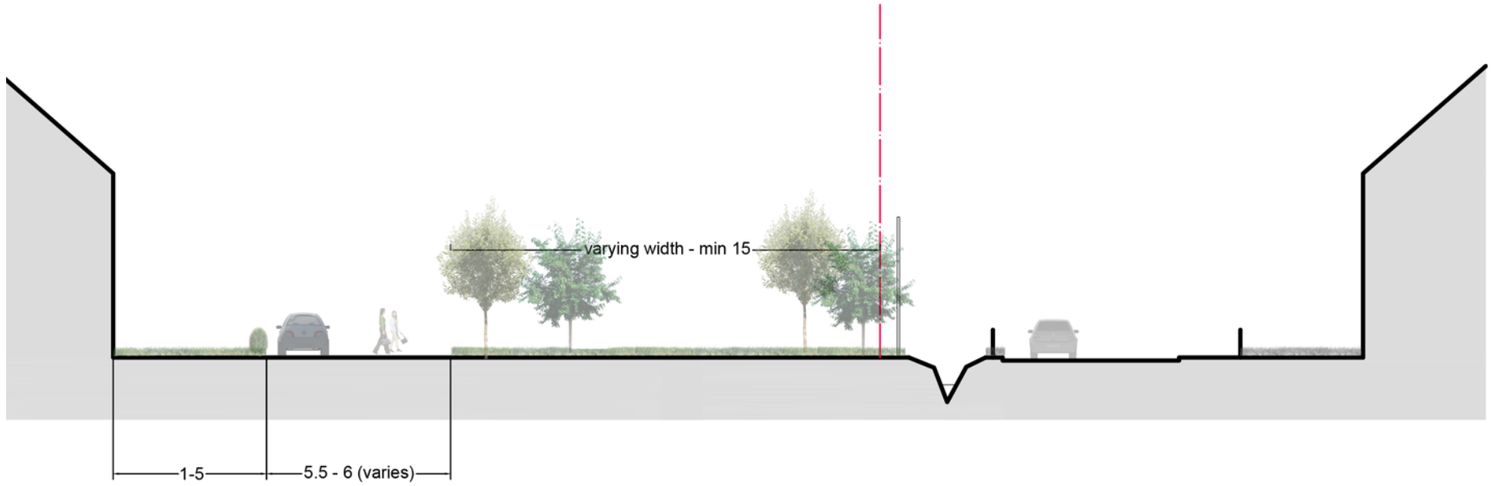


BE PERFORMANCE SPECIFICATION	
Type	■ Existing Road / Housing
Core Functions	■ Define the importance of frontage to existing routes, public and private space. ■ To provide pedestrian access along the site. ■ To provide perimeter blocks and active development frontage between the development and existing site edges and roads.
Design Objectives	■ The main role of the frontage is to define the boundary between public realm and the private plot and to positively enclose the public realm. ■ Frontage can comprise a building or other boundary feature (such as hedge or wall). ■ To enable positive gateways and entrances, as arrival points into the site and into Heybridge. ■ To offer good connections for pedestrians, cyclists and drivers between, through and around the site and its context. ■ Maintain a clearly defined and positive edge to public realm. ■ To ensure continuity of approach to different site ownerships within the Garden Suburb.
DESIGN CRITERIA	
Building height	Building height should create a human scale of development whilst providing appropriate levels of enclosure in keeping with surrounding urban form. The Structuring Plan sets out buildings heights in blocks.
Privacy	Development shall consider the distance between backs of properties and/or location of windows to ensure privacy for residents.
Cycleway	No.
Private Curtilage to buildings	1-5m.
Landscape	Minimum 15m greenspace adjacent.
MATERIALS AND LANDSCAPE	
Materials	As per Design Guidance. Materials in adoptable areas to be agreed with Essex County Council.

BE01; DEVELOPMENT ADJACENT TO BROAD STREET GREEN ROAD



Where development is located along Broad Street Green it is important that the existing ditch, verge, hedge and trees are retained and enhanced along the boundary in order to maintain the character of the existing road. This frontage is important in connecting the suburb with Heybridge and retaining the character of the local road network. A buffer zone should be maintained as a 'no dig zone' to protect the roots of existing trees. This provides an opportunity for a greenspace to be provided and housing should front this space to provide overlooking and natural surveillance of this space.



EXISTING GARDEN

EXISTING BROAD STREET GREEN ROAD AND PATHS

EXISTING FENCE

EXISTING DITCH

EXISTING VERGE & ELECTRICITY POSTS
SITE BOUNDARY

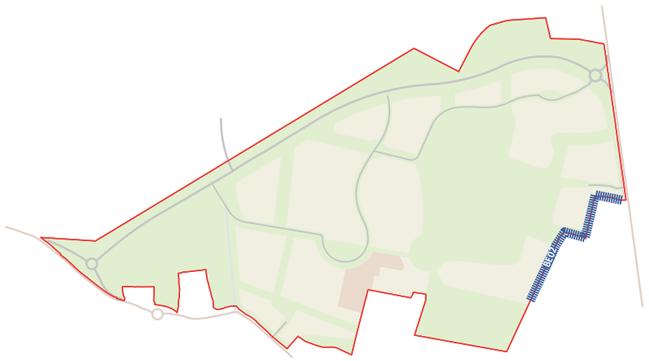
GREENSPACE (TO RESPECT ROOT
PROTECTION ZONE OF EXISTING TREES)

PRIVATE DRIVE OR SHARED SURFACE
WITH LOCALISED NARROWING

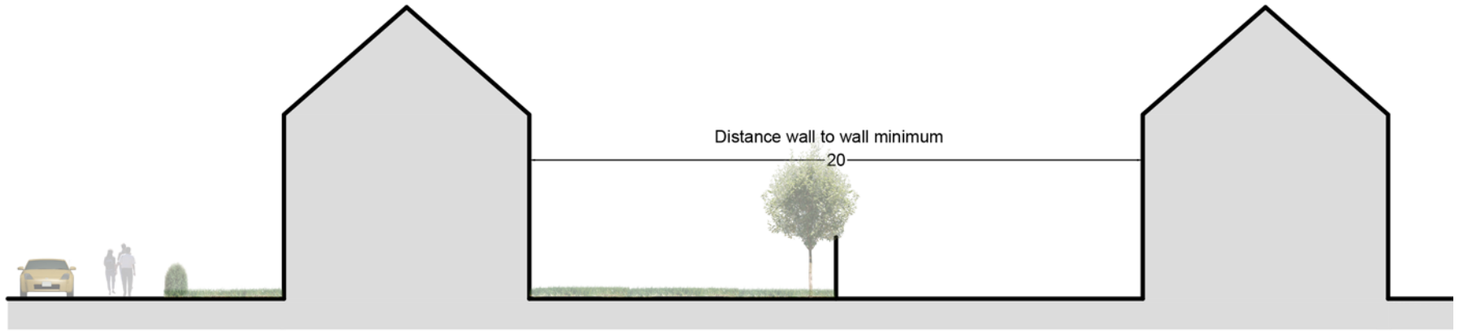
FORMAL HEDGE BOUNDARY TREATMENT

GARDEN 1-5M

BE02; DEVELOPMENT ADJACENT TO EXISTING HOUSING

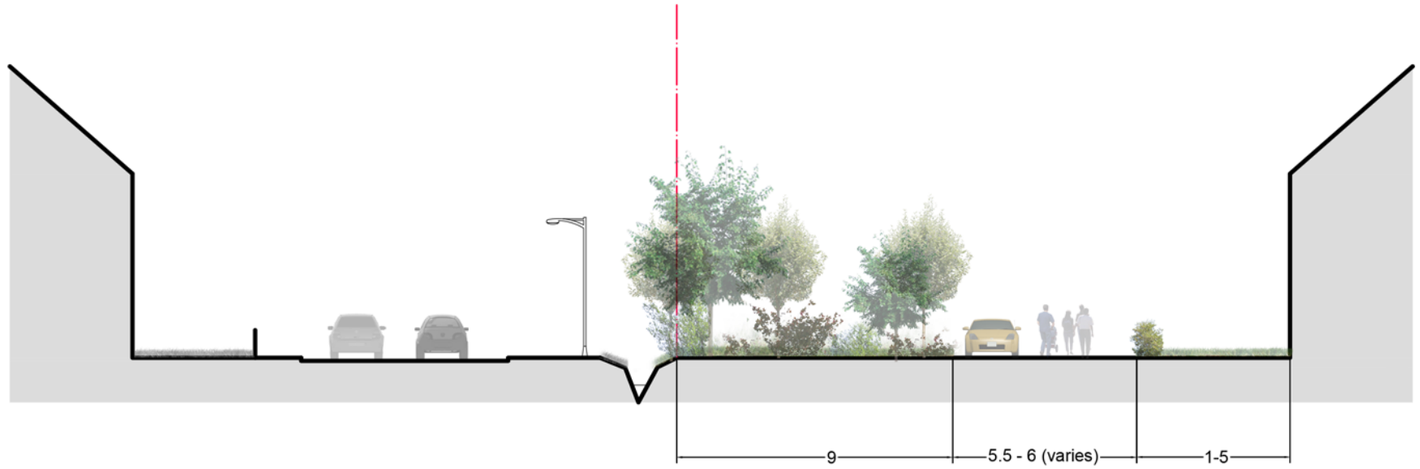


This section runs along the east boundary of the site; residential development is located adjacent to existing housing that backs onto the site. The minimum back-to-back distances between existing rear elevations and proposed housing should be a minimum of 20m, with rear gardens located along the boundary to minimise overlooking and loss of privacy for both new and existing properties.



BE03; DEVELOPMENT ADJACENT TO HOLLOWAY ROAD

Where development is located along Holloway Road it is important that the existing watercourse, verge, hedge and trees are retained and enhanced along the boundary in order to maintain the character of the existing road. This frontage is important in connecting the suburb with Heybridge and retaining the character of the local road network. A 9m easement from the watercourse is required to be maintained. This provides an opportunity for a greenspace to be provided and housing should front this space to provide overlooking and natural surveillance of this space.



1-5M GARDEN

FORMAL HEDGE BOUNDARY TREATMENT

PRIVATE DRIVE OR SHARED SURFACE
WITH LOCALISED NARROWING

EASEMENT (DISTANCE FROM WATERCOURSE)

EXISTING HEDGE
SITE BOUNDARY

EXISTING WATERCOURSE

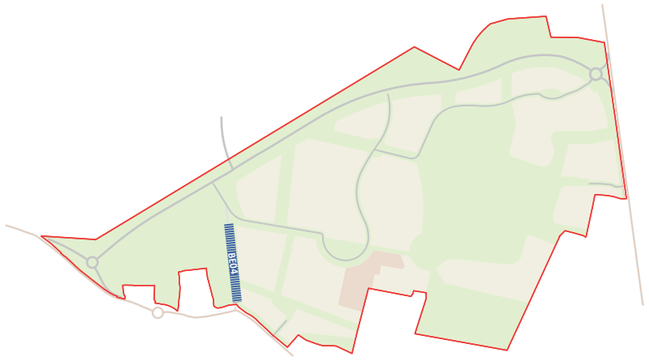
EXISTING VERGE & LIGHTING

EXISTING PATH

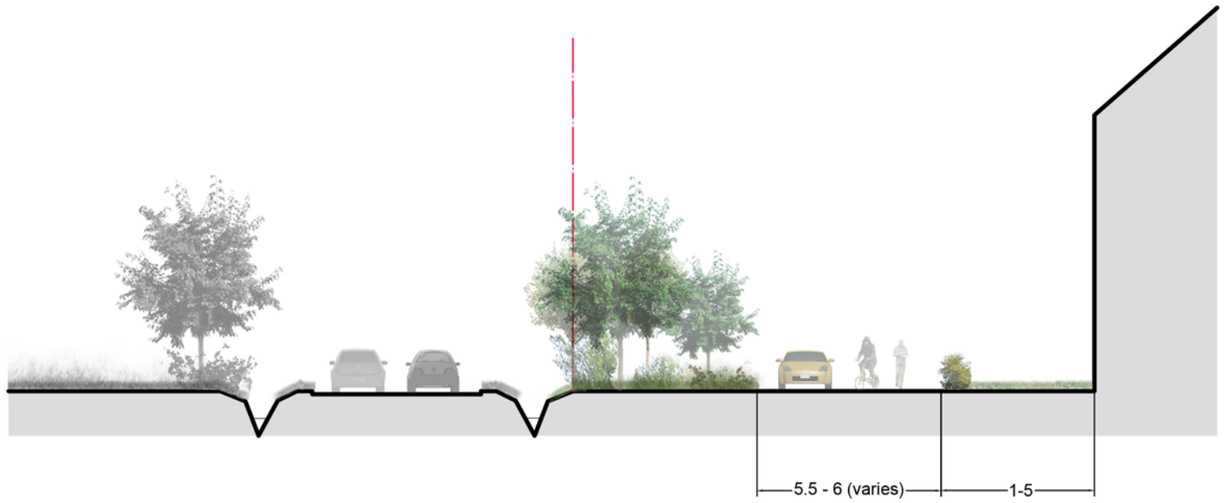
EXISTING HOLLOWAY ROAD

EXISTING GARDEN

BE04; DEVELOPMENT ADJACENT TO MAYPOLE ROAD



Where development is located along Maypole Road it is important that the existing ditch, verge, hedge and trees are retained and enhanced along the boundary in order to maintain the character of the existing road. This frontage is important in connecting the suburb with Heybridge and retaining the character of the local road network. This provides an opportunity for a greenspace to be provided and housing should front this space to provide overlooking and natural surveillance of this space.



SECTION 5.0
DESIGN GUIDANCE

'The Design Guidance' provides qualitative advice on how those elements of the scheme that cannot be fixed in advance of plot development should be designed. The design guidance contained in this section illustrates design intent, design statements submitted alongside detailed proposals must demonstrate how the guidance has been applied. The solutions illustrated in this section are one way of applying the guidance, other solutions may be equally appropriate. Design guidance has been prepared for the following:

- Character context areas
- Car parking
- Bin Storage

GENERAL PRINCIPLES OF GOOD URBAN DESIGN

Whilst codes and guidance set out how developers and designers should address specific parts of the site, there remains an overarching requirement for all parts of any plot to be designed in accordance with the objectives of good design. These objectives are widely accepted and are set out in a variety of guidance documents on good design and summarised below. In addition to compliance with the codes, all development proposals will be judged against these design objectives.

OBJECTIVES OF GOOD DESIGN AT NORTH HEYBRIDGE:

- Natural heritage: Development should be designed to integrate with, protect and enhance the landscape and biodiversity of the site
- Compactness: Development should use land efficiently and provide local densities that offer maximum possible support for public transport and commercial/community services with clear and direct walking routes to these facilities
- Accessibility and ease of movement: Layout should be accessible to all, make links to surrounding areas, create new links and ensure that it is easy to get from A to B within the development
- Legibility: Layouts should be easy to understand and find one's way around
- Character and context: Development should respond to the character and local distinctiveness of site context
- Continuity and enclosure: Streets and spaces should be overlooked with well-defined street frontage
- Public realm: Public realm should be high quality, place specific, attractive and safe
- Variety and diversity: Development should provide a mix of uses and variety and choice of properties and places
- Adaptability: Buildings and spaces should be designed so that they are flexible and adaptable and can serve a variety of use over time
- Resource efficiency: Buildings and landscape should source materials responsibly

5.1 CHARACTER CONTEXT AREAS

The South Maldon and North Heybridge SMF's set out the overarching vision for the development of new Garden Suburb communities in Maldon District. The Garden Suburb vision sets out to use the idea as a differentiator to start to build a new image of what living in Maldon and Heybridge might be like. The Garden Suburb vision puts forward the idea that different areas of the site could be designed to have varying character but based on the garden theme; of using the landscape setting to define the spirit, character and form of the new garden suburb communities; and responding to different parts of the sites which have particular qualities.

In order to achieve this, the North Heybridge SMF establishes the principle of defining three character context areas which reflect the qualities of the landscape in which the site sits, namely:

- Garden Suburb
- Village Edge
- Woodland Edge

The Character Context Areas are explained in section 2.3, which emphasises that these are broad brush and differ from the Character Areas identified within the DAS for Heybridge North (page 83). The broad Character Context Areas of the Garden Suburbs are over arching areas which will require a predominant approach, but the design response should be sensitive to local distinctions in specific parts of the sites which have particular qualities. For example Heybridge Wood provides a clear opportunity to reflect woodland character within the design. Another example is the difference in landscape character between the centre and edges of the site where there are other opportunities to define the spirit, character and form of the Garden Suburb with site specific responses to those parts of the site.

As well as responding to the existing character and landscape, there are a number of elements that will be introduced to the Garden Suburb sites that should enhance and reflect the character context areas. In particular a careful consideration of existing watercourses, hedge lines, SUDs and tree planting would be expected to reflect the character context areas and draw attention to the distinctions across the site. For example, the formality or informality of water attenuation features and their treatment within green spaces.

The dominance of street tree planting on Primary Streets has been referred to. Similarly planting beyond these key streets should be considered strategically, considering the effect that is sought in their use across the garden suburb and how it can enhance the garden suburb vision.

GATEWAYS AND ENTRANCES

The entrances into the garden suburb will have design treatments to reflect the Village Edge character location, but they should include subtle variations in response to context. For example it will be appropriate for the entrance from the Relief Road to have a traditional rural feel with post and rail fencing and white five-bar gates either side of the road as commonly seen in surrounding villages.

It should be clear from the design and layout of the entrances from Broad Street Green and Holloway Road that they are lesser routes, possibly by tighter urban form, which are not vehicular through routes to the wider Garden Suburb.

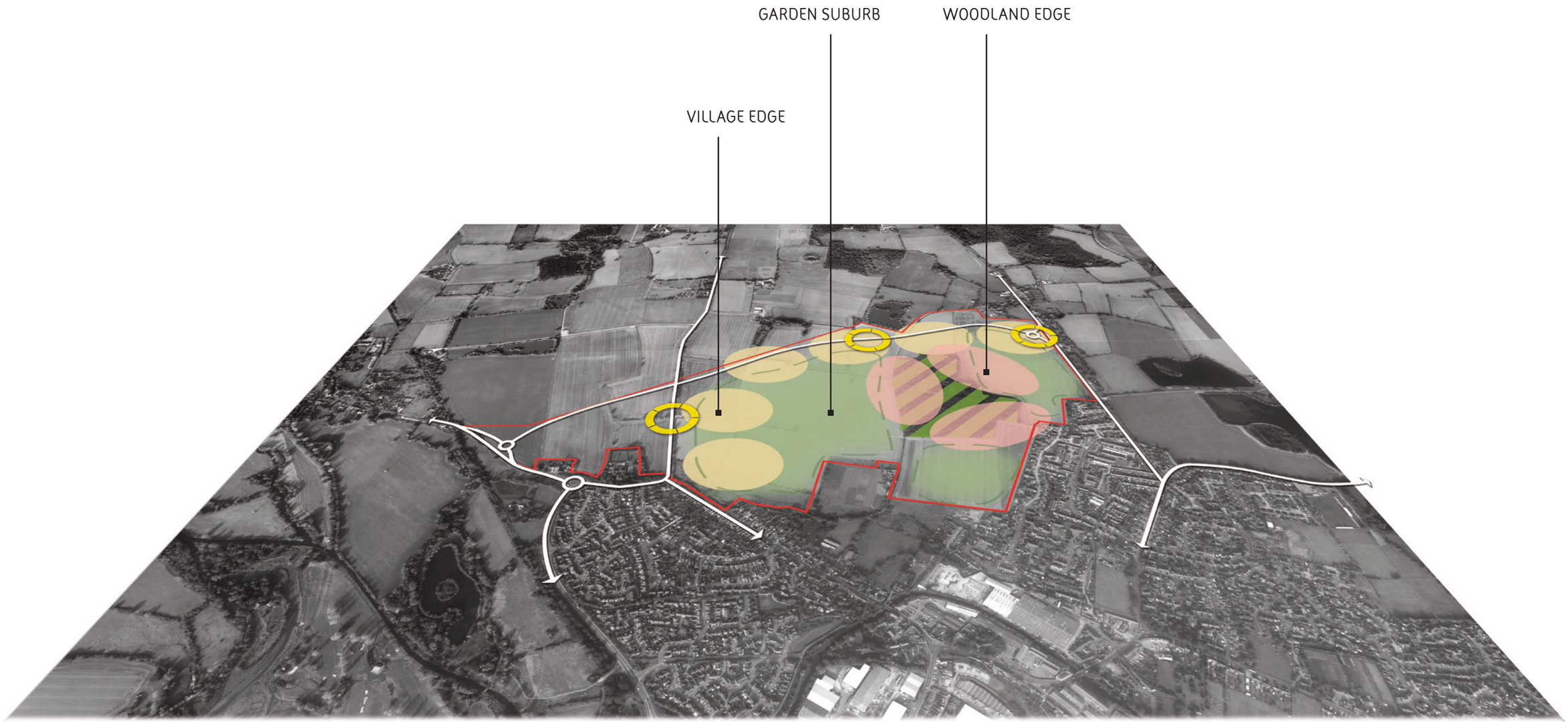
CONSISTENCY

There will inevitably be further local variations in character within each of these areas. However, the need to establish an overall consistency and common design language within each of these areas will be fundamental in establishing an image defining and memorable identity for North Heybridge. In order to achieve this it is expected that variations in public realm treatment, building line, height, orientation, boundaries, materials and architectural style should be carefully considered varying some but not all of these elements. The images in each of the following Character Context Area Guidance sections illustrate how a considerable measure of consistency is central to achieving a distinct and recognisable character. One of the consistent features of places which have successfully established a strong identity is a sense of rhythm in the built form where variations in the elements listed above vary on an urban block scale rather than individual plot scale. Design guidance documents that Maldon District Council has endorsed or adopted should be used as a reference and guide to develop appropriate detail design proposals.

The following section will outline the design principles which must be reflected in the design response for each of these character context areas as well as guidance on how these principles could be achieved. Imagery to convey how the potential character of each area might be realised is also included.

NORTH HEYBRIDGE CONCEPTUAL PLAN

CHARACTER CONTEXT AREAS



Aerial Photography - Bing Maps: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

GARDEN SUBURB

The area closest to the urban edge of Heybridge most closely represents the formal planned layout of a traditional garden suburb. This area will be the core of the new community. It will be centred on the new school and local centre. It will have formal wide tree lined avenues, greenways leading to the most significant destinations and also giving designed views to focal points, landmarks and Heybridge Wood. Housing layouts respond to a formal linear structure with generally straight streets with a tighter urban form to achieve higher densities.

The street structure will be important to establishing the garden suburb character with careful consideration being given to the hierarchy and cross section of streets which are lined by avenues of a single species of tree (Acer Platanoides 'Emerald Queen', Tilia 'Brabant' or Tilia Cordata).

Although this character context area will have a generally harder and more formal nature the planting of front gardens and requirement to define front gardens with single species formal clipped hedges (Hornbeam or as required by Maldon District Council) will be a unifying element.

Aerial Photography - Bing Maps: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

GUIDANCE DOWNLOAD

CORE OBJECTIVE

To bring the core physical qualities of garden suburbs into the centre of the site, reflecting its proximity to Heybridge Centre with an urban character.

To use the landscape setting to define the spirit, character and form of the place.

URBAN FORM

An urban form structured around a more formal linear structure for housing layouts and a regular street pattern.
Generally straight streets, with a tighter urban form to achieve higher densities, well defined streets enclosed by consistent building lines and strong frontage to primary streets.
Greenways with vistas to community and civic destinations as well as to designed open spaces.

PLANTING STRATEGY

Formal wide tree lined avenues - single species of trees. (Acer Platanoides 'Emerald Queen', Tilia 'Brabant' or Tilia Cordata) are some recommendations, with landscape strips to establish the character of this area.
Areas of formal ornamental planting to reflect the more urban character of this area.
Respects and enhances existing natural features, hedgerows, wildlife areas and water features.

COLOUR AND MATERIALS

Use of varied building materials - influence of local vernacular. Predominantly render, brick and timber.

BOUNDARY AND TREATMENT

Single species clipped hedges defining boundary between street and front garden. (Hornbeam or as required by Maldon District Council)
Smaller garden sizes which reinforce a more urban character and enclose streets.

WOODLAND EDGE

The garden suburb areas surrounding the edge of Heybridge Wood will draw on the physical characteristics of the garden suburb but with an emphasis on the strong physical presence of the wood and it's protective buffer. It will have a looser, less formal arrangement of streets and will have a layout that works particularly well with development facing towards the woodland and attractive intervening treed spaces that provide a sense of the woodland permeating the layouts. It will combine with the best and most successful principles of Garden Suburbs to create a successful synergy between living and woodland.

The layout of buildings and landscape create a more informal character with areas for natural planting and green space. The street structure remains vital with tree lined streets and universal presence of clipped hedges defining the boundary between street and front garden. The layout is more organic and lower density than other parts of the development and includes areas of incidental green space.

The woodland will be surrounded by a protective green buffer forming part of an extensive network of green infrastructure with amenity space along cycling routes overlooked by surrounding development.

Aerial Photography - Bing Maps: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

GUIDANCE DOWNLOAD

CORE OBJECTIVE

To bring the core physical qualities of garden suburbs into the Woodland Edge, creating a successful synergy between town and open countryside.

URBAN FORM

A natural and permeable arrangement of less formal streets with a rural influence and informal character.
The layout will provide either front or side elevations facing the edge of the wood to create overlooking and to provide views to the woodland, soft edge and gradual transition to the wood itself.

PLANTING STRATEGY

Natural planting and green space to reflect woodland.
Tree lined streets - single species of trees. (Acer Platanoides 'Emerald Queen', Tilia 'Brabant' or Tilia Cordata are some recommendations).

COLOUR AND MATERIALS

Varied natural material palette - influence of local vernacular.
Neutral to warm coloured and natural materials including stone, metal, slate, brick and timber can be combined to ensure building complement the surrounding areas of countryside.
Open space and public realm within this area should build on the woodland character incorporating informal footpaths and timber furniture.

BOUNDARY AND TREATMENT

Single species clipped hedges defining boundary between street and front garden. (Hornbeam or as required by Maldon District Council)

VILLAGE EDGE

The village edge references its location adjacent to open countryside where it is appropriate to make a gentle transition from town to country. It will be formed from the development areas lying around the northern and western rural edge of the site and close to the Relief Road corridor.

The principle is to create a looser-grained rural edge with development arranged around informal and irregular shaped green spaces, as can be found at villages such as Little and Great Totham and punctuated by a designed landscape providing green infrastructure and wildlife corridors.

Aerial Photography - Bing Maps: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

GUIDANCE DOWNLOAD

CORE OBJECTIVE

To bring the core physical qualities of garden suburbs into the Village Edge areas, creating a softer edge to the development through a sequence of open spaces, planting and the retention of existing landscape elements.

URBAN FORM

A softer edge around the northern and western rural edge of the site and close to the green corridor formed by the Relief Road.
Built form should be planned to overlook open space positioned in peripheral areas of the site to strengthen the visual relationship between the housing and open space.
Street layout should have a less consistent building line than other areas.

PLANTING STRATEGY

Additional planting to enhance existing planting, with new tree and shrub planting contribute to green space, particularly along pedestrian routes and within parks.
Street and open spaces to be characterised by informal and naturalistic design and planting, with visible linear SUDs features and wetland planting.

COLOUR AND MATERIALS

Natural material palette - influence of local rural vernacular.
Neutral to warm coloured and natural materials including stone, metal, slate, brick and timber can be combined to ensure building complement the surrounding areas of countryside.
Open space and public realm within this area should build on the informal character incorporating gravel footpaths and timber furniture.

BOUNDARY AND TREATMENT

Predominant use of hedge boundaries, with some post and rail fencing and timber gates, to reinforce the rural character common to surrounding villages of the area (Goldhanger and Purleigh) to define the edge of relatively large front gardens.

5.2 PARKING GUIDANCE

PRINCIPLES

The accommodation of parking into the scheme is one of the most difficult design problems of the development. People have a tendency to park wherever they can, as close to their houses as possible, regardless of the design intent of the scheme. If it is not flexible and naturally policed it will fail. In the past there has been too much reliance on parking courts as a mechanism to push cars off the street to achieve uncluttered frontages. This over reliance on parking courts has led to security issues, but has also created urban patterns which are expensive to implement and maintain with large areas of hard surfacing. Parking court solutions are often highly inefficient and unless they are well designed residents often chose not to use them.

The Maldon District Garden Suburb schemes should adopt a more flexible and traditional approach to parking and allow for on street and on plot parking as well as a small amount of court-based parking. Key principles to underpin any parking solution are:

- Provide sufficient parking in accordance with Maldon District Vehicle Parking Standard (or succesor document) and Essex Design Guide Road Type Table (refer to Appendix A).
- Rely on natural policing: If a parking solution relies on a large amount of management and enforcement it is probably wrong. Solutions implemented in the past which force people not to park in the street to encourage the use of parking courts can prove particularly difficult to manage. Any parking solution should be capable of being naturally policed. Generally this will be achieved through the provision of adequate spaces in convenient and safe locations whilst ensuring that parking is difficult or unachievable in all other locations. Traditionally on-street parking has achieved this effectively by providing a set number of spaces but leaving little scope for abuse.
- Ensure natural surveillance: Residents like good surveillance of their vehicles. Ideally this will be by themselves so the provision of car spaces within sight of a dwelling is always preferred. However residents are also happy to park a vehicle where it is has good surveillance from properties other than their own. All parking areas should be overlooked or otherwise secure. Small dedicated access-controlled parking courts can be more effective than large public parking courts which are difficult to naturally survey.
- Allow flexibility: Parking solutions need to be flexible rather than prescriptive. Whilst dedicated on plot parking works well, other forms of dedicated parking is less effective. Parking off-plot should therefore be flexible and provided in the form of on-street parking and parking areas with good surveillance with an overall quantum of spaces adequate to meet demand. Parking in other areas should be made difficult or impossible through the design of streets and spaces.
- Parking should be achieved predominantly with on-street and on-plot parking with courtyard parking used occasionally and in certain situations including where there are flats.. Where courtyard parking is used it should generally be at the front of dwellings or at the end/side of short terraces. Side parking courts should be kept small and size and generally be a maximum of 6-8 spaces and should always be visible from the street and well overlooked by fronts of surrounding properties.
- Allocated parking is not acceptable in adoptable areas.

ON STREET PARALLEL PARKING

On-street parking is encouraged on all streets, parallel parking is the most common way of achieving this goal. These spaces can be set out to relate to specific houses as allocated spaces or for general visitor parking or for additional spaces in tandem with on-plot parking which is described further under Combination parking. Parallel on-street parking can be adjacent to footways or separated from footways by verges, they can also be used in shared surface streets to create homezone arrangements. On street parking should be provided in clearly marked bays and 'designed in' to the streetscene.

ON STREET PERPENDICULAR PARKING

An alternative arrangement for on-street parking is perpendicular or 90 degree parking which can achieve all the same advantages as parallel parking. Perpendicular parking can be used to vary the townscape by creating wider streets or varying the width of streets to become more like spaces than streets, often utilising trees within the parking areas to add to the townscape and make use of the space/street width created. They can also be used to alter the nature of streets. Perpendicular parking can effect the way the street is used with slower speeds, breaks in traffic etc. as cars access spaces.

Perpendicular parking can be used to increase numbers along streets and is often a useful way of achieving visitor parking at the end of streets or in small front parking courts. Care should be taken to ensure a minimum of 6m space beyond the parking spaces for manoeuvring and access.

As shown in the above photo landscaping or other interventions work well to break up perpendicular parking bays, to reduce their dominance on the street. A maximum of six spaces should be provided in any group before being broken up by a landscape bay or street tree planting.

ON STREET FLEXIBLE PARKING

Combinations of these types of parking along the same street or from street to street can be used to vary the character throughout the development. This approach to on-street parking is achieved by designing street cross sections that can utilise both parallel and perpendicular parking. This can be used to accommodate different housing typologies along a street and to improve and vary townscape by altering the width of streets public realm. This approach can be used to increase numbers of parking and identify allocated and non-allocated parking.

ON PLOT PARKING

On-plot parking can be achieved in many ways within the private curtilage but to achieve good and varying townscape we suggest three key approaches, on-plot to the front, on-plot to the side, and integral garaging.

On-plot to the side is to be utilised for detached, semi-detached and end of terraces. This will be accommodated through sufficient width of plot to allow parking at the side of the dwelling, potentially allowing for two spaces one in front of the other or even garage parking.

On-plot to the front of the dwelling is often utilised for terrace housing allowing for off-street parking. Where this arrangement is utilised it is essential that alongside the parking space, space is always retained for planting/garden, pedestrian access to dwelling, and cycle and refuse storage if the strategy for these requires it.

Integral garaging is often utilised for 'mews' housing or narrow urban streets. Care should be taken to ensure that the street elevations are not dominated by garage fronts, so integral garaging should either be alternated with other arrangements or used with wider dwelling frontages that incorporate entrances and openings onto habitable rooms to ensure active frontages.

COMBINATION ON STREET & ON PLOT PARKING

As already suggested, the use of on-street and on-plot parking is preferred and certain streets will benefit from the repetition of a certain parking type, however to achieve a truly varied and interesting townscape particularly on tertiary streets and shared surface streets it is important to allow for a combination of these parking arrangements. This combination can also help to accommodate a range of house typologies. Street sections can provide for on-street parking opposite on-plot parking as well as allowing for alternating arrangements along the length of a street.

COURTYARD PARKING

As discussed under 'principles' the guidance suggests that parking should be achieved predominantly with on-street and on-plot parking with courtyard parking used occasionally and in certain situations. Where courtyard parking is used it is generally at the front of dwellings or at the end/side of short terraces. There are certain circumstances where rear parking can be used successfully, such as on the frontage to open spaces where it is preferable to avoid parking on the green infrastructure edge and gateway or other particularly prominent locations. Where courtyard parking occurs it must be dealt with as a mews with at least two properties overlooking.

In this case a well-designed rear court could be used which should have good pedestrian access through the terrace to the front with surveillance and security considered. A maximum group of 10 spaces per courtyard (preferably 6-8 spaces), broken up with planting to reduce the impact that large numbers of cars can have in dominating the development. Proposals for courtyard parking and the number of spaces to be provided will be assessed taking into account site layout, amenity and landscaping proposals.

Front courtyard parking can be used to improve townscape and to increase parking numbers. This can be achieved through widening streets at key locations or by altering the street alignment. These spaces often provide the opportunity to combine parking and tree planting.

5.3 MATERIALS & PUBLIC REALM DESIGN PRINCIPLES

PRINCIPLES

The materials utilised both on buildings and within the public realm design will be important in helping to define the quality and character of the streets within the scheme. It is recognised that the project will be built over a number of years and it is likely that there will be changes in the availability of materials and furniture over the period. For this reason the guidance sets out a performance specification for key elements of the buildings and public realm across the development. The final specification and details for the external works finish in different development areas will be a matter for the developer and the local authority to resolve together. Considerations will include effects on commercial viability in responding to the key objectives of the Strategic Masterplan Framework. Regular discussion and agreement between Local Authorities and developers will clarify where the scope for innovation is at any point in development of the overall scheme.

The materials shown are typical examples only and are not proposed as a specification palette to be rolled out across the whole site. These materials are only indicative of the quality thresholds for specification of external works items and building elements in any part of the development. The Developer is responsible for the design development of a coordinated works design package that is appropriate to achieving the place making objectives and principles for character of the development plot they are delivering.

The illustrated layouts for the respective character context areas demonstrate a simple efficiency to support the delivery of the overall objectives of the Structuring Plan. It is possible to reinforce this approach through to detailed design of the public realm with a focus on the coordinated design and execution of a consistent quality of workmanship from a refined pallet of appropriate materials that are fit for purpose and reflect the hierarchy and added value the public space offers. For example; bitumen macadam on the carriageway of Primary streets and consistent surface dressing in shared surface areas tied together with a consistent kerb unit material throughout. Opportunities for adding trees, appropriate permeable surfaces, such as stabilised gravel, grass and/or paving blocks as part of the shared surface street would reinforce the legibility of the place. A simple contemporary design for street furniture and lighting would fit in with a street scene characterised by buildings that are equally refined and of their time.

With regard to public realm key principles to be taken into account include:

- Unify the scheme: the choice of dominant public realm colours, materials and finishes should help to visually link and unify all parts of the development and help it read as a cohesive whole. In practice this means ensuring that a small number of dominant elements of primary streets are consistently treated across each phase, these key elements are therefore specified in the primary street (PS) strategic design codes. They include:
  - Carriageway
  - Footway
  - Create Places: The location and positioning of public realm elements can help to define places and points of interest within the scheme.
- Robustness and durability: Ensure materials specified are robust, durable and will stand the test of time. This generally means the use of good quality natural materials and other materials that have a proven performance in an urban environment. However allow for the use of innovative local produced, sustainable or aesthetic materials supported by technical data where this will enhance the overall quality or sustainability of the scheme.
- Ease of maintenance: specify standards of materials and workmanship that allow easy maintenance and replacement. Avoid complicated and fussy detailing except where part of a feature with a specific design intent.
- Carbon footprint: consider the environmental implications of materials. Specify materials in accordance with the BRE Green Guide to minimise carbon footprint.

Public realm treatments within development blocks and along tertiary streets can help to support the character of each area. The use and arrangement of planting will have a particularly strong impact and guidance is given in Section 5.1 Character Context Areas and Performance Specification tables in this document. The consistency in the design of the space between the building elevation and the street, the design of street itself and the implementation of a consistent and coordinated design of the threshold level of buildings with the back of the pavement will all affect the perceived quality of the scheme.

Access and servicing arrangements, such as bin storage and the location of services and utilities infrastructure should all be coordinated as part of an integrated design of the streets and spaces. A consistent soft boundary treatment to properties, together with mature street trees of a uniform habit and species (Acer Platanoides ‘Emerald Queen’, Tilia ‘Brabant’ or Tilia Cordata) in the public space is an opportunity to soften the environment and reflect the formal arrangement of the buildings that characterises this area. The finer level of planting such as the treatment of soft verges, existing watercourses, swales and other landscape elements that extend throughout the area are also opportunities for a creative and distinctive approach that strengthens the identity of the character context area. For example, hedgerows adjoining the countryside and to the linear park can strengthen this identity with selection of appropriate native species.

Overall public realm treatments will serve to unify public areas rather than differentiate them and the main character variations will come from variations in density, formality of layout, garden and boundary treatments, the impact of use on character, scale of buildings and use of material in relation to building form and grouping.

Guidance is given below on acceptable materials for key public realm elements likely to feature within the scheme.

FOOTPATHS AND CYCLE PATHS

- All shared footpath surfaces should be designed to be fit for purpose according to the access requirements and traffic overrun anticipated
- Products using recycled material and local and/ or UK provenance are preferred
- Medium specification surface finish: Resin-bonded surface dressing
- Lower specification surface finish in 'rural' areas (for example through greenways, parks, green fingers) : Self-binding aggregate or other porous surface dressing
- Lower specification surface finish in urban areas: Blacktop

Typical examples of materials suitable for use in footpaths and cycle ways:

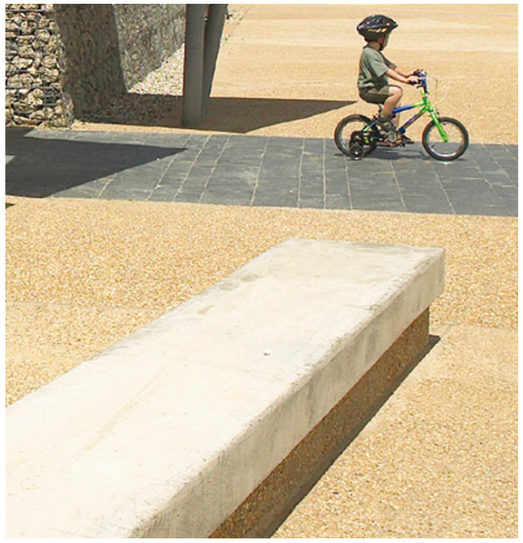
1 Resin bonded aggregate.
2 Self-binding aggregate.
3 Black top.

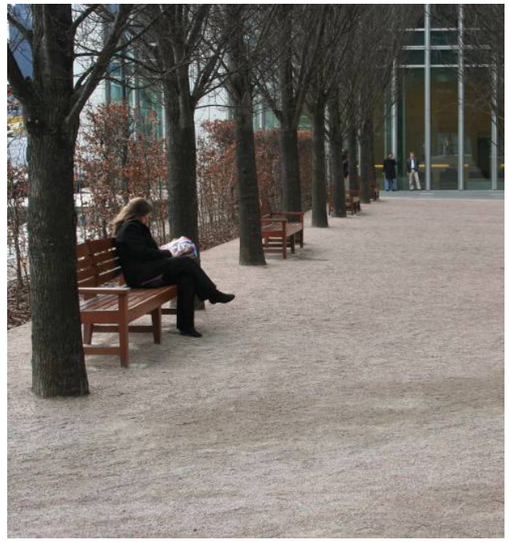
CAR PARKING SURFACE TREATMENT

- Finishes in car parking areas shall be suitable for use in a permeable paving system to improve the SUDs design
- All paving systems will need to be able to tolerate forecasted trafficking, attain infiltration targets and are to be detailed to manufacturer's requirements
- Where possible, products using recycled material of local and/or UK provenance should be specified
- Where possible, recycled material should be used through the full depth of construction
- A subtle method of marking parking bays is preferred to line marking and should be considered as part of the overall car park finish design

Typical examples of car park finishes:

1 Block pavers.
2 Stabilised gravel and turf systems
3 Metal studs, contrasting colour or tone of material used to demarcate parking





CARRIAGEWAYS

- It is recommended that all primary street carriageways are to be finished in black top macadam or a clear bound natural aggregate.
- Carriageways in tertiary streets and shared spaces should be designed to respond to the relevant character context area description and achieve the design requirements set out by the relevant street code. Shared spaces and dedicated parking bays should also be finished in materials that support the character objectives of the area in which they are situated. Opportunities to use porous pavement design solutions should be considered wherever possible, particularly in tertiary streets and spaces.
- Carriageway design must meet relevant Highways Authority standards with materials in adoptable areas to be agreed with Essex County Council.
- Raised tabletop crossings and any other shared surfaces should be designed to complement the finishes in other parts of the scheme

Typical examples of materials suitable for use in carriageways:

1 Block pavers
2 Blacktop
3 Reconstituted stone kerb
4 Clear bound natural aggregate

- Note that resin bonded material and permeable paving is not acceptable within adopted areas.

KERB STONES AND EDGING

- A uniform kerb type should be used throughout the scheme on primary streets. To ensure this the selected kerb material or product should be available in a range of dimensions so it can be laid in a number of scenarios i.e. with upstand, flush etc.
- Kerbs on shared and tertiary streets should be laid flush/ minimal upstand where drainage requirements permit
- On tertiary streets and shared space kerbs constructed from recycled and/ or reconstituted stone should be used
- The use of 'integrated' or 'drainage' type kerbs can be considered but the material, design and finish should match other kerbs used on site and be coordinated with the other surface finishes used
- Additional specialist kerbs may be required for bus stops and controlled road crossings

Typical examples of kerbs:

1 Reconstructed stone kerb
2 Conservation kerbs
3 Granite kerb
4 Other natural stone materials







BIN STORAGE

Reference should be made to Maldon District Council's current Recycling, Rubbish and Waste arrangements to understand the provision of containers for household waste and recycling. From early Summer 2016 residents within the District were provided with a black wheeled bin for refuse, a caddy for food waste, a pink recycling sack and a blue box for glass. Additionally consideration should be given to accommodating a green wheeled bin for garden waste.

Allocated space should be provided within the boundary of each housing plot for the storage of the necessary number of bins in a manner which does not detract from the street scene. The design must demonstrate that the containers can be stored and collected.

The following principles will be used to determine whether or not the proposed storage solution meets these requirements:

- Convenient: storage must be positioned in the most convenient location within the plot otherwise it will not be used.
- Visibility: The storage facility should be capable of minimising the visual intrusion of bins on the street scene when not out for collection, this will include ensuring sufficient height to screen bins, maximising the number of sides of the bin which are screened and minimising the number and frequency of visible bins from the street.
- Integrated: form and materials should be considered so that there is continuity with either the front elevation of the buildings or the boundary treatment or both and that the bin store itself does not end up dominating the street scene
- Consistency: A consistent approach should be taken to minimise the visual interference of the facilities in the street scene

The following examples illustrate a number of arrangements which could, if well designed, achieve these requirements of the Council guidance and the principles outlined above:

- Stored to the side or the rear of the property, suitable for detached, semi-detached and end terraced where this can be provided conveniently enough that bins do not end up stored in front gardens.
- Integrated into the front boundary treatment of the property, suitable where a hedge or a wall can be extended to provide a structure which is capable of limiting the visibility of bins. This could be either a bespoke bin store well integrated into the boundary or use of the boundary itself to provide the screen. This would require a boundary height of 1.2m so consideration should be given to visibility adjacent to the highway. It may be possible to raise the boundary for a small section of the boundary to provide the screen.
- Integrated in to the plot boundary between properties in similar arrangement described above
- Integrated into front elevation of the building, potentially combined with a porch area or integral garage, this approach must not result in a facility which dominates the front elevation of the building
- Placed in integral garages; where provided and of sufficient size.

Consideration should be given to combining bin storage with cycle storage and potentially on plot parking arrangements to ensure all these functions are catered for, their effects on the street scene are considered and do not result in a proliferation of structures over time.









APPENDIX A
ESSEX DESIGN GUIDE ROAD TYPE TABLE

Due to be adopted April 2017

The draft standards are being applied by Maldon DC and they will be kept under review.

Reference to the road types highlighted in the Essex Design Guide Road Type Table are made in the Performance Specification Tables in this Strategic Design Code. ECC Highways standards may be subject to review and application of the Design Codes will need to take into account any future modifications. Early consultation with ECC is recommended to confirm standards applicable at the time of Reserved Matters applications.

Road Type	Road Description	Guide to No Dwellings	Min Carriageway Width, Cycleway/Footway Requirements	Design Speed	Visibility Splays	Max Gradient	Min Centre Line Radius	Kerb Radii	Comments
A	**Local Distributor**	n/a	7.3m & 1 x 2m footway, 1 x 3.5m cycleway/footway. Buses to use full laybys. Pedestrian and cycle crossings to be provided on identified desire lines.		Junction and forward visibility splays will comply with current policy standards; please refer to DMRB or Manual for Street	5%	DMRB	10m for non-industrial, 15m for industrial	• Multi-purpose through route, required. Classification of County route required. • Minimum 3m verges • Clearway. • Frontage access prohibited • A straight section of carriageway will be provided from the entrance junction for 30 metres. • Lighting will be provided in accordance with ECC Operational plan
B	**Link Road**	n/a	6.75m & 1 x 2m footway, 1 x 3.5m cycleway/footway. Buses to use half laybys or on carriageway. Pedestrian and cycle crossings to be provided on identified desire lines.	50kph 30mph	Junction and forward visibility splays will comply with current policy standards; please refer to DMRB or Manual for Street	6%	44m	10m	• The road forms more than 1 access to the development. Links neighbourhoods and also serves non-residential or industrial uses. • Public transport route. • Minimum 3m verges required. • No parking unless off carriageway provision is made. • No frontage access within 15m from junctions • Egress in forward gear only within 15 - 30m from a junction • A straight section of carriageway will be provided from the entrance junction for 22 metres. • Lighting will be provided in accordance with ECC Operational plan
C	**Feeder Road**	n/a	6m or 6.75m if a current bus route now or one is expected in the future. 2 x 2m footway	30kph 20mph	Junction and forward visibility splays will comply with current policy standards; please refer to DMRB or Manual for Street	8% 6% on a bus route	20m	6m 10m on a bus route	• May serve residential and non-residential uses. • A 50kph (30 mph) speed limit may be considered on a public transport route where it is not possible to provide appropriate traffic calming for a 30kph (20mph) speed limit. • No parking unless where off carriageway provision is made. • No frontage access within 15m from junctions • Egress in forward gear only within 15 - 30m from a junction • A straight section of carriageway will be provided from the entrance junction for 22 metres. • Lighting will be provided in accordance with ECC Operational plan
D	**Access Road**	400 units on a loop, or 200 for a cul de sac	5.5m with 2 x 2m footways or 1 x 2m footway if fewer than 25 dwellings are served.	30kph 20mph	Junction and forward visibility splays will comply with current policy standards; please refer to DMRB or Manual for Street	8%	13.6m	6m	• Provide direct access to dwellings • A section of carriageway will be provided from the entrance junction for 15 metres. • Lighting will be provided in accordance with ECC Operational plan
E	**Minor Access**	100 units on a loop, or 50 for a cul de sac	Combined pedestrian/vehicular surface 6m. Maximum length 125m for a cul-de-sac, or 250m for a through-route. Localised narrowing where appropriate.	30kph 20mph	Junction and forward visibility splays will comply with current policy standards; please refer to DMRB or Manual for Street	8%	13.6m		• Tabled entrance approach and priority for pedestrians and cyclists across junctions • Junctions a straight section of carriageway will be provided from the entrance junction for 15 metres. • Street lighting not required
F	**Mews Court**	20 units on a cul-de-sac	Combined pedestrian/vehicular surface 6m. Maximum length 50m (cul de sac). Localised narrowing where appropriate.	30kph 20mph	Junction and forward visibility splays will comply with current policy standards; please refer to DMRB or Manual for Street	8%	13.6m		• Special junction detail. • Priority for pedestrians and cyclists across junctions. • A constricted entrance enclosed by buildings or walls to a minimum height of 1.8m for the first 8m back from the footway of the major road (except for the 1.5x1.5m pedestrian visibility splays). • No doors, gates or other entrances may open on to the mews within this first 8m. • No projections over the net adoptable area of the mews court. • No windows or doors should open outwards over the highway. • A straight section of carriageway will be provided from the entrance junction for 12 metres. • Street lighting not required
G	**Shared Private Drive**	5 units	5.5m for first 6m tapering down to a lesser width. Desirable max length 18m, longer requires a turning head of size 5 and passing bays.		Junction and forward visibility splays will comply with current policy standards; please refer to Manual for Street	8%			• Where private drive joins a 30kph (20mph) network, width may be reduced. • At junctions a straight section of carriageway will be provided from the entrance junction for 6 metres. • Street lighting not required.
H	**Mixed Use Street**	n/a	6.75m carriageway comprising of two 3m running lanes with generally a 0.75m central over run-able strip & 2 x 2m footways. Bus route.	30kph 20mph	Junction and forward visibility splays will comply with current policy standards; please refer to DMRB or Manual for Street	5%	20m	10m on a bus route otherwise 6m	• Serves residential and non-residential uses; for example High Streets. • On-street parking in bays. • Street trees required. Details in The Urban Place Supplement. • Over run-able strip should be wider where appropriate e.g. at crossing points. • A straight section of carriageway will be provided from the entrance junction for 22 metres. • Lighting will be provided in accordance with ECC Operational plan