locality
the power of community

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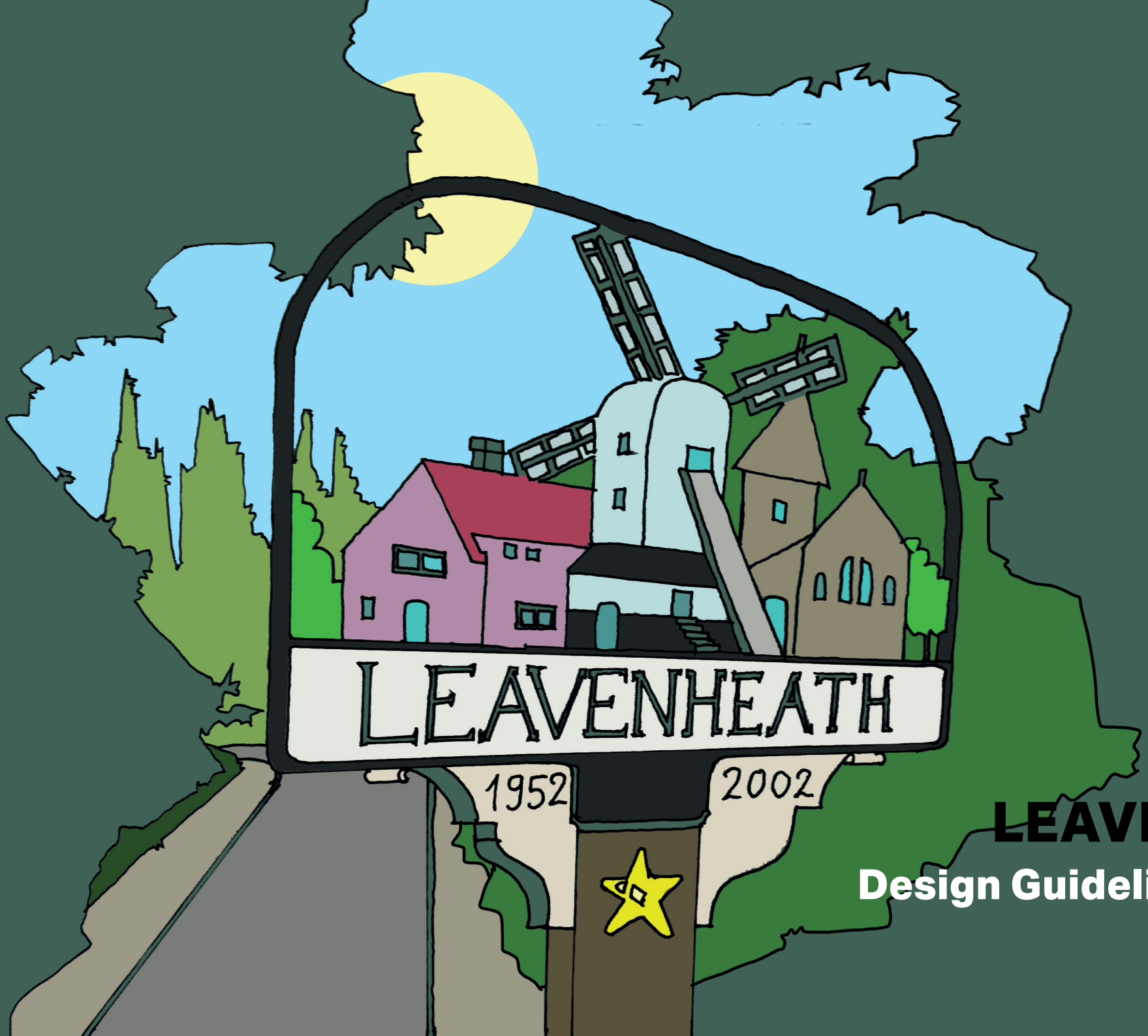


LEAVENHEATH

Design Guidelines & Codes

FINAL REPORT

June 2021

CONTENTS

Quality information

Project role	Name	Position	Action summary	Signature	Date
Qualifying Body	John Simpson	Leavenheath NP Group Chairman	Draft Report Submitted for comments	John Simpson	21-06-2021
Director / QA	Ben Castell	Technical Director	Revision and approval of Final Report	Ben Castell	21-06-2021
Researcher	Luis Juarez	Associate Director	Document structure, Stage Revisions	Luis Juarez	21-06-2021
Researcher	Alejandro de Miguel	Senior Urban Designer	Research, written content, drawings	Alejandro de Miguel	21-06-2021

INTRODUCTION

01

1. INTRODUCTION

Introduction

AECOM has been commissioned to provide design support to Leavenheath Parish Council through the Ministry of Housing, Communities and Local Government Neighbourhood Planning Programme led by Locality.

The Steering Group has requested professional advice on design guidelines and codes for future development within the parish. This document has been successfully put into community consultation.

This document should be read in conjunction with Neighbourhood Plan policies that guide the assessment of future development proposals and encourage high-quality design. This document advises on how to design the physical environment to create distinct and lively places integrated within the parish.

Objective

The main objective of this document is to develop design codes that will inform any future development in the parish. These design codes gather the residents' aspirations and the work being undertaken in the drafting of the emerging neighbourhood plan policies to produce design codes that respond to, retain and enhance the intrinsic features of the parish.

The core method to produce these design codes can be divided into the following steps:

- **Review of emerging policy and other relevant documentation *(Emerging Neighbourhood Plan Policies, Emerging Character Area Appraisal, NP Data Profile, Leavenheath Household Survey, Leavenheath Housing Need Assessment).*** These documents constitute the base to understand the objectives and aims for the plan and the residents' input into design. Together with conversations and meetings with the group, these documents shape the content and structure of the design codes.

- **Production of Design Codes.** The design codes constitute the specific design actions that any future proposed development will need to implement if it wants to be successful. This document follows the character of the parish and specifically details the design codes relevant to each element of design, within the following four categories: *Strategic Codes & Best Design Practices, Street Typologies & Car Parking, Built Form and Environment & Energy Efficiency.*

Process

Following an inception meeting, AECOM and the members of the Neighbourhood Plan Steering Group carried out a high level assessment of the area. The following steps were agreed with the group to produce this report:

- Initial meetings.
- Urban design analysis.
- Preparation of design codes and other guidelines to be used to assess future developments.
- Draft report.
- Final report.

The area of study

Leavenheath is a parish located on the Essex-Suffolk border. Located on the A134 running north-south between Sudbury and Colchester. It is part of Babergh district.

Leavenheath is composed of three distinct hamlets. High Road comprises the main one and is completed with the hamlets of Honey Tye to the south and Harrow Street to the north.

High Road contains The Green, a protected six acre open green space which is partly used by the cricket club, and the large Village Hall, together with the bulk of residential development in the area. The housing typologies are typically detached and semi-detached properties with generous front gardens that contribute to the general feeling of openness on the streetscape. The structure of the area to the west is that of cul-de-sacs.

Honey Tye contains several grade 2 listed historic properties, including Honey Hall, a grand old manor house in a prominent location and Rosehill farmhouse.

Harrow Street constituted the centre of the parish until the development of High Road in the 80's. It is a mix of old and newer properties from the 70's. Located in this part of the parish is the local pub, the Hare and Hounds. This 19th century building is listed and has been a community hub since it became a pub.

Along the A134 is a Parish Church namely St Matthew's. Originally a chapel of ease, it was built in 1836, and was enlarged in 1882 using brick and stone.

North from St. Mathews Church toward Harrow Street is The Leaven Hall, a 16th century unlisted house situated at the end of a private drive. Across the A134 from Leaven Hall is Mill House. Both the Corn Mill and Millers House were thought to be around 250 years old by the time the mill was demolished in 1925.

According to the 2011 census, Leavenheath has 1,370 residents.

Figure 1: Leavenheath and its surroundings

STRATEGIC DESIGN GUIDANCE

02

SDG. Strategic Design Guidance

SDG.01. Consider the context

Links to the countryside

The parish boasts high quality natural areas. The south-eastern part of the parish is covered by the Dedham Vale AONB, whilst the south-west contains a section of the Arger Fen SSSI. The Carrs, a set of four ponds that feed the River Stour are located to the east. Breach Grove and Leadenhall Woods are both designated nature reserves.

Actions:

- Create better links with the countryside. In edge locations, consider connecting all streets to the network of public pathways and rights of way.
- Retain approach routes and perceptions of a settlement. If the new development serves as the access point to the parish or an area of distinct character, new developments should visually acknowledge that fact.

Local rural character

As of 1865, the description of the area was that 'there are few farmhouses and cottages'. Developments must reflect this open and rural character.

Actions:

- Secure the continued protection and enhancement of listed & non-listed heritage assets and their setting and contribute to the distinctiveness of the areas in which they are located.
- New developments should take local character into careful consideration. Design should consider scale, layout, density, mass, materials and architectural features, as well as incorporate high standard of landscaping to add to the quality of the place.

Unite settlements

The fragmented nature of the parish poses challenges to pedestrian and cycle connectivity. The creation of safe and accessible links between settlements should be at the base of a more cohesive social tissue that strengthens the identity of the parish.

Actions:

- Make the best use of existing public transport services and improve safe walking and cycling paths.
- Locate development where the need to travel will be minimised.
- Limit any significant impacts from and to the development of the highways and transportation network.

Village Green looking north from High Road

SDG.02. Connect

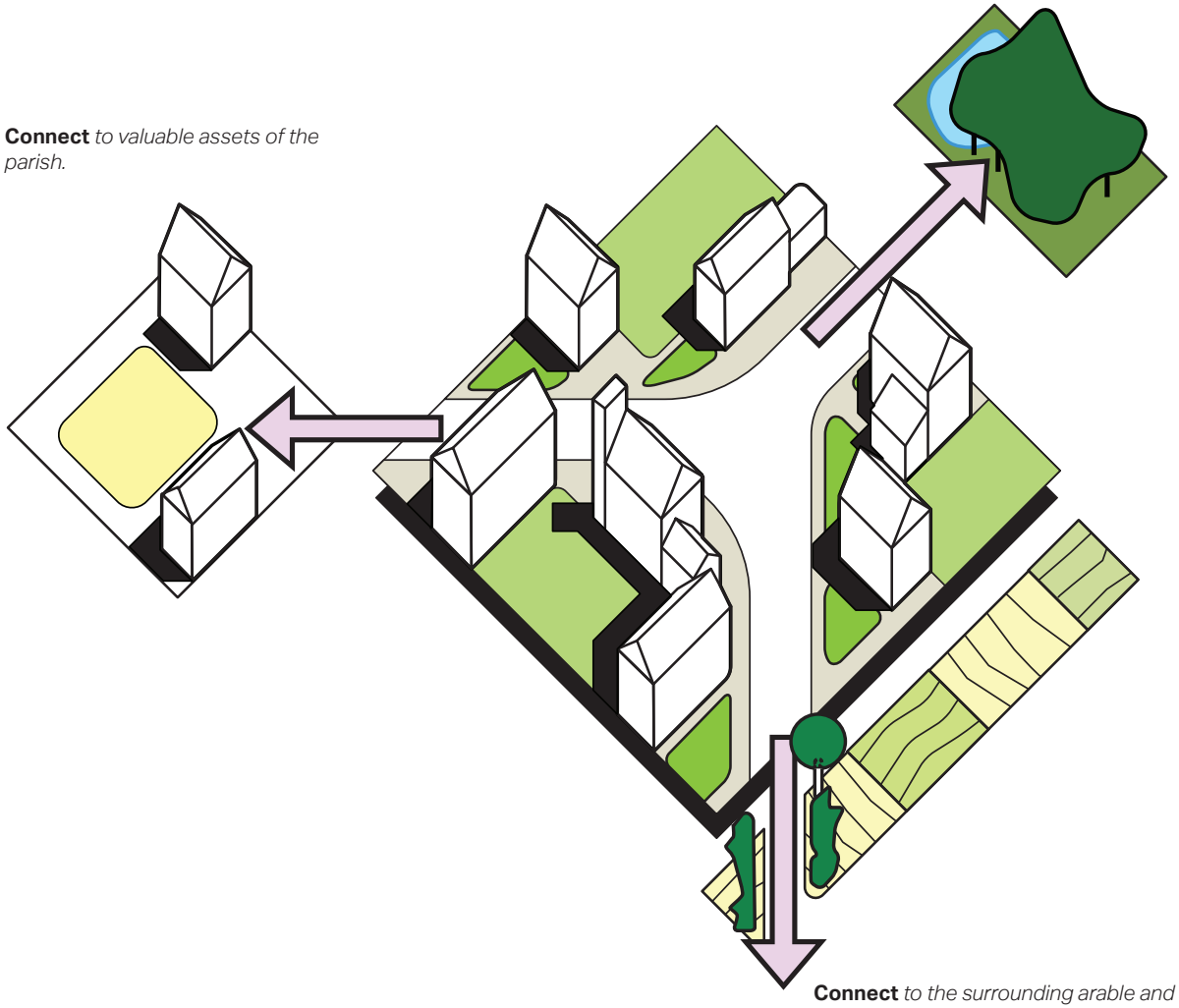
Connect

Creating new walking routes which are well connected to existing ones is a prerequisite for any new development. Whilst generally following the shortest and straightest distance between two points, successful walking routes radiating from the development should simultaneously maximize landscape attractiveness and journey perception, underlining their amenity character.

Actions:

- New developments should aim to create permeable networks of connections within development sites as well as connecting to the wider locality and to public footpath networks beyond. In case of creating new links, barriers to vehicle movement should be kept to a minimum.
- Connect to established pathways and rights of way.
- Maximize connectivity to high quality natural areas and the open countryside, to valuable listed and non-listed assets and buildings and other settlements, hamlets and isolated buildings.
- Pedestrian routes are to be considered first and must be considered both within the site boundary and the surrounding area. Designers should be looking to link developments into the existing pedestrian networks and public rights of way beyond the site, so that new developments or schemes become fully integrated and connected.

Connect *to valuable assets of the parish.*



Connect *to the surrounding arable and agricultural fields. Controlled access to paths along fields helps maintain hedgerows and wild flora and fauna and enhances the appeal of traditional agricultural and horticultural practices*

SDG.03. Enable wayfinding

Wayfinding

A way of making walking and cycling easier is to ensure that routes are direct as well as memorable.

Actions:

- Create places that have a clear identity and that are easy to navigate.
- Local landmark buildings or distinct building features -such as towers, chimneys, or porches- and clear, direct routes can aid legibility. Clear signage should be placed at key nodes and arrival points to aid orientation.
- Use landscape and feature trees as both wayfinding aids and as elements that provide enclosure and attractiveness to the street. Trees can be a great design tool to mark the access to new developments and distinct parts of an area.
- Legible streets allow for easy navigation, reducing confusion and uncertainty. This requires street networks that are well-connected with relatively short streets. This is complimented by use of clear signage which is required by law. The use of discretionary signage should be minimised where possible. Street furniture and street objects should not create clutter or hazards along the street.

Serial vision

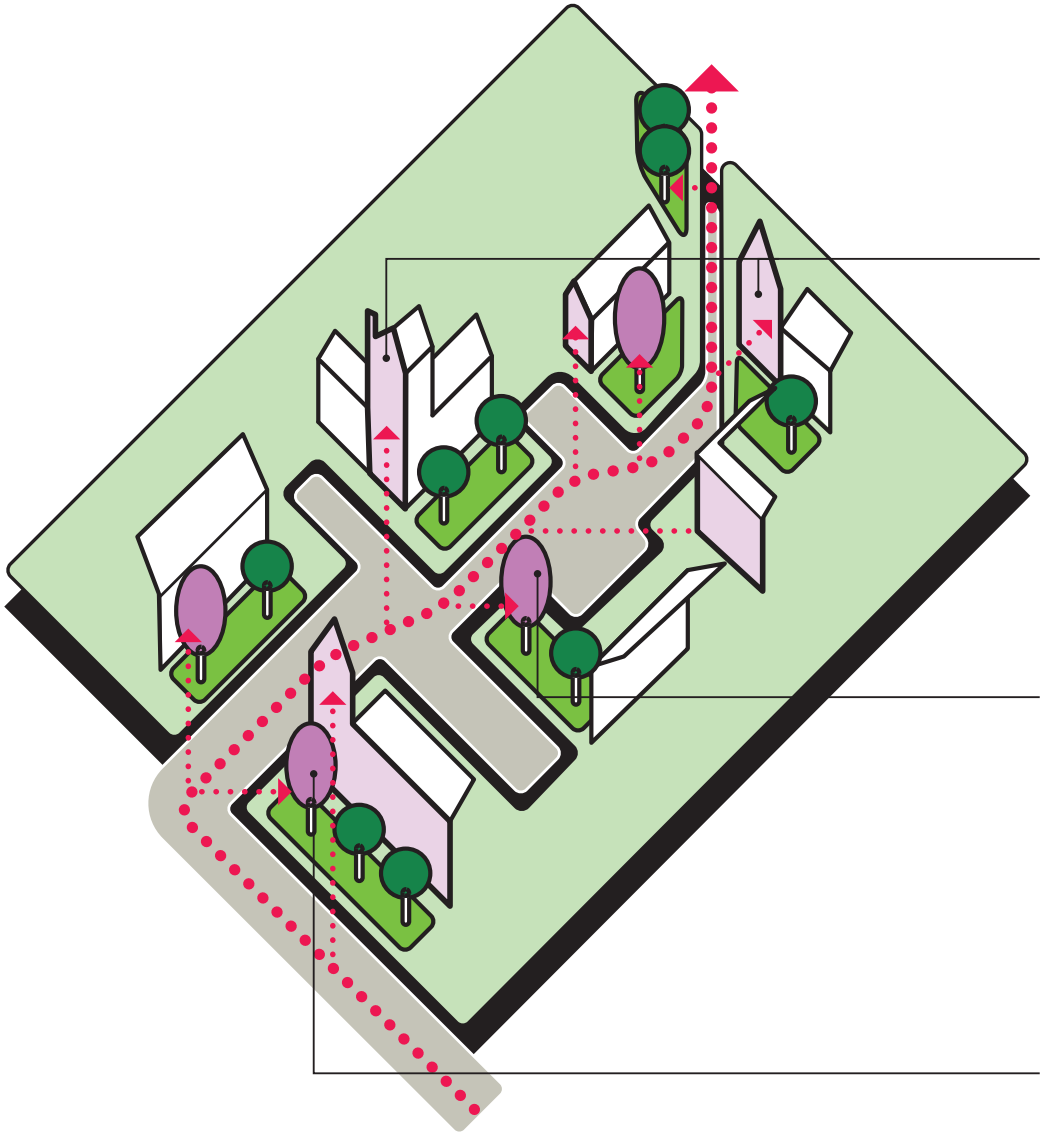
Actions:

- Subtle variations in alignment and small setbacks of buildings can have a powerful effect of discovery and drama as one moves through a development.
- This effect can be achieved through delivering developments that allow free movement from one place to another, movement to the enclosed space of a square or courtyard where people meet, and to the focal point where people go to.
- This process can be described as the interplay between 'here' and 'there', in sequences of focal buildings and building features, landmarks and vistas.

Accessibility

Actions:

- All development should be suitable for all user types and disabilities.
- Designing inclusive streets for pedestrians requires the designer to fully understand the users and how different disabilities present various design challenges. A tactile/tonal distinction should be made between pedestrian areas and vehicular areas and at crossings / intersections, so that people with visual impairment can distinguish between the two.
- Accessible street should ensure clear widths and gently sloped gradients wherever possible.



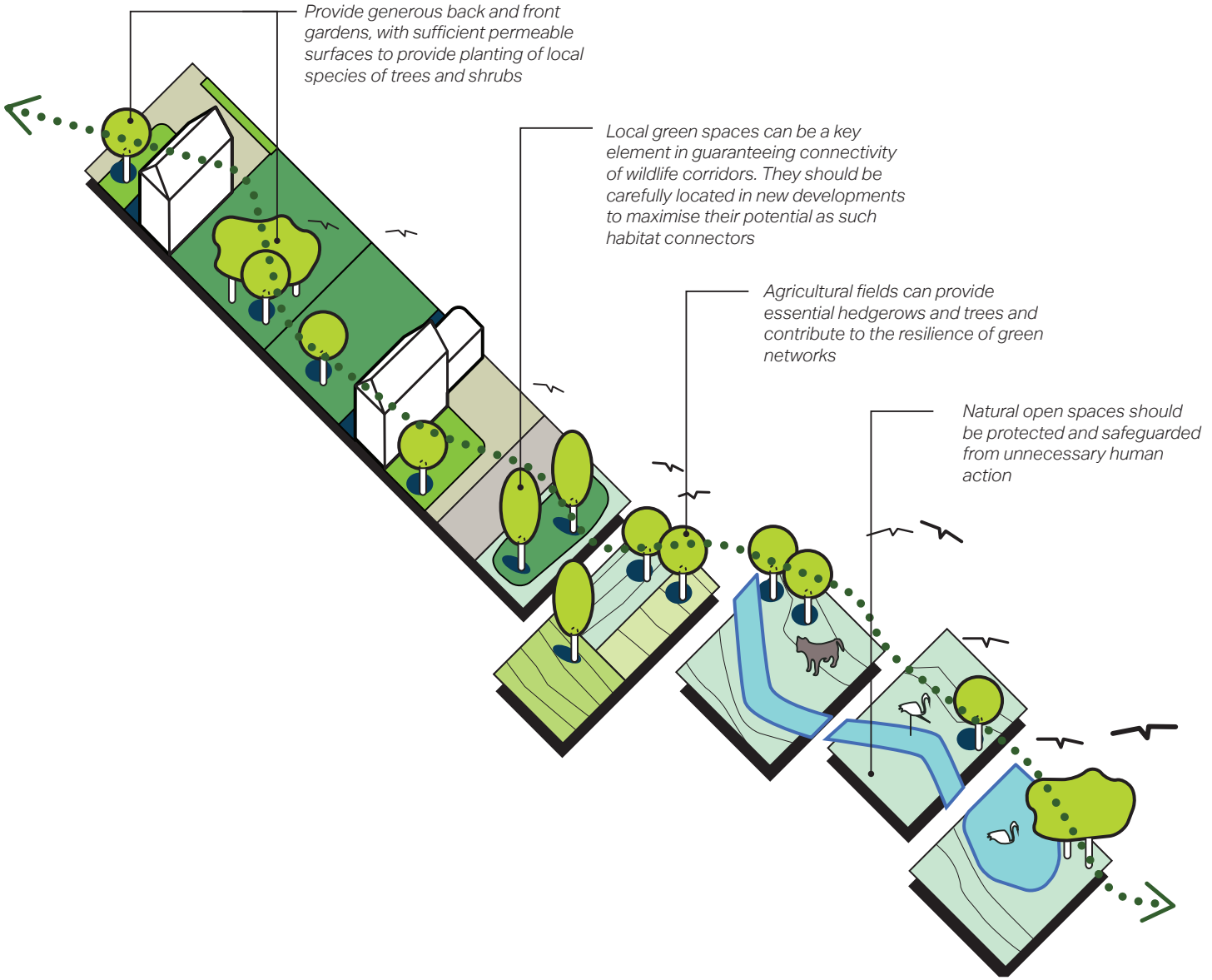
SDG.04. Create a green network

Green networks

Green networks, corridors and linkages are widely seen as a key mechanism for reversing the effects of fragmentation on biodiversity. They also deliver a range of other social and environmental benefits, including enhancement of local landscape character, and greater opportunities for public access and recreational use.

Actions:

- Provide a connected network of private and public green spaces that includes generous and vegetated back and front gardens, public green spaces, fields and natural open spaces.



CODES FOR STREET TYPOLOGIES AND CAR PARKING

03

SPC. Codes for Street Typologies & Car Parking

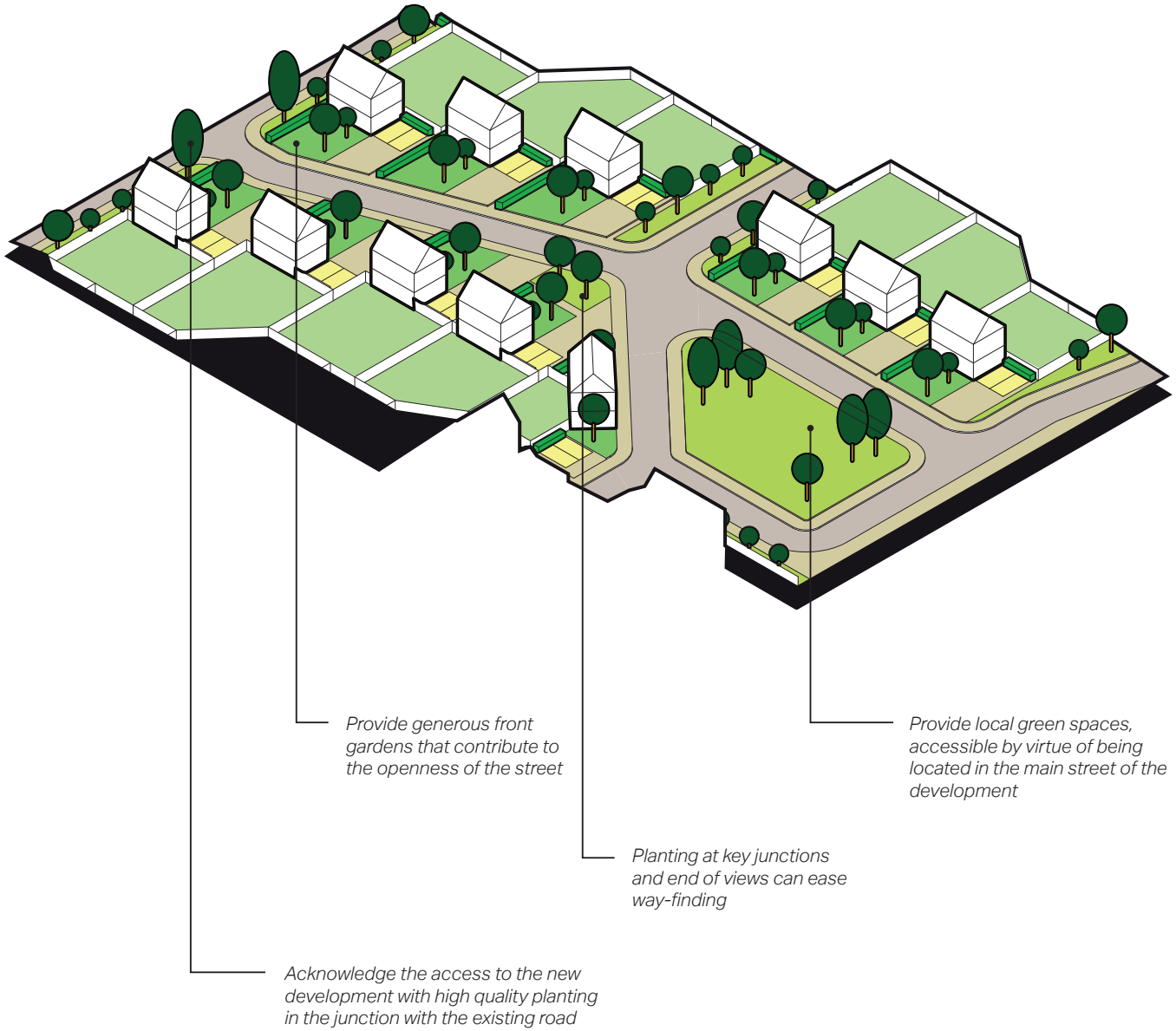
SPC.01. Main access street

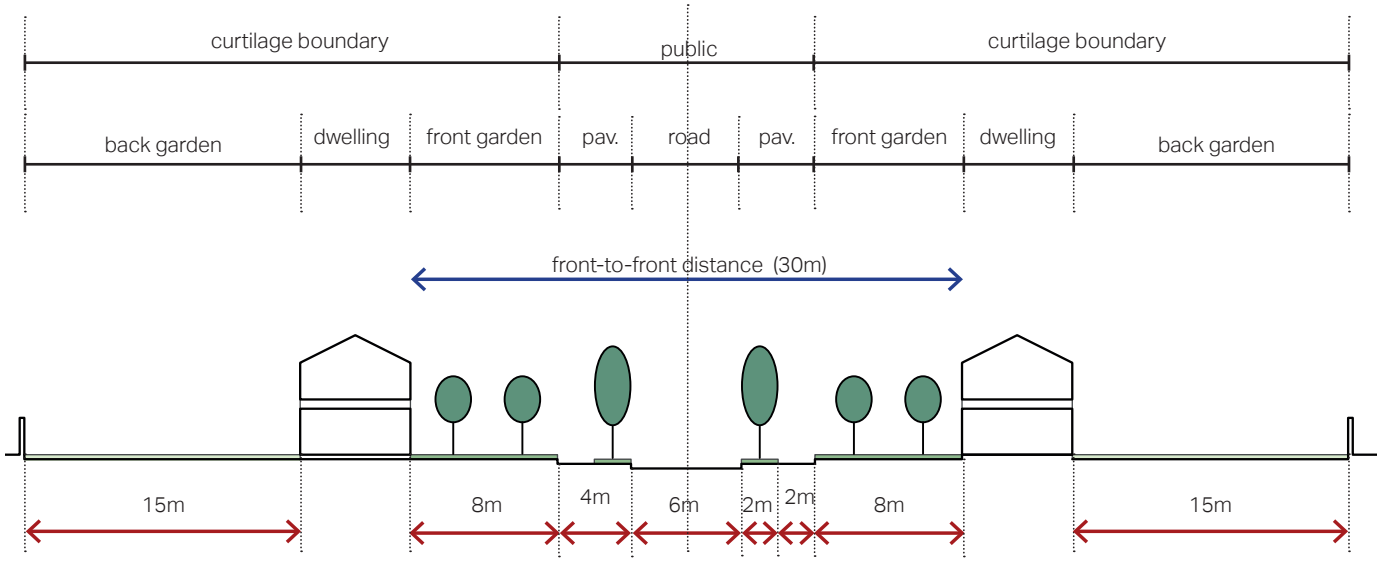
Main access street

This street provides the main access spine of a new development. It connects the development to the rest of the settlement.

Actions:

- Provide generous front gardens and street planting that contribute to the general feeling of openness.
- Locate parking to the side of properties and consider using garages to mitigate the impact of cars on the streetscape.
- Main street serves as the access to the new development and that can be acknowledged by providing planting in the junction with the existing road. Buildings in the access and ending can have special features to provide interest to the main spine.
- Local open spaces can ease way-finding with planting in corners, intersections with other streets and end of views, but also as separate open spaces in their own right. Provide those local green spaces, that are made accessible by being on the main structuring spine of the development.
- Make sure that any planting of verges, bushes or trees does not impede forward visibility or junction sightlines. Refer to the *Suffolk Design Streets Guide* for further guidance on acceptable planting close to roads and footways and minimum distances from highway infrastructure.





Key dimensions

The nominal dimensions on the diagrams to the left are a guidance on the key elements and proportions to be provided on the main access street.

- *Building height:* maximum building height is 2 levels + pitch roof.
- *Pavements:* minimum width of pavements is 2m. An additional 2m is provided for street planting if required.
- *Front gardens:* minimum depth of front gardens is 8m. Tree planting is encouraged.
- *Back gardens:* minimum depth of back gardens is 15m.
- *Front-to-front distance:* the resulting street corridor width is in the range of 30m, contributing to the openness of the streetscape.

Note: Take the *Suffolk Design Streets Guide (2020)* as reference for dimensions, geometry and drainage of roads. Any new proposed road design should be in accordance with this or any updated edition of the guide.

Examples

Some local examples of streets of similar condition are provided below.

High Road. *Note the generous front gardens and planting at corners*

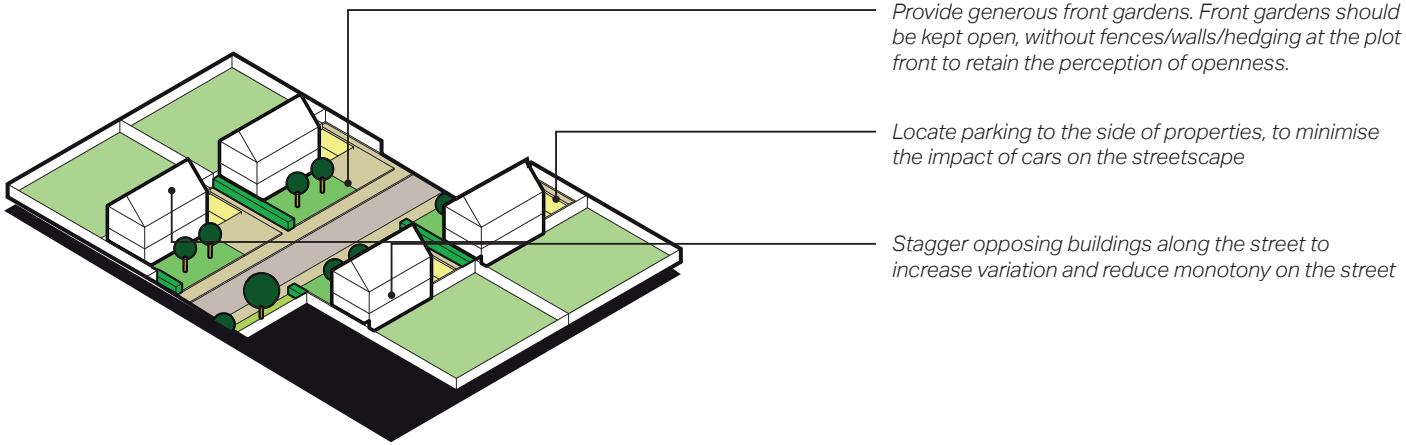
High Road. *Note the generous front gardens, the general openness and tree and hedgerow presence*

SPC.02. Residential streets

Residential street

Actions:

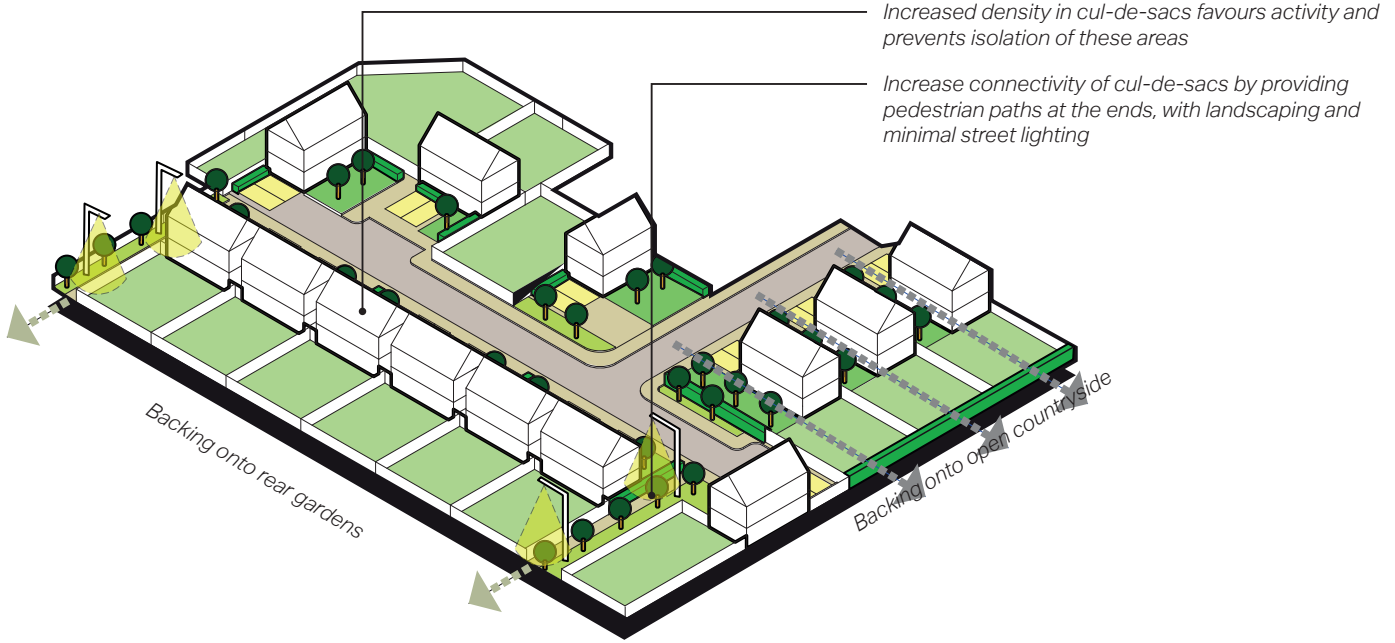
- Provide generous front gardens that contribute to the general feeling of openness.
- Locate parking to the side of the property to mitigate the impact of cars on the streetscape.
- Residential streets branch out from the main street, it is good practise to stagger branching streets organically to avoid excessive long views.
- It is also advisable to stagger opposing buildings along the street so they are not directly facing each other, and therefore reduce the monotony along the streetscape.

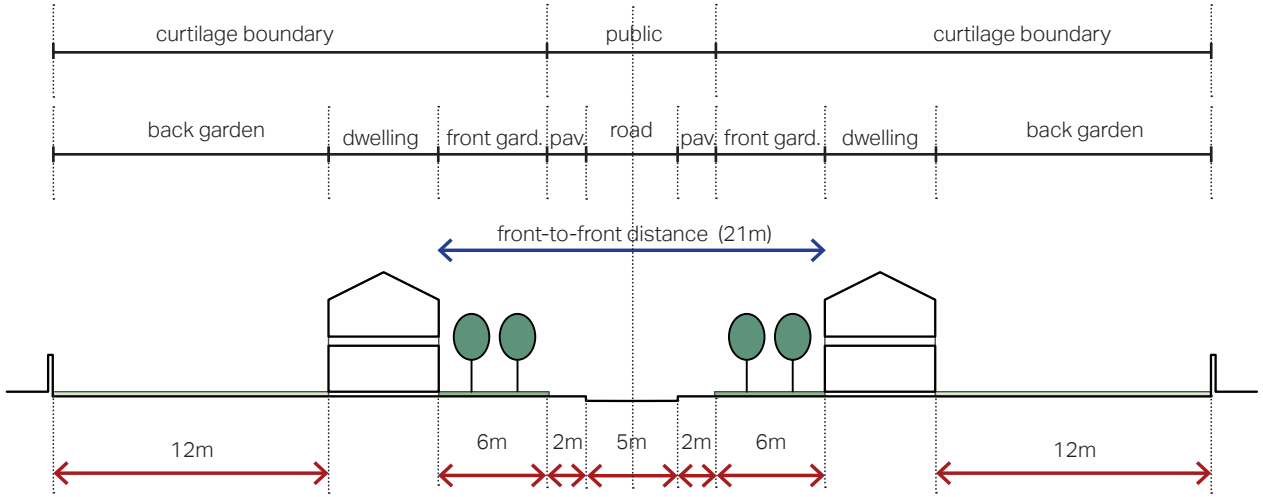


Cul-de-sac street

Actions:

- It is generally acceptable to increase the density and decrease the spacing of buildings in cul-de-sacs to favour activity and prevent them from becoming isolated, parking can be at the front of properties in this case. Garages separate from dwellings are not acceptable and neither are parking courtyards.
- Cul-de-sacs should have pedestrian paths that connect them to surrounding areas and increase their connectivity access and overlooking. Careful consideration should be given to the landscaping and lighting of these paths to increase their safety. Follow Secure by Design principles included in Secure by Design Homes 2019 or in the latest edition
- Cul-de-sacs are typically backing onto the open land in Leavenheath. This is generally not advisable, as rear gardens become exposed. It is generally advisable to back onto gardens of other properties. A side dwelling typology is suggested here as an alternative when properties back onto the open countryside. It provides distant views to the open land from the street.





Key dimensions

The nominal dimensions on the diagrams to the left are a guidance on the key elements and proportions to be provided on both residential and cul-de-sac streets.

- *Building height:* maximum building height is 2 levels + pitch roof.
- *Pavements:* minimum width of pavements is 2m. An additional 2m is provided for street planting if required.
- *Front gardens:* minimum depth of front gardens is 6m. Tree planting is encouraged.
- *Back gardens:* minimum depth of back gardens is 12m.
- *Front-to-front distance:* the resulting street corridor width is in the range of 20m, contributing to the general openness of the streetscape.

Note: Take the *Suffolk Design Streets Guide (2020)* as reference for dimensions, geometry and drainage of roads. Any new proposed road design should be in accordance with this or any updated edition of the guide.

Examples

Some local examples of streets of similar condition are provided below.

Sweet Briar Close. *Residential streets maintain the generous front gardens and openness of the street*

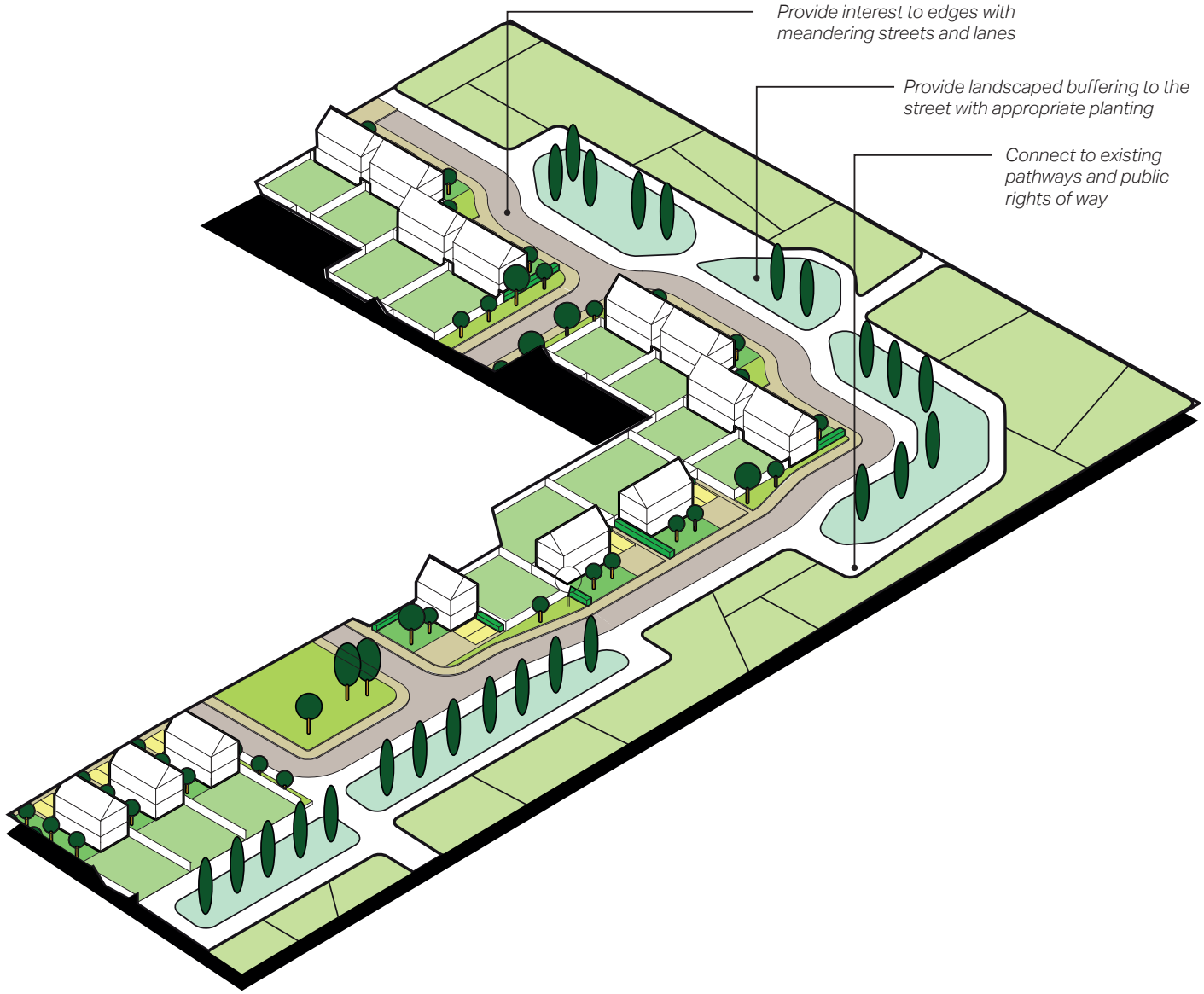
Mayfield. *Cul-de-sacs are slightly more compact that the rest of the area, they keep quality landscaping*

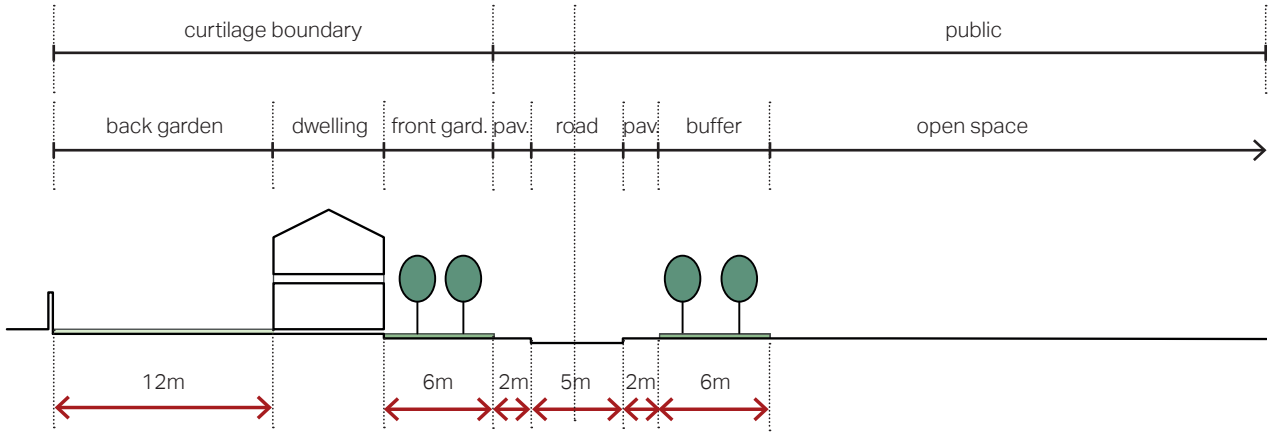
SPC.03. Edge street / lane

Edge street / lane

Actions:

- Edge lanes are a suitable way of fronting the surrounding countryside making it accessible to most users.
- These streets can have gentle meandering, providing interest and evolving views while helping with orientation.
- Carefully consider landscaping as a buffer between development and the open countryside. The landscape buffer provides additional separation in the event of additional development against the edge lane in the future.
- Connect the edge lane to existing paths and other public rights of way.





Key dimensions

The nominal dimensions on the diagrams to the left are a guidance on the key elements and proportions to be provided on the main access street.

- *Building height:* maximum building height is 2 levels + pitch roof.
- *Pavements:* minimum width of pavements is 2m. An additional 2m is provided for street planting if required.
- *Front gardens:* minimum depth of front gardens is 6m. Tree planting is encouraged.
- *Back gardens:* minimum depth of back gardens is 12m.
- *Buffer landscaping:* this buffer guarantees separation from the open countryside, and form potential new developments that might come forward beyond the boundary of the current site. A minimum buffer distance of 6m is represented in this diagram.

Note: Take the *Suffolk Design Streets Guide (2020)* as reference for dimensions, geometry and drainage of roads. Any new proposed road design should be in accordance with this or any updated edition of the guide.

Examples

Some local examples of streets of similar condition are provided below.

Harrow Street. *Some sections of this street have an edge condition, with long views to the open countryside*

High Road. *Similarly, High road has an edge condition along the section fronting The Green.*

SPC.04. SuDS

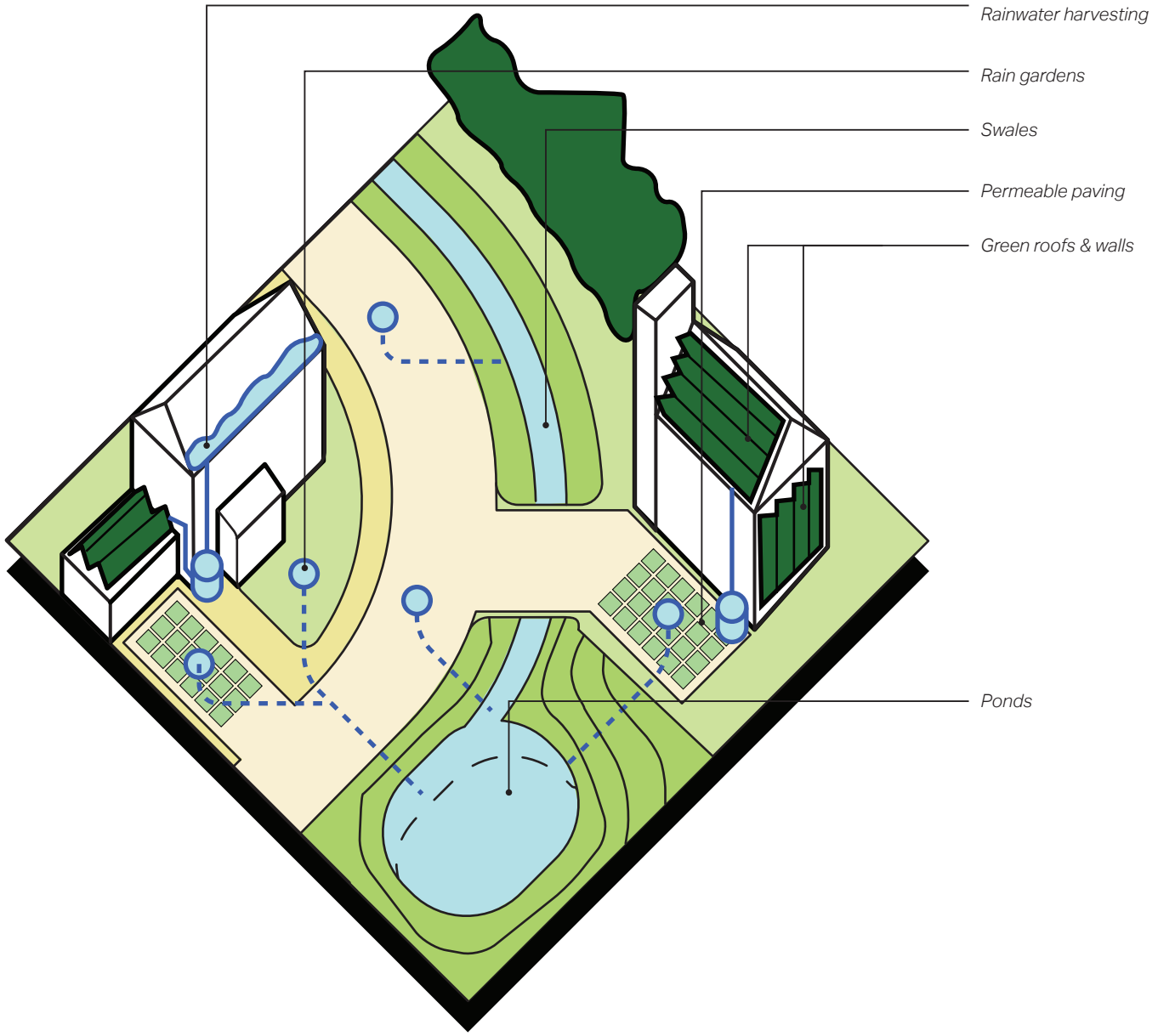
SuDS

Sustainable Drainage Systems cover a range of approaches to managing surface water in a more sustainable way to reduce flood risk and improve water quality whilst improving amenity benefits.

Where reuse is not possible there are two alternative approaches using SuDS:

- Infiltration, which allows water to percolate into the ground and eventually restore groundwater; and
- Attenuation and controlled release, which holds back the water and slowly releases it into the sewer network. Although the overall volume entering the sewer system is the same, the peak flow is reduced. This reduces the risk of sewers overflowing. Attenuation and controlled release options are suitable when either infiltration is not possible (for example where the water table is high or soils are clay) or where infiltration could be polluting (such as on contaminated sites).

The most effective type or design of SuDS would depend on site-specific conditions such as underlying ground conditions, infiltration rate, slope, or presence of ground contamination. SuDS components will be further detailed in the Environment & Energy Efficiency section, but some of the key design elements are outlined in the diagram to the right.



SPC.05. Car parking solutions

Car parking design should be safe and should not undermine the quality and amenity of the streets. In residential developments, parking should be provided on plot, either in garages, car ports or on the plot to the side or to the front. Generally, on-street parking should be considered only for visitors and near public open spaces, and kept at a minimum. Refer to design code BF.05 for further guidance on dimensional requirements.

On-plot parking

Actions:

- On plot parking can be either in garages or car ports and/or on the driveway. If parking is proposed at the driveway, it is preferable to place it at the side of the building to minimise the presence of cars on the street.
- Driveway parking at the front of the building will only be allowed if it is combined with high quality and well designed soft landscaping.
- Quality landscaping and boundary treatment is the key element in getting attractive streets, which can be achieved by using elements such as hedges, trees, flower beds, low walls and high quality paving materials between the private and public space.
- Front gardens must dominate the fronts of properties, paved surfaces for driveways will never constitute more than 50% of the front curtilage. Hard standing driveways must be constructed from porous materials to minimise surface water run-off.
- For residential developments, each dwelling must have the ducting in place to allow a suitable wattage wall charging unit to be installed and connected to a suitable household consumer unit, that has the capacity to charge an electric vehicle and run other household electrical appliances when required by the resident.
- Make sure the EV charging-ready wall does not clutter elevations, in particular main facades and front elevations.

On-plot garages / car ports

Actions:

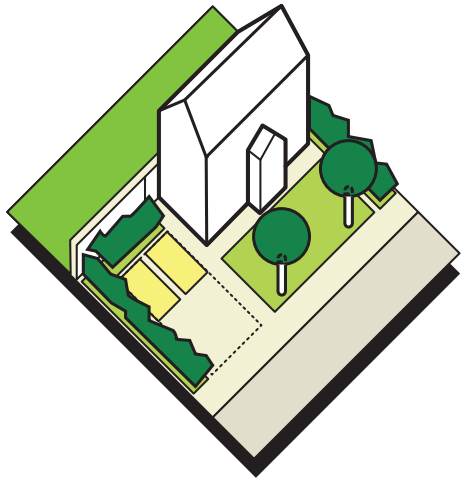
- Garages should preferably be designed in forms linked to the main building, rather than free-standing structures. In both situations, they should reflect the architectural style of the main building.
- Garages should be in line or recessed from the main building line, and not dominate the street.
- Integrate bicycle parking and/or waste storage into garages.
- Garages should be able to accommodate modern car dimensions.

On-street parking & other forms of parking

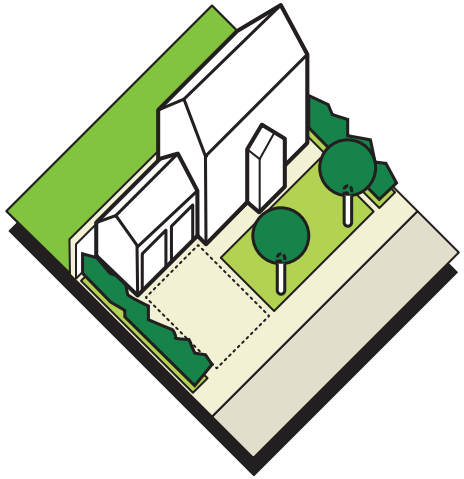
Actions:

- Provide parking for residents on plot and provide visitor parking on the street adjacent to public open spaces and on other streets only if the width of the road allows for it.
- Visual impacts from visitor parking on the street scene can be ameliorated by the use of high quality landscaping and planting.
- Generally, parking courtyards and flat-over-garages are not allowed in residential areas.

On-plot parking on driveway



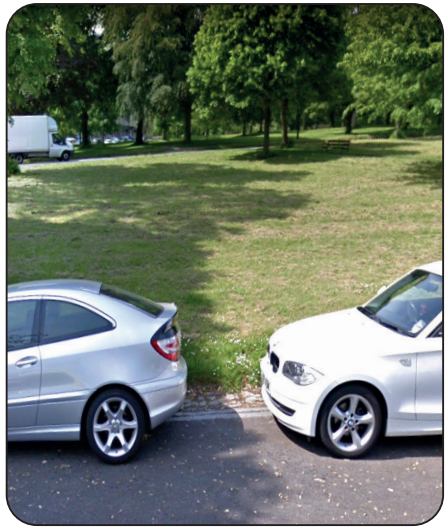
On-plot parking in garage



On-street parking adjacent public open space

Edies Lane. *On-plot parking on driveway*

The Old Road. *On-plot parking in garage*



On-street parking should be limited to public open space locations

SPC.06. Street planting

Flower beds, bushes and shrubs

Flower beds, bushes and shrubs contribute to the livelihood of the streetscape. Normally planted within the curtilage boundary, ornamental species add interest and colour to their surroundings and become an identity and expressive feature of each dwelling.

Hedges

Hedgerows are normally used to mark property limits, they can also be planted in front of bare boundary walls to ease their visual presence. They can be used to conceal on-plot car parking and driveways within curtilages. They can also be used as protective barriers on gable ends facing windows onto the street.

Trees

Trees can normally be used to mark reference points and as feature elements in the streetscape. When planted in intersections and key locations can help with privacy whilst enhancing the wayfinding and distinctiveness of the area. These tend to be within property curtilages. Trees should also be present in any public open space, green or play area to generate environmental and wildlife benefits.

Planting standards

The British Standard 5837: 2012 'Trees in relation to construction-Recommendations' should be the principal reference document when considering new and existing trees on proposed development sites.

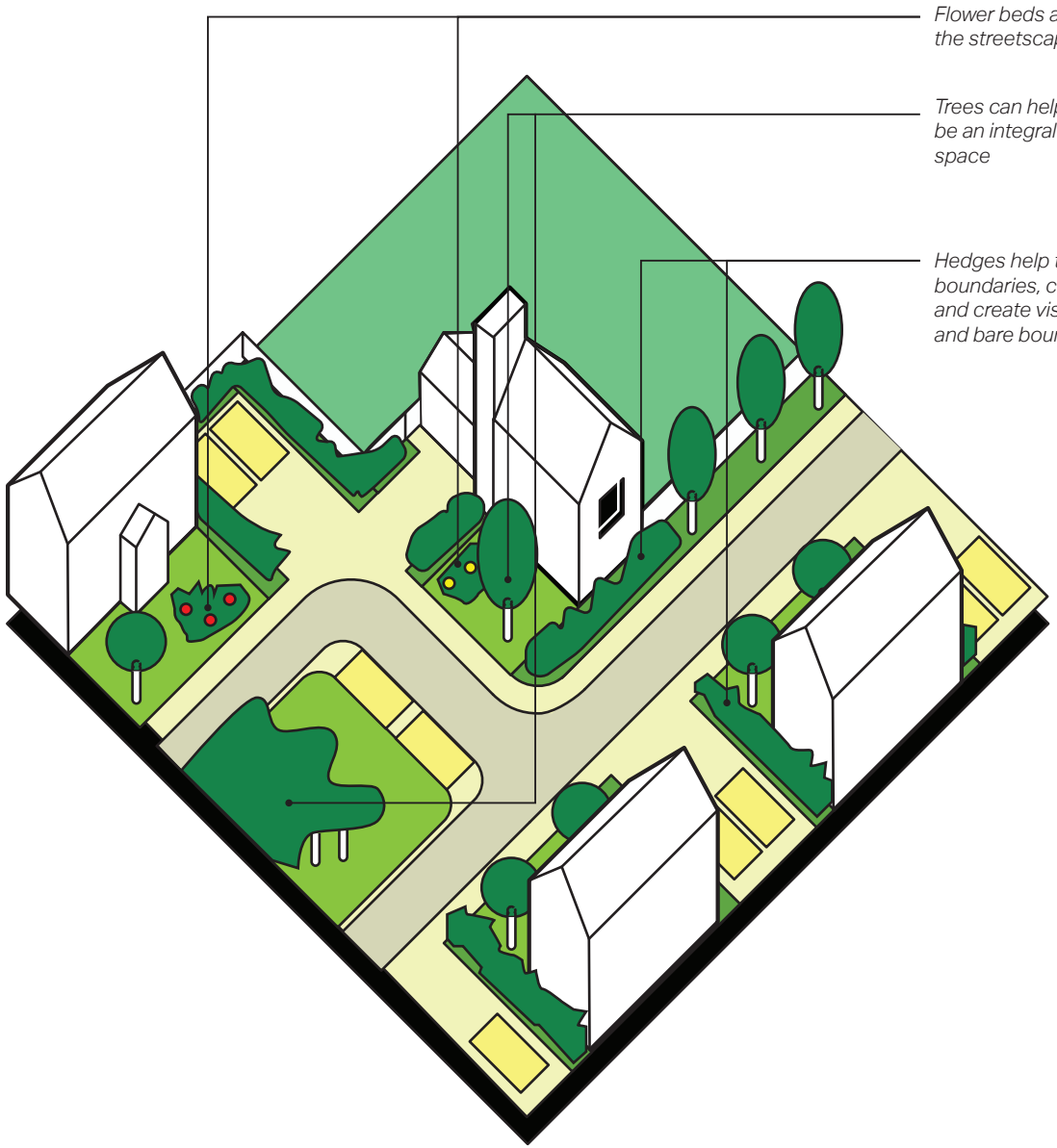
Actions:

- All existing trees to be retained except where they are diseased or require removing to enhance the overall ecological value of the site.
- Retained trees should be considered at the earliest design stage to ensure that any retained trees will be able to grow and mature in the future without outgrowing their surroundings;
- The success of tree planting is more likely to be achieved when it has been carefully planned to work in conjunction with all parts of the new development, parking, buildings, street lights,etc.
- In each new plot of a single dwelling at least two new trees should be planted.

Native species

Actions:

- Impact on local wildlife should be considered when specifying new planting. Native species should be prioritised.



SPC.07. Street lighting

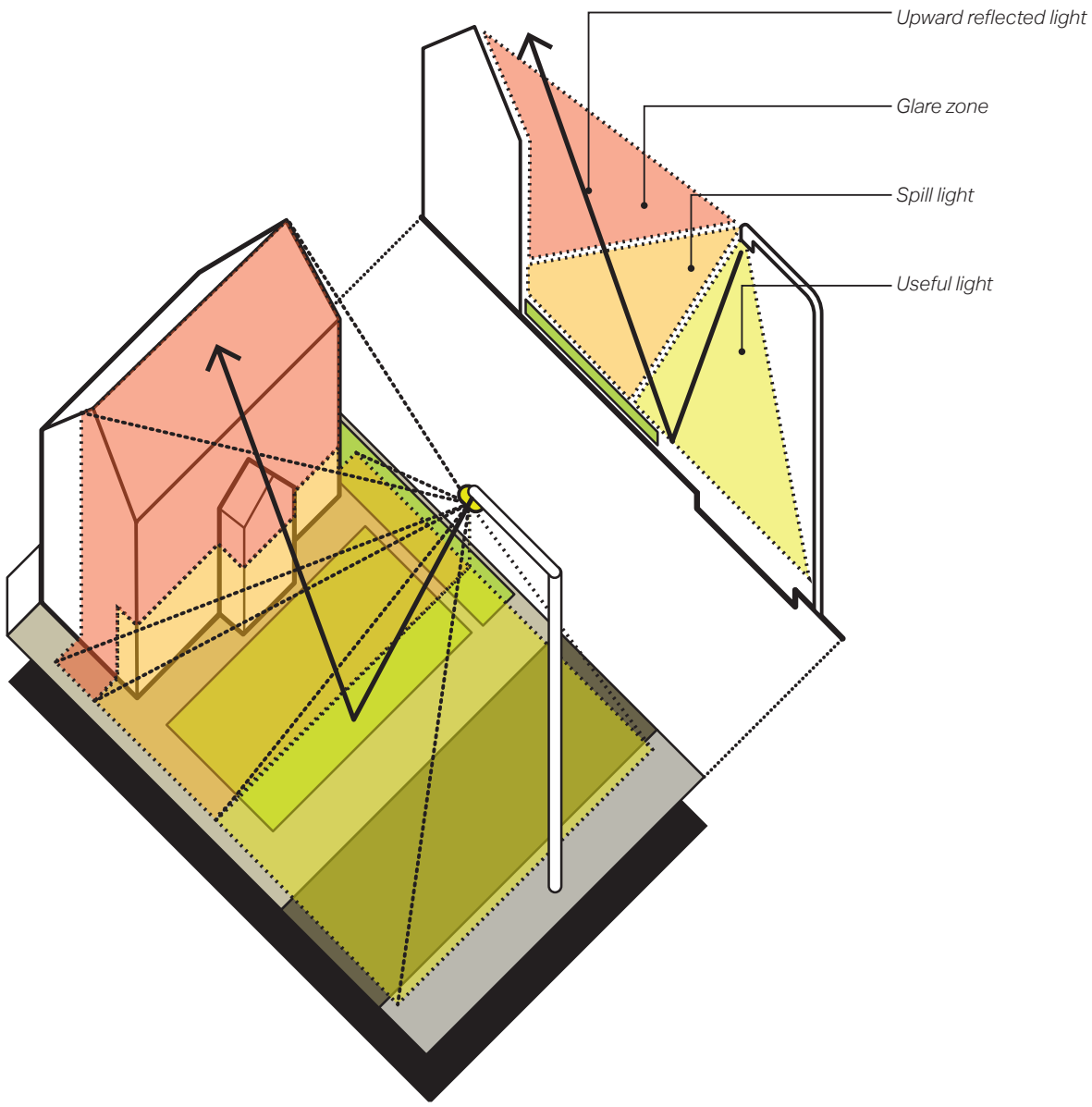
Manage lighting

For maximum benefit, the best use of artificial light is about getting the right light, in the right place and providing light at the right time. Lighting schemes can be costly and difficult to change, so getting the design right and setting appropriate conditions at the design stage is important. Lighting in Leavenheath should be kept to a minimum, given the proximity to the countryside.

Actions:

- Ensure that lighting schemes will not cause unacceptable levels of light pollution particularly in intrinsically dark areas. These can be areas very close to the countryside or where dark skies are enjoyed.
- Consider lighting schemes that could be turned off when not needed ('part-night lighting') to reduce any potential adverse effects.
- Impact on sensitive wildlife receptors throughout the year, or at particular times (e.g. on migration routes), may be mitigated by the design of the lighting or by turning it off or down at sensitive times.
- The needs of particular individuals or groups should be considered where appropriate (e.g. the safety of pedestrians and cyclists). Schemes designed for those more likely to be older or visually impaired may require higher levels of light and enhanced contrast, together with more control, as the negative effects of glare also increase with age.

Note: Any adoptable street lighting must be designed or approved by the SCC Street Lighting team.



SPC.08. Services & utilities

Services

Actions:

- Design shared common trenches for service and drainage runs to minimise disturbance to buildings and reserve space for pipework and drainage under the verges and service strips.
- Where existing pavements are excavated, they should be reinstated with matching materials to ensure coherent surfacing.
- Avoid any damage to the root system of retained tree species.. Service runs should not be located within the tree root spreads or new tree planting corridors.
- Use sympathetic materials to the surrounding paved areas for manhole covers and make sure they fit with the surface material used. Ease of maintenance should be a priority.
- Integrate substations and other service kiosks into the design of new developments from the start.

Pipework & utilities

Utilities are necessary parts in the operation of public and domestic environments. Special attention is required for selection and location utilities such as pipework and utility boxes. Poor planning of utilities could easily hinder the overall quality of the urban environment and create unattractive new development schemes.

Actions:

- The location and design of services on a building must be considered carefully and every effort should be made to locate these items as unobtrusively as possible.
- Pipework should be grouped together and run internally wherever practical. Chimneys can be used to disguise gas flues where they do not serve a working fireplace. By default, rainwater goods should be dark coloured unless they are matching a prevalent colour in the area.
- Meter boxes should be designed into a scheme from the outset to avoid cluttering the elevations. They should be on end rather than front elevations where possible and be in a colour that blends in with the surrounding wall.

Poorly located meter boxes, their presence clutters front elevations

Porches / recessed entries can conceal the presence of meter boxes

Positive example of drainage channel as demarcation of thresholds of water run-off from and to dwellings

Use clean lines and sympathetic colours for gutters and downpipes

GUIDELINES AND CODES FOR BUILT FORM

04

BF. Built Form

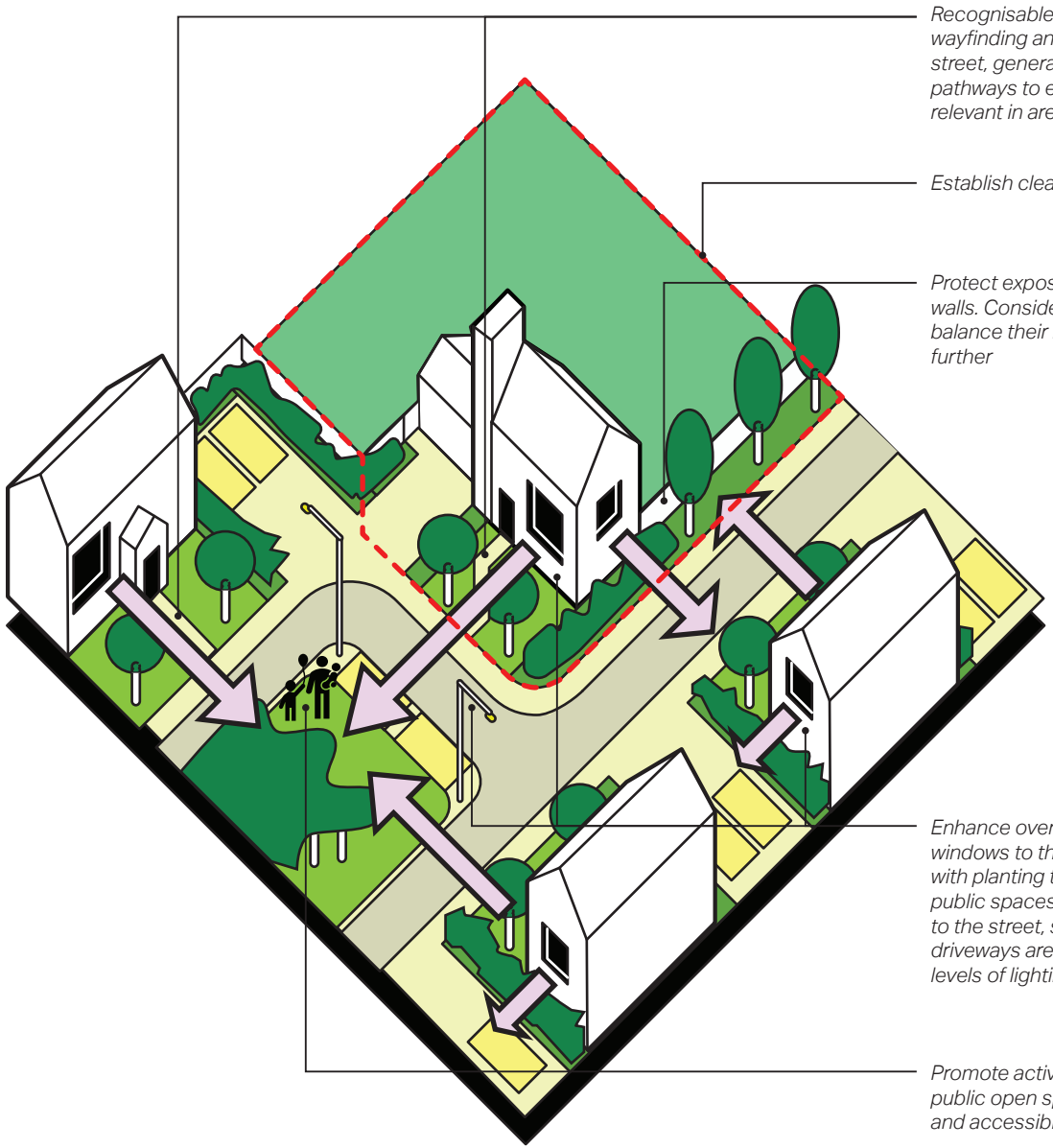
BF.01. Overlook the public space

Safe and lively spaces

Designing out crime and designing community safety is essential to the creation of successful, safe and attractive developments. The following guidelines are in line with the latest manual endorsed by the police 'Secured by Design Homes 2019'.

Actions:

- *Access and movement:* design places with well-defined routes, spaces and entrances that provide for convenient movement without compromising security.
- *Structure:* design places that are structured and easy to read, so that different uses do not cause conflict.
- *Activity:* design places where the level of human activity is appropriate to the location and creates a reduced risk of crime and a sense of safety at all times.
- *Surveillance:* design places where all publicly and privately-owned open spaces (such as front gardens and driveways) are overlooked. Provide adequate levels of street lighting.
- *Ownership:* design places that promote a sense of ownership, respect, territorial responsibility and community, without compromising well defined dwelling boundaries.
- *Physical protection:* design places that include necessary, well-designed security features, such as boundary walls and party fences.
- *Management and maintenance:* design places that are designed with ease of management and maintenance in mind, to discourage crime in the present and the future.
- *Green spaces:* new green open spaces should be provided at the edge of new developments to provide direct connections with existing areas of development and to create open space that is owned by all residents. A new green should be created within large developments, and the creation of pocket parks or small grassed areas within smaller developments.



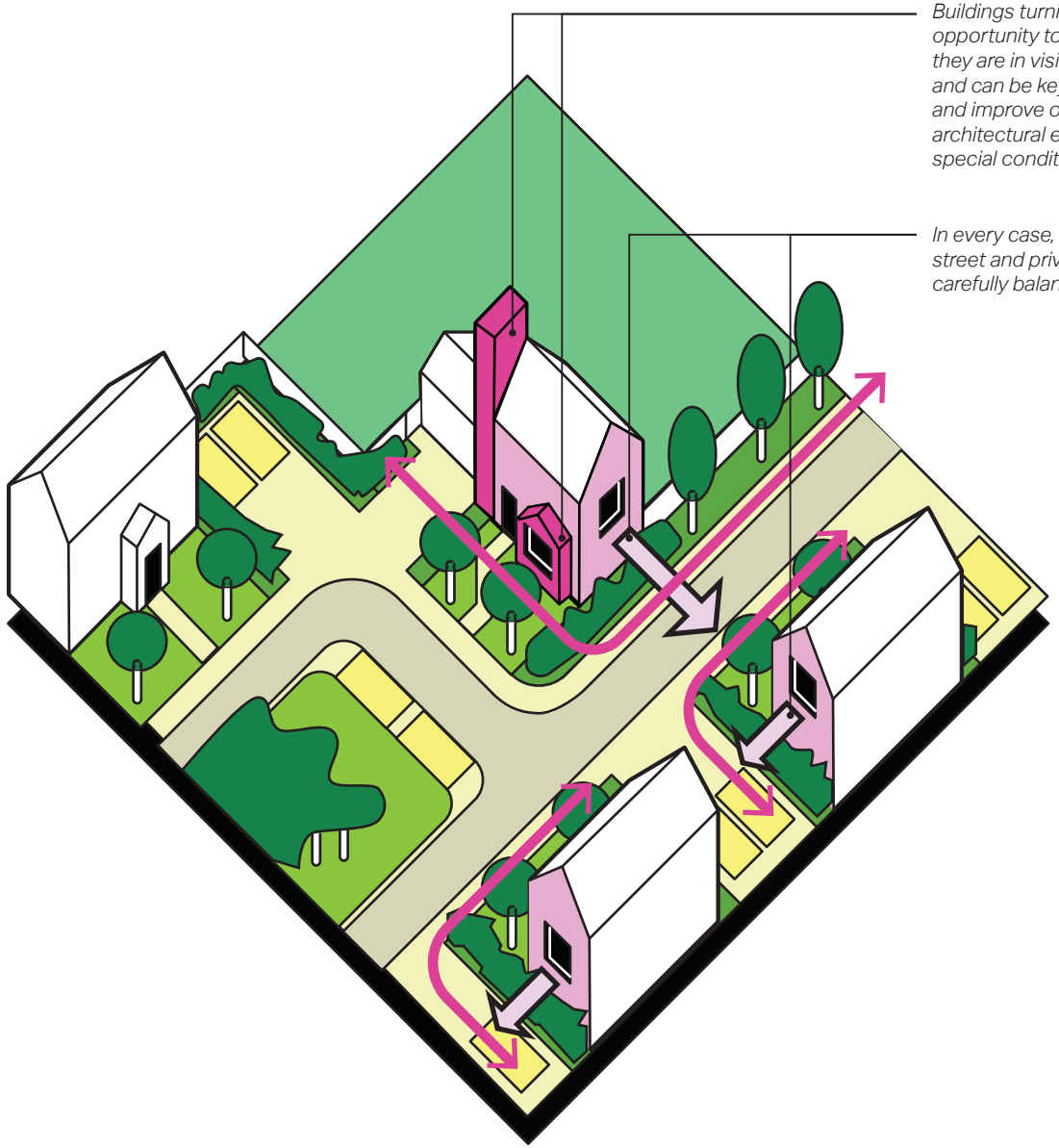
BF.02. Turn every corner

Buildings turning a corner

Streets with active frontages provide visual attractiveness and enhance the streetscape, but also provide high levels of natural surveillance.

Actions:

- Animate both facades on corner buildings with doors and/or windows. Exposed, blank gable end buildings with no windows fronting the public realm should be avoided.
- Consider decorative architectural feature elements for these building types, given their prominence and their ability to create local character.
- As well as relating carefully to existing heritage features, landmark buildings should also be innovative and interesting. They should promote good architecture and ensure that places are distinct, recognisable and memorable.
- In any case, privacy measures should be taken into account from the early design stage. Issues such as overlooking from streets, private and communal gardens should all be considered. Setback from the street, front garden landscaping and detailed architectural design should help in balancing privacy to front living spaces with the need for overlooking of the street.



Buildings turning a corner have the opportunity to generate new local character, they are in visible points of the development, and can be key elements to reduce monotony and improve orientation. They can feature architectural elements that underline their special conditions

In every case, overlooking towards the street and privacy of the dwellings should be carefully balanced

BF.03. Maintain a consistent building line

Building lines

The way buildings sit in relation to the street can affect the feel of a development.

Actions:

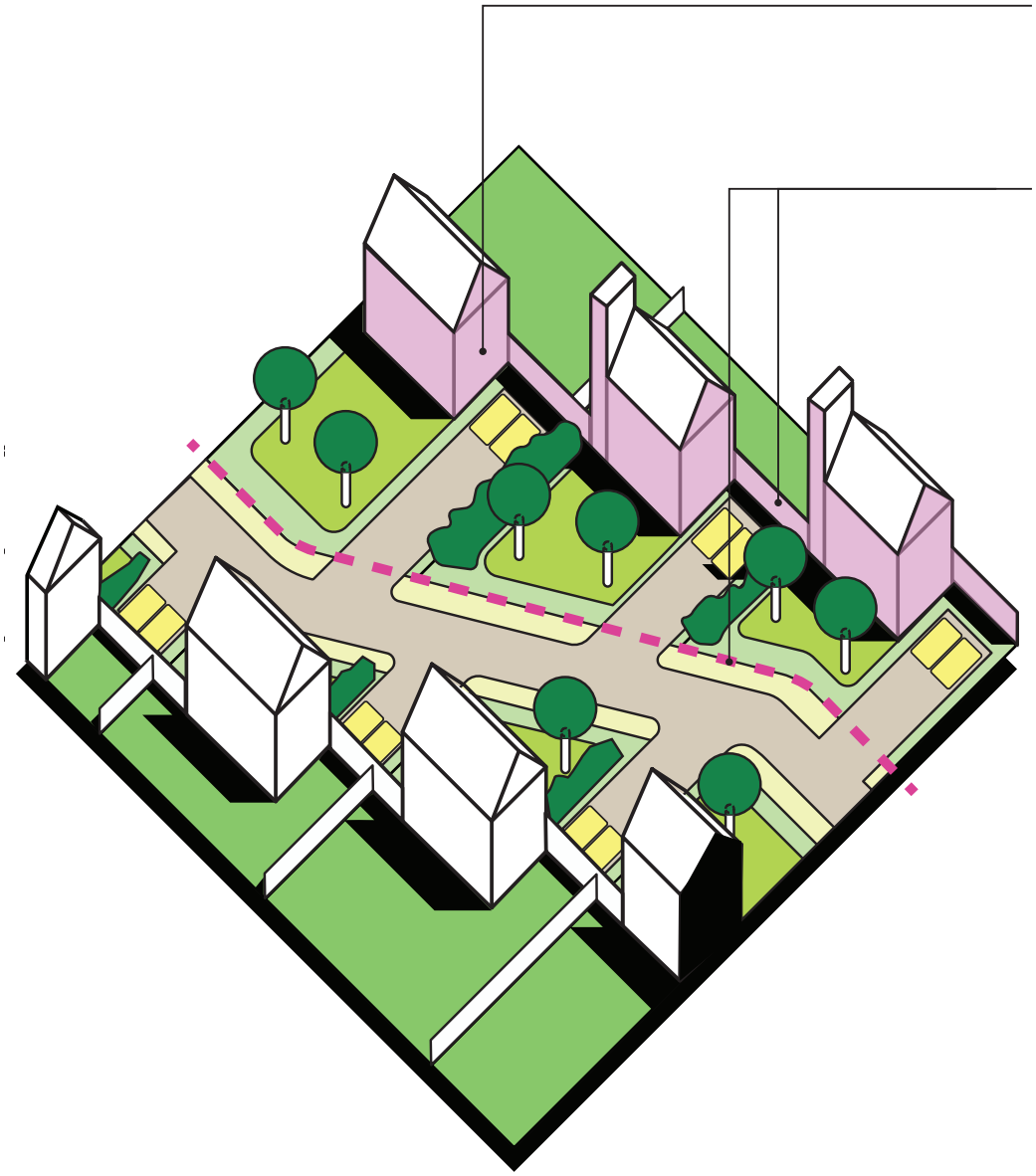
- The building line should have subtle variations in the form of recesses and protrusions but should generally form a unified whole.
- Boundary treatments should reinforce the sense of continuity of the building line and help define the street, appropriate to the rural character of the area.
- Boundary treatments should not impair natural surveillance.

Setbacks

A setback is the distance between the back of the pavement and the building line. The size of the setback contributes to the overall character and sense of enclosure along a street.

Actions:

- A coherent street frontage should be achieved by coordinating the setback between buildings and the street. Large differences in setbacks for adjacent properties should be discouraged as they do not contribute to the overall streetscape or cohesiveness of place.



The building line should have subtle variations in the form of recesses and protrusions but should generally form a unified whole

Boundary walls and treatments should reinforce the sense of continuity of the building line and help define the street

BF.04. Gaps and Views

Gaps

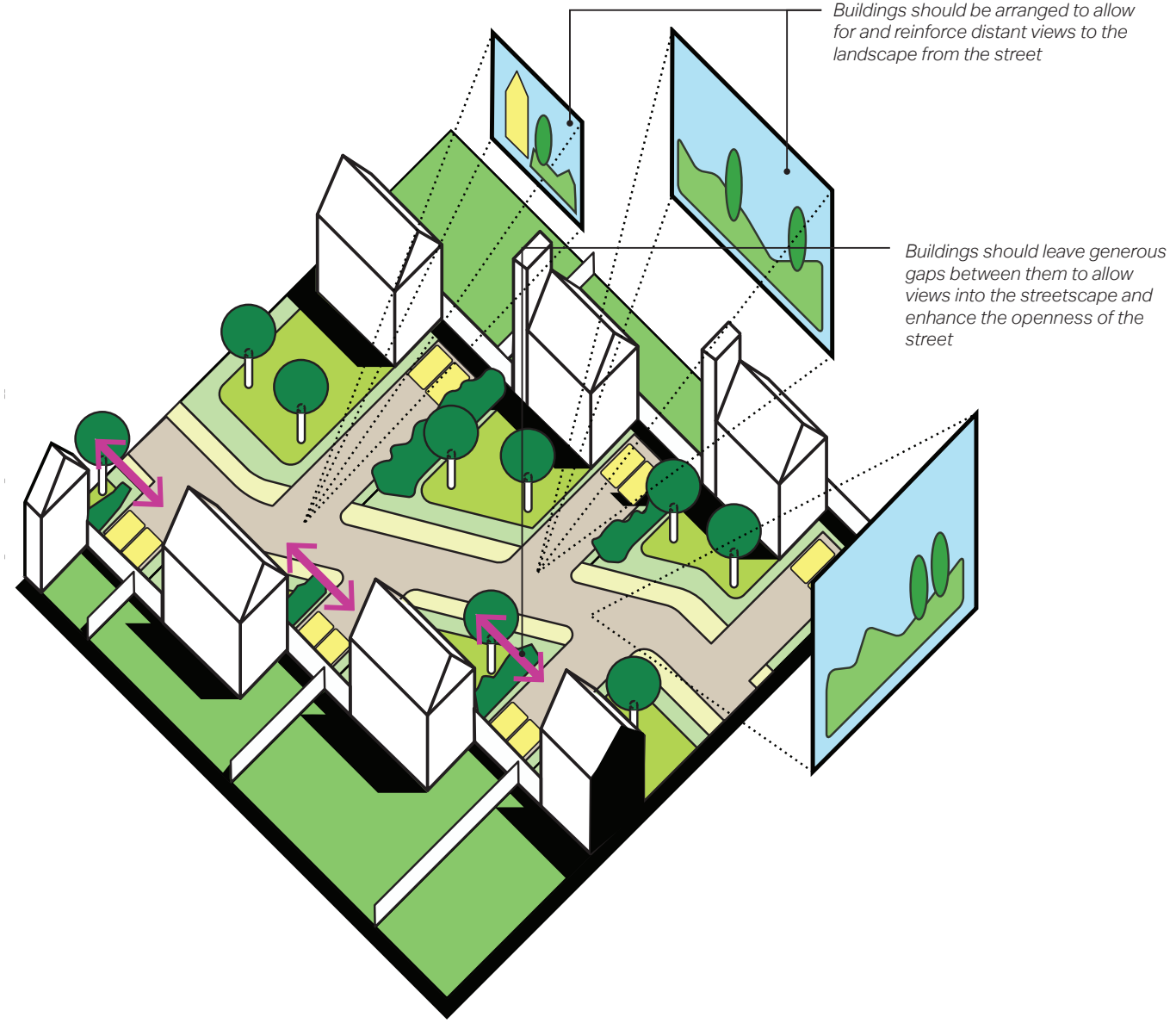
Actions:

- Narrow gaps between buildings should be avoided, generous gaps between buildings contribute to the general feel of openness of the area.
- Refer to the nominal dimensions on the next design code to guarantee sufficient separation between buildings.

Views

Actions:

- Buildings should be designed and arranged to reinforce views of existing landmarks and the open countryside through appropriate scale, mass and separation.



BF.05. Establish a consistent property boundary

Nominal dimensions of a plot

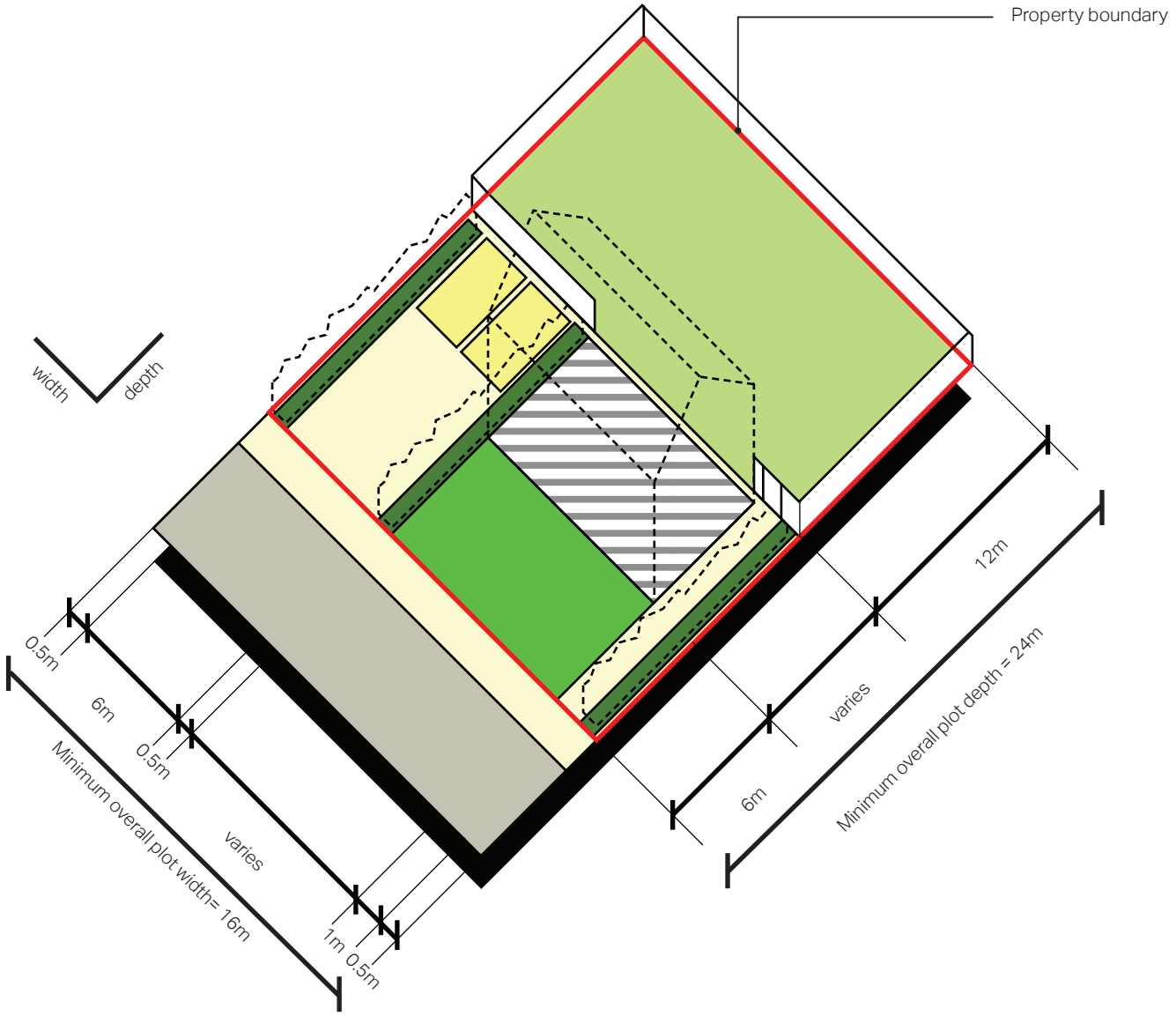
In order to achieve the general separation and openness pertinent to Leavenheath, new plots should follow these dimensions. They determine the extent of the property boundary.

- *Building height:* maximum building height is 2 levels + pitch roof.
- *Driveway:* minimum width of driveway is 6m. Two additional bands of 0.5m each should be allowed for planting at either side of the main parking bay.
- *Front gardens:* minimum depth of front gardens is 6m.
- *Access to back gardens corridor:* minimum width of the corridor is 1m. Access to back gardens should be provided with a secure door. Allow an additional 0.5m band for planting at the side of the corridor to the neighbouring property.
- *Overall plot width:* the minimum plot width is 16m.
- *Overall plot depth:* the minimum plot depth is 24m.
- *Dwelling:* no minimum dimensions are given in relation to the width or depth of the dwelling as they should be in accordance to the size and type of dwelling, however:
    - Parking spaces should not develop beyond the main building line.
    - The front garden should be sufficiently overlooked to maximise natural surveillance of the street.

Parking dimensions

- *Bay size for cars:* 5.0m x 2.5m including space to access car and boot.
    - Make sure parking spaces are overlooked and that an allocated bay can be viewed from a habitable room window of the residents' property.
    - Tandem parking (one vehicle behind the other, including one within a garage or car port) is acceptable on-plot. 'Triple tandem parking' is not acceptable.
    - Where a dwelling has car parking within its individual plot (or title) boundary, at least one parking space should be capable of enlargement to achieve a minimum width of 3300mm.
    - For a garage (or car port) to be counted as an allocated space they must meet the minimum dimension requirement: 7.0m x 3.0m (internal dimension) with clear doorway minimum 2.4m wide.

Note: Car parking provision and layouts (plus cycle storage and EV charging) should be in accordance with the *Suffolk Guidance for Parking (2019)* or any newer/updated version of the guide.



BF.06. Desired Roof Profile

Roofline

Creating a good variety in the roof line is a significant element of designing attractive places. There are certain elements that serve as guidelines in achieving a good variety of roofs:

- Scale of the roof should always be in proportion with the dimensions of the building itself.
- Monotonous building elevations should be avoided, with subtle changes in roof line being promoted during the design process.
- Local traditional roof detailing elements should be considered and implemented where possible.
- Dormers can be used as a design element to add variety and interest to roofs.
- Roofs should also be designed with photovoltaics taken into account, either as part of the build or future retro-fit. Consider orientation and available roof space.

Chimneys

Chimneys add interest to roof lines, even if they are no longer needed to heat the home, they contribute towards the local vernacular.

Images below show positive examples of roofscape articulations and local styles of chimneys, typical of Leavenheath.

High Road

Mayfield

BF.07. Typical architecture details and materials

Wall materials

- *Render:* smooth floated finish in a limited range of naturally occurring colours. The local rendering tradition suggests a white or light pastel colouring.
- *Stone:* Leavenheath is not one of those areas where stone is part of the local vernacular.
- *Weatherboarding:* This is a used cladding material in Leavenheath, normally in both white and dark grey and black tones.
- *Brick:* Locally, the clays are predominantly rich hues of reds and orange, burnt headers are also characteristic.
- *Rendering:* It is used to protect the walling material beneath. Traditionally, render is a smooth floated finish in a limited range of naturally occurring colours. The local vernacular rendering is ochre and pastel pink. It is recommended to keep rendering to subtle tones.
- New developments should use a variety in design and wall materials to create interest within any new development.

Architectural details

- It is important that the detailing and architectural elements used in new developments are of a high quality and reinforce the local character of Leavenheath.
- Architectural detailing shall typically display elements that equate to those on existing traditional buildings which provide interest, scale and texture to form and elevations.

Dormers

- A dormer is a roofed structure, often containing a window, that projects vertically beyond the plane of a pitched roof. They can add interest to the roof, and can be considered as part of the Leavenheath vernacular in Radley Lane.

Gable dormers & bay-windows

- The projecting structure of gable dormers above a bay window is already displayed in Honey Hall (late 14th Century) and has been largely replicated in properties in the Maple Way residential developments. It can be considered vernacular.
- In the later examples the projecting gable dormer is clad with weatherboard or rendered in light colours.

Roofing

- The roofline of residential dwellings in Leavenheath is varied and full of interest thanks to the mentioned gables and dormers. Generally, the building line is well-kept as neighbouring buildings tend to have a consistent number of either one or two storeys.
- New developments should strive to create coherent and vibrant rooflines, such as those in the area display.

Skirting

- A black rendered or exposed brick skirting appears to be typical of the vernacular cottages. New developments do not display that skirting.
- Consider displaying the traditional skirting by a change of material in a low band when the new building meets the ground.

Chimneys

- Traditionally, buildings display simply-shaped brick chimneys. New buildings can make use of accent and feature elements such as chimneys to generate visual interest in the roof line and the streetscape.

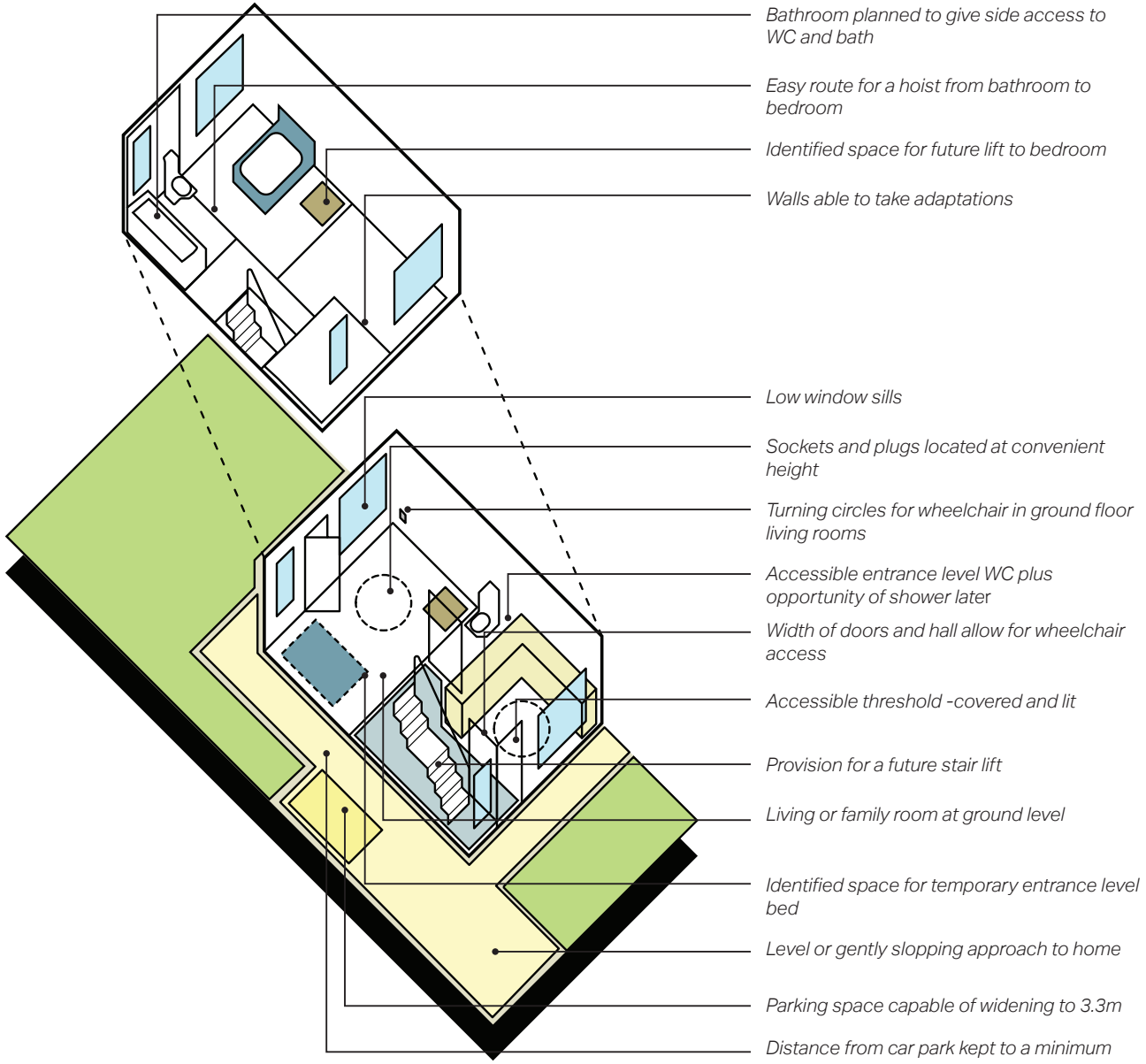
Images above show wall materials, windows and openings examples

BF.08. Adaptability

Houses for a lifetime

Houses should be designed to meet the differing and changing needs of households and people's physical abilities over their entire lifetime. One way to achieve this is to incorporate all the standards -M4(1), M4(2) and M4 (3)- of the approved document M4 of the Building Regulations in the design of new homes and to assess whether they can be retrofitted in existing properties.

The diagram to the left illustrates the principles of inclusivity, accessibility, adaptability and sustainability in a dwelling.



GUIDELINES AND CODES FOR ENVIRONMENT & ENERGY EFFICIENCY

05

EE. Environment & Energy Efficiency

EE.01. Building fabric

Thermal mass

Thermal mass describes the ability of a material to absorb, store and release heat energy. Thermal mass can be used to even-out variations in internal and external conditions, absorbing heat as temperatures rise and releasing it as they fall. Thermal mass can be used to store high thermal loads by absorbing heat introduced by external conditions, such as solar radiation, or by internal sources such as appliances and lighting, to be released when conditions are cooler. This can be beneficial both during the summer and the winter.

Actions:

- Provide thermal storage in construction elements, such as a trombe wall placed in front of a south-facing window or concrete floor slabs, that will absorb solar radiation and then slowly re-release it into the enclosed space.
- Use mass combined with suitable ventilation strategies,

Insulation

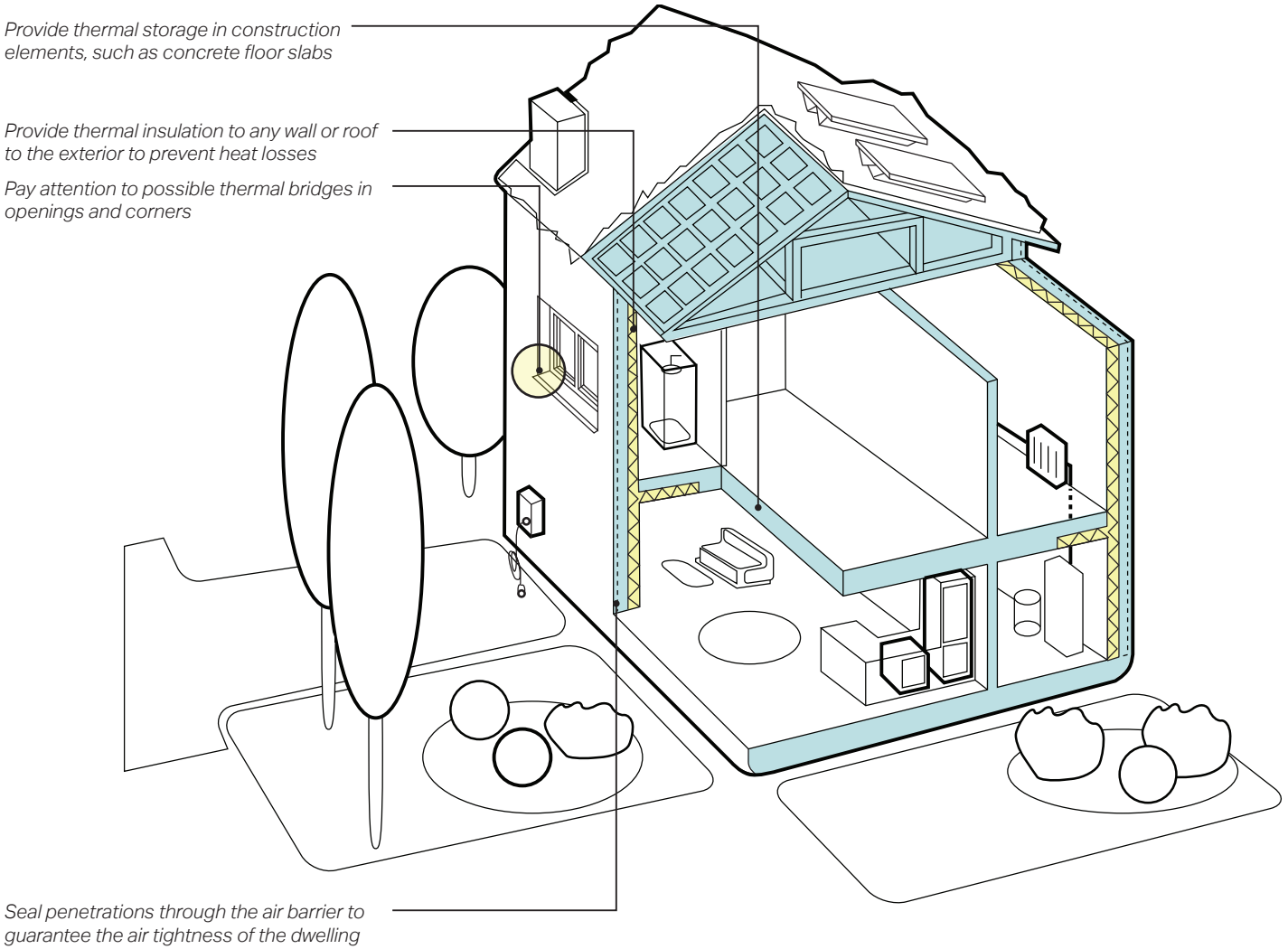
- Provide thermal insulation to any wall or roof to the exterior to prevent heat losses. Pay particular attention to heat bridges around corners and openings in the design stage.
- Provide acoustic insulation to prevent the transmission of sound between active (i.e: living room) and passive spaces (i.e: bedroom).
- Provide fire insulation and electrical insulation to prevent the passage of fire between spaces or components and to contain and separate electrical conductors.

Air tightness

Airtight constructions help reduce heat loss, improving comfort and protecting the building fabric. Airtightness is achieved by sealing a building to reduce infiltration – which is sometimes called uncontrolled ventilation. Simplicity is key in airtightness design. The fewer junctions, the simpler and more efficient the airtightness design will be.

Actions:

- Form an airtightness layer in the floor, walls and roof.
- Seal the doors, windows and rooflights (if applicable) to the adjacent walls or roof.
- Link the interfaces between walls and floor and between walls and roof, including around the perimeter of any intermediate floor.
- Seal penetrations through the air barrier. Consider waste pipes & soil pipes, ventilation ducts, incoming water, gas, oil, electricity, data and district heating, chimneys and flues, including air supplies to wood burning stoves or similar, connections to external services, such as entry phones, outside lights, external taps and sockets, security cameras, satellite dishes.



EE.02. Low carbon development

High Performance Residential Buildings

Energy efficient or eco homes combine all around energy efficient construction, appliances, and lighting with commercially available renewable energy systems, such as solar water heating and solar electricity.

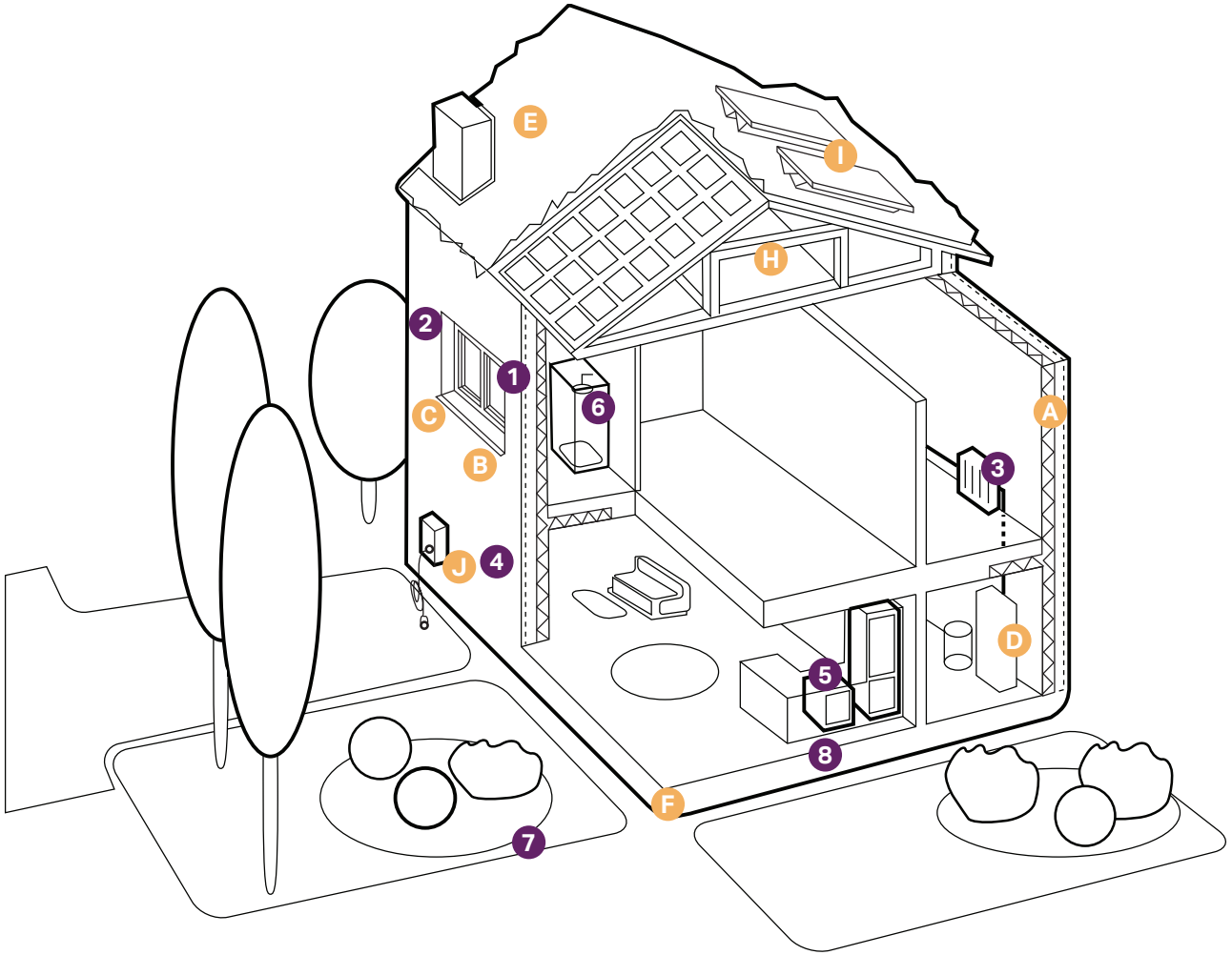
The aim of these interventions is to reduce home overall energy use as cost effectively as the circumstances allow for. Whereas, the final step towards a high performance building would consist of other on-site measures towards renewable energy systems.

Existing homes

1. **Insulation** in lofts and walls (cavity and solid)
2. **Double or triple glazing with shading** (e.g. tinted window film, blinds, curtains and trees outside)
3. **Low- carbon heating** with heat pumps or connections to district heat network
4. **Draught proofing** of floors, walls, windows and doors
5. **Highly energy- efficient appliances** (e.g. A++ and A+++ rating)
6. **Highly waste- efficient devices** with low-flow showers and taps, insulated tanks and hot water thermostats
7. **Green space (e.g. gardens and trees)** to help reduce the risks and impacts of flooding and overheating
8. **Flood resilience and resistance** with removable air back covers, relocated appliances (e.g. installing washing machines upstairs), treated wooden floors

New build homes

- A **High levels of airtightness**
- B **More fresh air** with the mechanical ventilation and heat recovery, and passive cooling
- C **Triple glazed windows and external shading** especially on south and west faces
- D **Low-carbon heating** and no new homes on the gas grid by 2025 at the latest
- E **Water management and cooling** more ambitious water efficiency standards, green roofs and reflective walls
- F **Flood resilience and resistance** e.g. raised electrical, concrete floors and greening your garden
- H **Construction and site planning** timber frames, sustainable transport options (such as cycling)
- I **Solar panel**
- J **Electric car charging point**



EE.05. Storage

Bicycles

Actions:

- A straight-forward way to encourage cycling is to provide secured spaces for bicycles within all new residential developments and publicly available cycle parking racks in the public realm. These should be located and designed to avoid anti- social behaviour and be covered, safe and convenient
- In residential developments, where no provision is specified, garages or car ports should be large enough to accommodate cycles
- Where no suitably sized garage is available cycle parking should be provided in secure covered areas.
- Access from the street to rear gardens should be provided via secured gates. Bulky bike storage on front gardens should be avoided.

Note: Secure, covered cycle storage should accord with the *Suffolk Guidance for Parking (2019)* or any newer/updated version. Bin storage and presentation areas should be clear of the highway so as not to obstruct pedestrian, cycle, and vehicle routes.

Refuse bins

With modern requirements for waste separation and recycling, the number of household bins that need to be stored has generally increased. It is important that these are accommodated in ways that allow convenient access, and without increasing street clutter or harming the appearance of new buildings.

Actions:

- The most appropriate location to avoid clutter on the streetscape is to provide space for waste bins in rear gardens.
- It is normally advisable to have access to the back garden from the street with a secured door. It is also recommended to have direct exit to the back garden via the kitchen. A paved section on the garden can be located nearby and hold the required bins so they can take the organic waste generated in the kitchen and be taken out to the front of the property for collection.
- There are several solutions to minimise the presence of wheelie bins on the garden, by using screening or planting to conceal them

Provide racking spaces on public open spaces

Provide secured storage space for bikes within the domestic curtilage

Access gate to back gardens, that provides a clear route for refuse bins to be moved from back gardens to the front of the property for collection

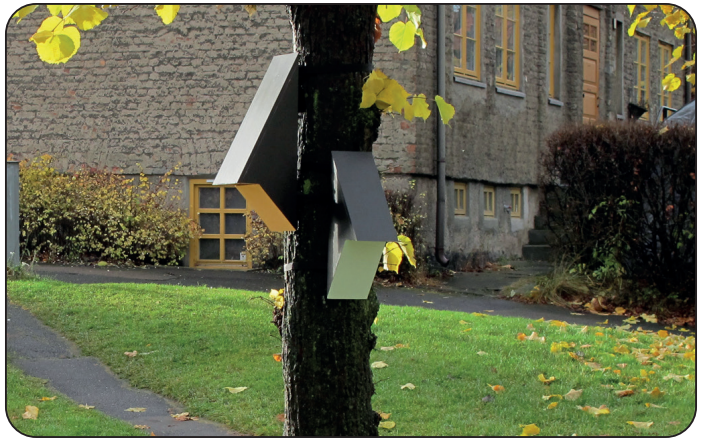
Positive example on how to conceal the presence of bins in back gardens

EE.06. Wildlife

Back and front gardens, together with public green open spaces and surrounding fields can have a key role in supporting wildlife in built-up areas. They have the potential to create habitat mosaics and enable wildlife corridors, often linking up with parks, tracks, rivers, churchyards and hedgerows. Users can follow these steps to foster wildlife and habitat creation in their community.

Actions:

- Reduce or eliminate use of chemicals in gardens, use companion planting and physical removal to combat pests such as aphids, slugs and sawfly.
- Create habitats for wildlife; bee-boxes, hedgehog homes, log and stone piles for invertebrates, toads and slow worms who will also inhabit a compost heap.
- Plant late, mid-season and early blooming nectar rich flowers to attract pollinators and beneficial insects all year round.
- Make a pond, keep it ice free in winter by floating a ball on the top and ensure that it is safe for children.
- Feed birds through the winter and supply nesting boxes.
- Allotments can be another green structuring element that improves natural habitats, consider the need for allotment plot allocation when planning a new development.
- Allotments can be great opportunities for ambitious design that moves away from the poor landscape quality of some and provides true community amenity in the development.



Create habitats for wildlife, such as bird and bee boxes

Incorporate water and wildlife friendly ponds in gardens

Consider the opportunities that allotments can offer for vibrant design

Allotments can have positive impact on the landscape and community

NEXT STEPS

06

Next steps

This section concludes the report with recommendations on how to embed findings in the Neighbourhood Plan and engage with local authorities.

This report considers the spatial and contextual character of Leavenheath and subsequently sets out the design codes for the Neighbourhood Plan. It demonstrates how future developments might create high quality places in a way which responds to and enhances the character and landscape of the parish. It also provides a masterplan framework integrating the site with the wider area in order to respect the rural character while complying with the design codes set out in the report.

This design code will be a valuable tool for securing context-driven, high quality development in Leavenheath, especially on potential sites that might come forward in the future. It will provide more certainty to both developers and the community in securing developments that are designed to the aspirations of the community and that can speed up the planning process.

They are anticipated to be used by different stakeholders in the planning and development process in the various ways summarised in the table opposite.

Stakeholders	**How to use this guideline**
Applicants, developers, landowners	As a guide to community and Local Planning Authorities expectations on design, allowing a degree of certainty – they will be expected to follow these guidelines as planning consent is sought.
Local Planning Authority	As a reference point, embedded in policy, against which to assess planning applications. The design codes should be discussed with applicants during any pre-application discussions.
Parish Council	As a guide when commenting on planning applications, ensuring that the design codes are complied with.
Community organisations	As a tool to promote community-backed development and to inform comments on planning applications.
Statutory consultees	As a reference point when commenting on planning applications.

Contact
Ben Castell
Director
D +44 (0)20 7798 5987
E: ben.castell@aecom.com

aecom.com