ENGLEFIELD GREEN VILLAGE NEIGHBOURHOOD AREA

Design Codes

'Made' Document (January 2024)

Final report

January 2023

AECOM

locality

the power of community

Quality information

Project role	Name/Position	Action summary	Signature	Date
Qualifying Body	The Neighbourhood Forum Steering Committee	Draft Report Submitted for comments	The Neighbourhood Forum Steering Committee	25-06-2021

Project role	Name	Position	Action summary	Signature	Date
Director / QA	Mark Hughes	Technical Director	Revision and approval of Final Report	Mark Hugues	25-06-2021
Researcher	Alejandro de Miguel Solano	Senior Urban Designer	Structure, research, drawings	Alejandro de Miguel Solano	25-06-2021
Researcher	Holly Turner	Graduate Urban Designer	Research, drawings	Holly Turner	25-06-2021
Researcher	Jessie Watson	Associate Director	Research, drawings	Mark Hughes	19-12-2022

Glossary of terms

The following terms and abbreviations will be consistently used across the document, they are included here for clarity:

- 'NF Area': Neighbourhood Forum Area.
- 'RHUL': Royal Holloway University of London.
- 'RBC' = Runnymede Borough Council.
- 'Local Plan': RBC Adopted Local Plan 2030.
- 'Current Document': Englefield Green Design Codes Report (2022).

Note

- The General Design Codes apply to all of the NF Area except for the University South Area. The Additional Design Codes for the Rural Area apply to the Rural Area Zone only, and the Additional Codes for the Historic Core apply to the Historic Core Zone only. In both cases these codes are additional and supplementary to the General Design Codes. (In case of conflict the Additional codes will apply).
- The University South Design Codes are stand alone codes that apply to the University South Area Zone.
- Explanations of why Additional Codes and a separate University South Code are required are given at the beginning of the relevant code section. Refer to Map, Page 20.

Contents

INTRODUCTION

01

1. INTRODUCTION

Introduction

Through the Ministry of Housing, Communities and Local Government Neighbourhood Planning Programme led by Locality, AECOM has been commissioned to provide design support to Englefield Green Village Neighbourhood Plan.

The Steering Group has requested professional advice on design guidelines and codes for future development within the Area. This document should be read as part of the 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 Area.

Design Codes

The Government is placing significant importance on the development of design codes in order to set standards for design upfront and provide firm guidance on how places should be developed.

The NPPF 2021, paragraphs 127-128 states that:

'To provide maximum clarity about design expectations at an early stage, plans ... should use visual tools such as design guides and codes. These provide a framework for creating distinctive places, with a consistent and high quality standard of design. However their level of detail and degree of prescription should be tailored to the circumstances in each place, and should allow a suitable degree of variety where this would be justified.'

How to use this document

It is intended that this independent technical report becomes an integral part and evidence base of the Neighbourhood Plan by informing policies that will influence the design of new development and have weight in the planning process.

This report covers the whole Neighbourhood Area and should be read in conjunction with the Neighbourhood Plan and its related policies, such as the Masterplan document. The report is structured around four zones, which are defined by different spatial and built characteristics.

Not all types of development proposal will be able to apply all design code principles, but they should refer to those principles that are achievable and are relevant. National and Regional Planning Policy, such as that in the NPPF and the Local Plan, will be key considerations in the design of any scheme, e.g. those located in the Green Belt and these policies may limit the ability of a proposal to meet all of the relevant design code requirements.

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 principles, design codes and other guidelines to be used to assess future developments.
- Draft report.
- Final report.

The NF Area of study

The NF Area comprises the village of Englefield Green and surrounding open space and sits within the Borough Council of Runnymede. The NF Area is located circa 30 km west of central London.

The settlement was originally a hamlet and medieval farm land near the former Great South West Road and the neighbouring land known as Egham Hill.

Most of the settlement boomed in the 19th century, as a consequence of the public sale of a large portion of the Great Park in the Crown Estate. Parts in the west remain the property of the Crown Estate.

Nowadays, Englefield Green has grown to encompass a mixed rural-urban character, set in a steeply undulating landscape surrounded by green belt. It is included in the wider context of Coopers Hill, Windsor Great Park and the River Thames Basin, well-connected by a network of key traffic routes.

To the north, the green that gives Englefield Green its name is included as part of a Conservation Area. Larger properties and estates are characteristic of the northern edge of the settlement.

The historic core of Englefield Green was developed in the XIX century and includes late Victorian residential examples. It contains shops, the church, the cemetery and a number of public houses. Surrounding the historic core to the east and west, post-war extensions of different styles complete the residential infrastructure of the Built Up Area.

The Royal Holloway College campus is located to the south of the Built Up Area. Its Founder's Building has been described by The Times as "one of Britain's most remarkable university buildings", largely for its elaborate architecture.

According to the 2011 census, Englefield Green has 10,607 residents plus 5,000 students in halls of residents or resident in the neighbourhood.


Runnymede Borough Boundary
River Thames
Egham Station
M25
Englefield Green NP Boundary

POLICY & DESIGN GUIDANCE REVIEW

02

2. POLICY & DESIGN GUIDANCE REVIEW

Policy & design guidance

The following documents have informed the Current Document. These guidelines have been produced at national, district or village level.

This section specifies how the specific policies and guidelines has been incorporated in the production of the design codes included in the Current Document.

Any new development application should be familiar with these documents and make explicit reference to how each of them is taken into account in the proposal.

National level

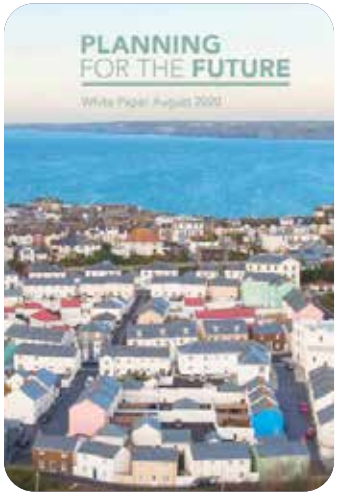
National Design Guide

Ministry of Housing, Communities & Local Government

2019

The National Design Guide (NDG) underlines that creating high quality buildings and places is fundamental to what any planning and development process should achieve.

The NDG should be read in conjunction with the design codes in the Current Document to achieve the best possible outcome.



Planning for the Future

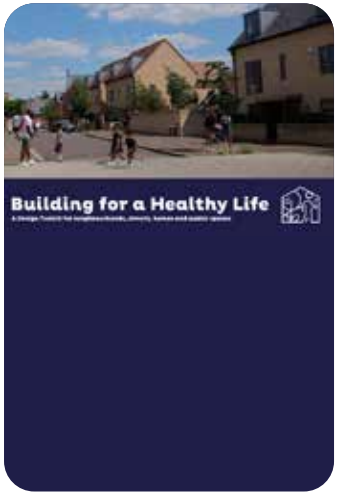
Ministry of Housing, Communities & Local Government

2020

This white paper proposes a new planning system reform, as a step into stronger neighbourhood planning.

This paper can be understood as an attempt to consolidate design codes, not merely as guidelines but as rules. These are to be prepared locally and to be based on community involvement so that local residents have a genuine say in the design of new development.

The Current Document and the design codes herein should be read in the light of the white paper.



Building for a Healthy Life

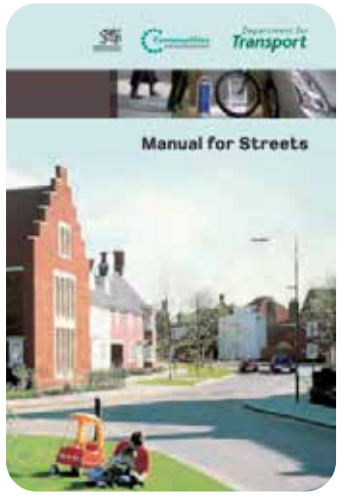
Homes England

2020

Building for a Healthy Life (BHL) updates the Building for Life 12 guide, a widely-used design tool for creating places that are better for people and nature.

The original 12 point structure and underlying principles within Building for Life 12 are at the heart of BHL.

The BHL should be read in conjunction with the design codes in the Current Document to achieve the best possible outcome.



Manual for Streets

Department for Transport

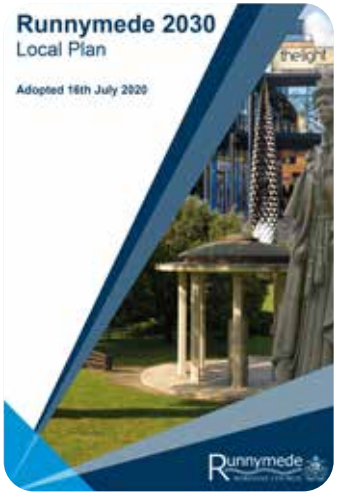
2007

This manual collects standards and best practises on street design.

This manual should be read in conjunction with the design codes in the Current Document to achieve the best possible outcome.

District level

Area level



Local Plan 2030

RBC

2020

The Runnymede 2030 Local Plan is the key framework document that guides the future development in the Borough of Runnymede over the period to 2030.

The policies in this plan provide an understanding of where growth is directed and how development will be encouraged, whilst recognising the need to safeguard historic and natural environments.

The design principles in the Current Document are based on the broad objectives of the RBC.

Runnymede Design SPD

RBC

2020

The Design SPD provides design guidance to supplement policies within the Local Plan and clarifies the RBC's expectations for development and high quality design.

The aspiration for good design should be embedded from the outset.

The guidance in the SPD has shaped the design codes in the Current Document. The guidance in the SPD should be read in conjunction with the design codes in the Current Document to achieve the best possible outcome.

Runnymede Design SPD

RBC

2009

The character areas included in character appraisal are taken as the reference to base the delineation of character areas in the Current Document.

Englefield Green Village Neighbourhood Plan

Englefield Green Village Forum

History. 2022

The history section of the emerging neighbourhood plan outlines the main architectural features and characters of the village.

The character areas included in the history section have informed the delineation of character areas and the different design codes in the Current Document.

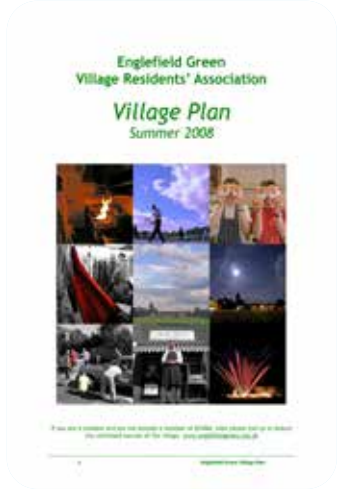
Englefield Green Village Neighbourhood Plan

Englefield Green Village Forum

Policy maps. 2022

These maps are part of the drafting of the emerging neighbourhood plan and provide initial understanding of the key constraints in the neighbourhood plan area. These maps also help to understand the policy designations and policies that already cover the NF Area under the Local Plan.

These maps have informed the site analysis section in the current document.



Village Plan

Englefield Green Village Forum

2008

This report is the predecessor of the current Neighbourhood Plan under preparation.

This document presents the views and concerns of residents about the Built Up Area.

It includes a list of actions to be undertaken from the period between its production to the completion of the emerging Neighbourhood Plan.

These actions have informed the design codes in the Current Document.

SITE WIDE ANALYSIS

03

3. SITE WIDE ANALYSIS

Transport & mobility

The NF Area has a well connected road network.

The A328 runs north-south, acting as one of the main routes connecting the settement to Old Windsor to the north and to the A30 to the south.

The A30 separates the north from the Royal Holloway University campus to the south, this road runs south west and connects the settement to Virginia Water to the south-west and to Staines to the east.

The M25 is a major motorway situated to the east of the settlement, past Egham. The nearest rail station is Egham Station, located within Egham.

There are many walking routes connecting Englefield Green to the surrounding countryside. There is also an off-road cycle route running east west (north of the green) that links to the A30.

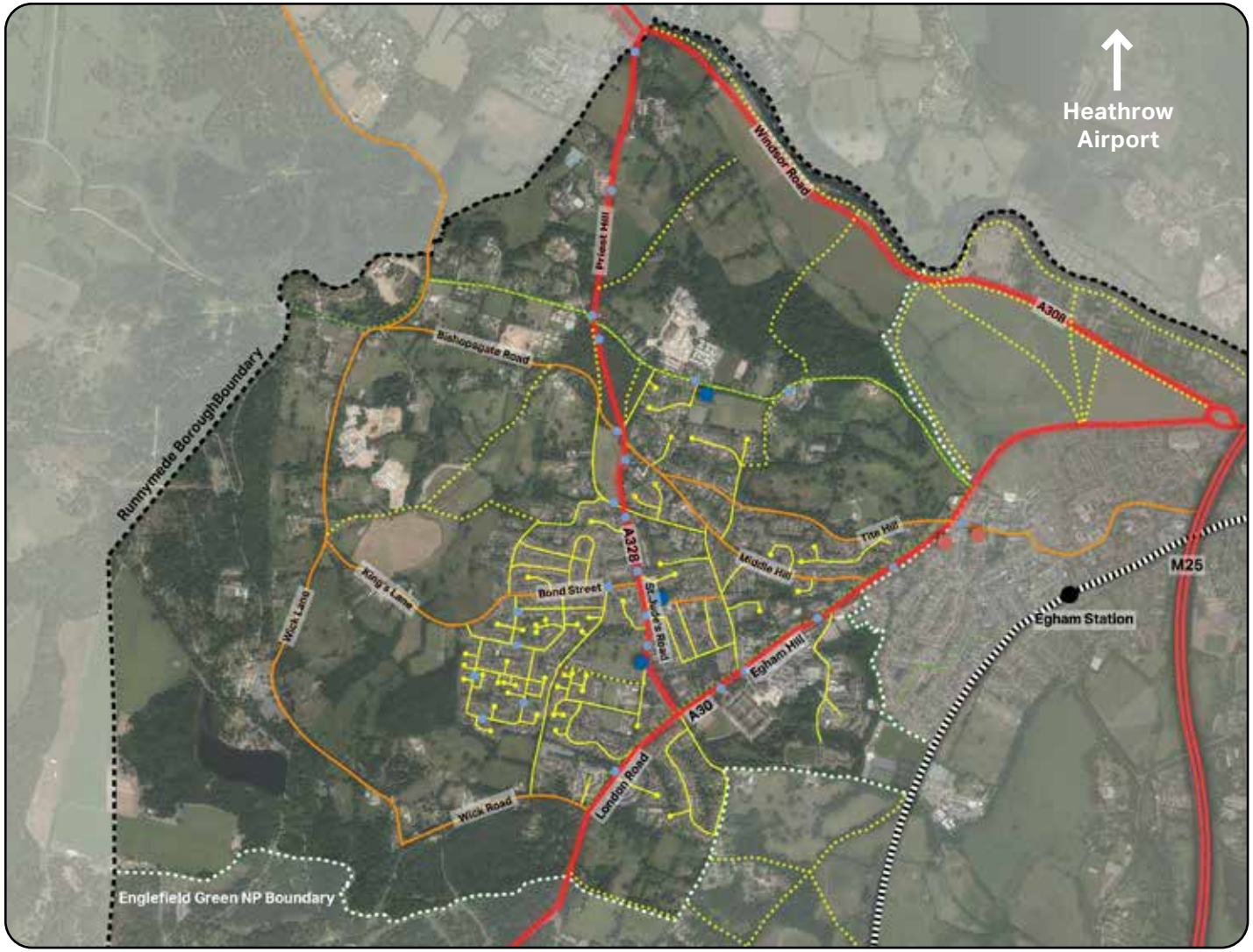


Figure 1: Mobility plan

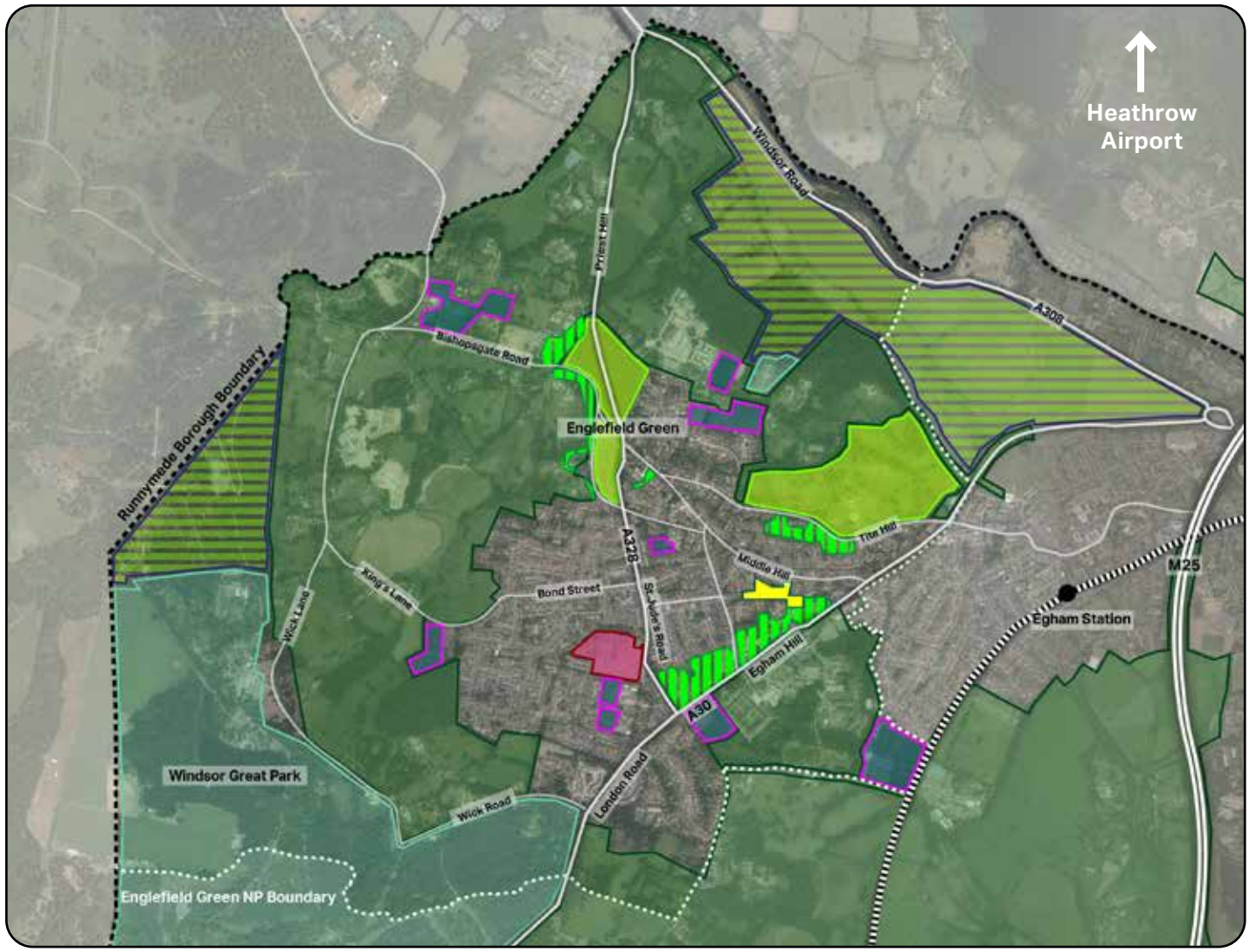


Figure 2: Landscape plan

KEY

- Borough Boundary
- Neighbourhood Plan Boundary (in white)
- Green Belt
- Parks and Gardens
- Outdoor Sports Facilities
- Amenity Green Spaces
- Natural and Semi Natural Green Space
- Tree protection order (large groupings)
- Local green spaces
- Cemeteries and churchyards
- Railway Line
- Rail Station
- Roads

Environment & landscape

Windsor Great Park lies to the north and east of the Area. The portion of the park inside the NF Area boundary to the south west displays a number of gardens and a lake. There are a number of outdoor sports facilities in different locations around the Area, accessible for residents and visitors.

The most significant green space within the settlement is the green. Located along St. Jude's Road to the north of the settlement, it lies within the Conservation Area and it is an important landscape and historic feature of the village.

The cemetery is located centrally in the core of the settlement next to the church and opposite the local shops and services. As a local open space, it is important to the character and provides vital amenity and services for the residents.

Water, air quality and SPA

This plan shows areas subject to flooding. The north east corner of the NF Area is in flood zone 3 due to its proximity to the River Thames. There are two small areas in zone 3, which could be affected by surface water flooding to the south. For the majority of the settlement, flooding is not a major consideration.

There is an Air Quality Management Area surrounding the M25 to the east of the Area. If a local authority finds any places where the objectives for air quality are not likely to be achieved, it must declare an Air Quality Management Area. The air quality conditions along the motorway are unlikely to have any relevant effect on the eastern edge of the Area.

The Thames Basin Heath Special Protection Area (TBH SPA) was designated in 2005 and is part of a European-wide network of sites of international importance for nature conservation. The TBH SPA is a lowland heath habitat supporting important populations of Dartford Warbler, Nightjar and Woodlark, which are vulnerable ground nesting birds.

No development is permitted within 400m of the SPA. Within 400m to 5km of the SPA boundary, some residential development may be possible if accompanied with sufficient mitigation measures. Within 5km to 7km from the SPA boundary, large scale residential development (50 units or more) will be assessed on an individual basis to understand if the proposal would have a significant adverse impact on the protection area.

As most of the settlement lies within the 5km to 7km zone, any new development will need to consider mitigation measures to protect the Thames Basin Heath habitat.

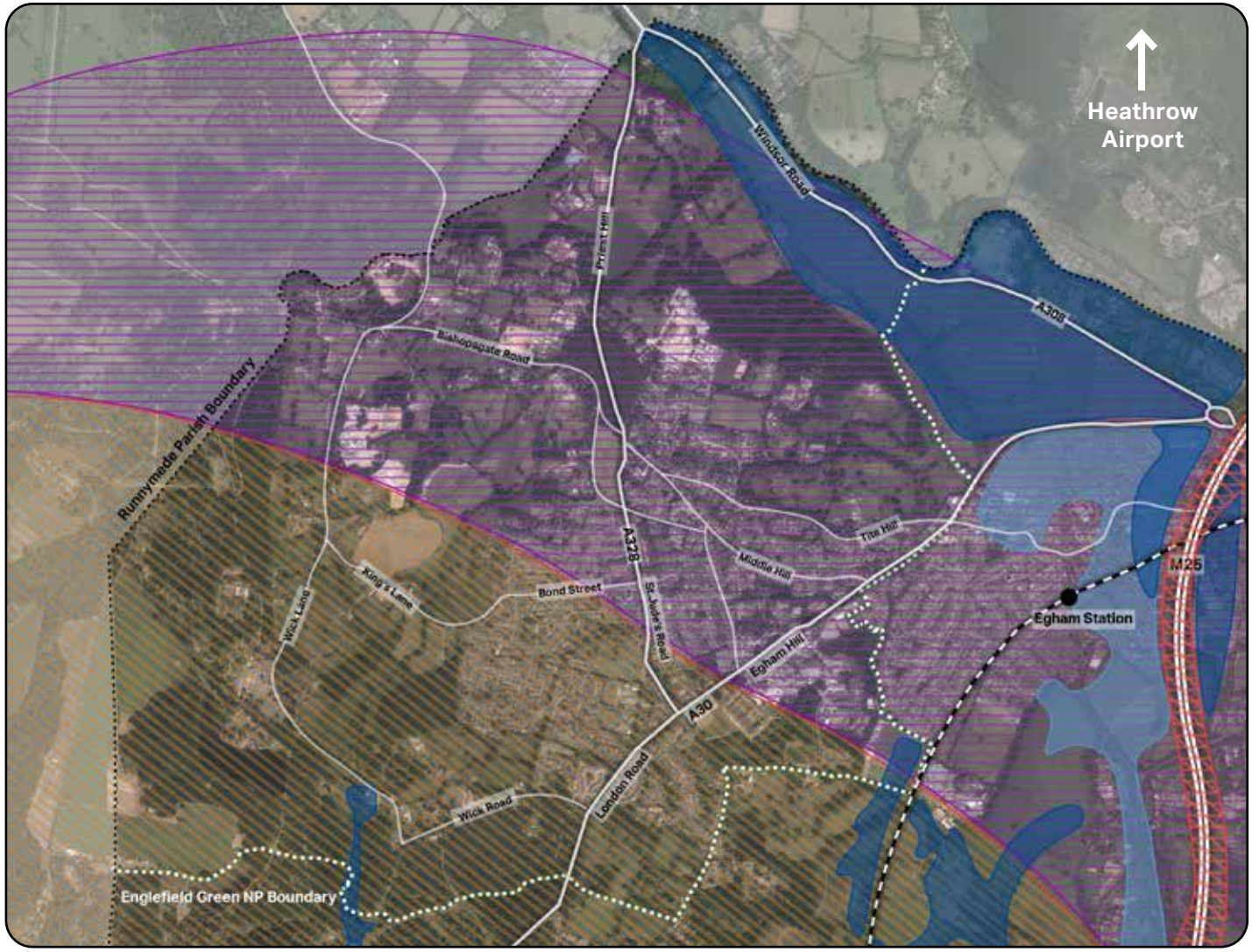


Figure 3: Water, Air Quality and SPA

KEY

- Borough Boundary
- Neighbourhood Plan Boundary (in white)
- Flood Zone 2
- Flood Zone 3
- Air Quality Management Area (AQMA)
- Thames Basin Heath SPA 400m-5km Zone
- Thames Basin Heath SPA 5km-7km Zone
- Railway Line
- Rail Station
- Roads

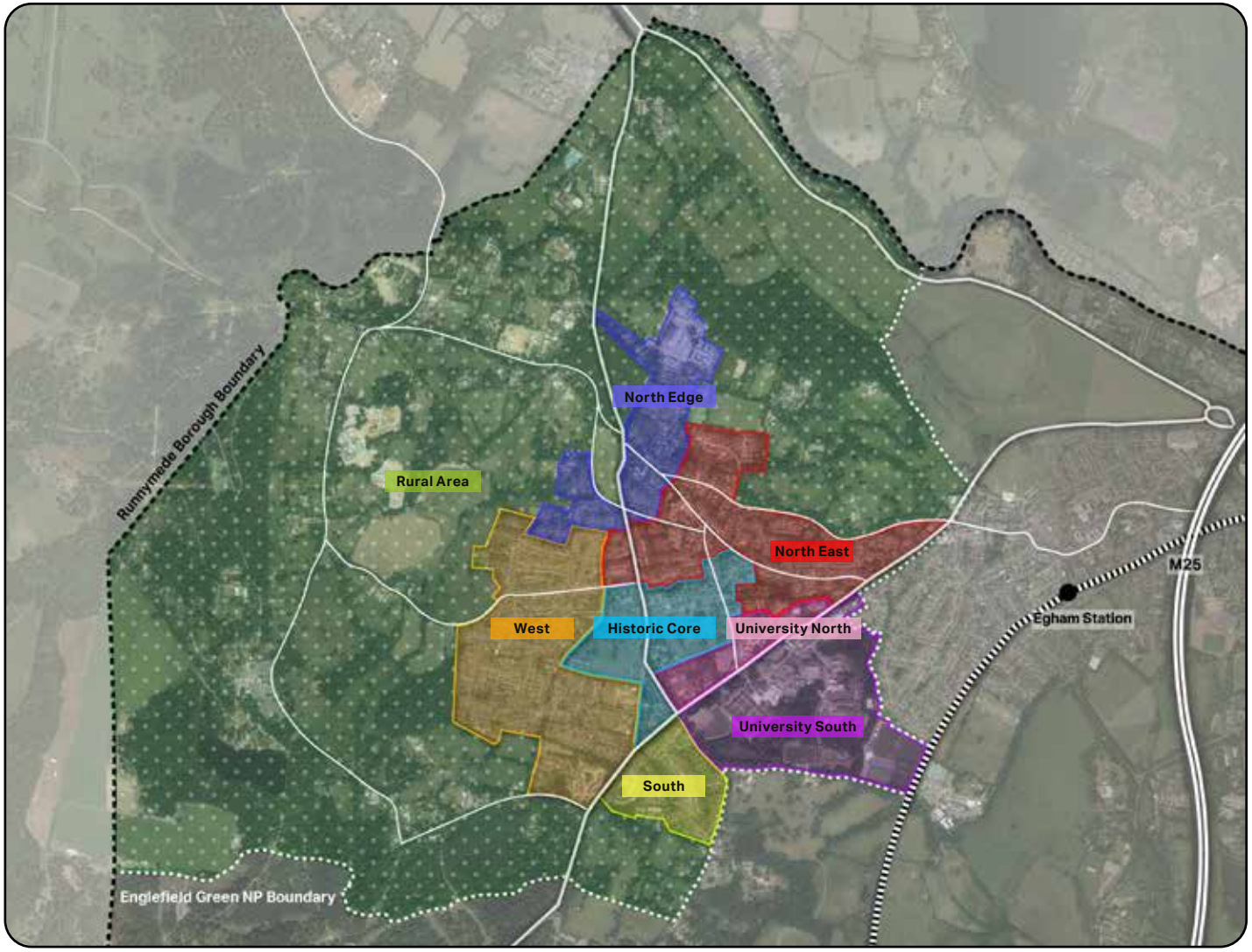


Figure 4: Character areas plan

KEY

Historic Core	South	University North
North East	North Edge	Rural Area
West	University South	

Character areas

Elements of the built environment such as streets, green spaces, buildings and materials all contribute to the character of a place. Much of the distinction between character areas on this page derives from the period when the areas of housing were constructed. However, built form, layout, density, architectural details and public realm configuration contribute to the delineation of these areas.

The plan in this page is an adaptation of the character areas presented in the Urban Characteristics of Englefield Green document within the Urban Area Character Appraisal, published by the RBC in September 2009.

This characterization of the Urban Area differentiates eight broad character sub-areas as follows:

- **Historic Core Character Area** of visually distinct high density late 19th and early 20th century mix use.
- **North East Character Area** of post-war medium and low density housing.
- **West Character Area** of post-war and late 20th century medium and higher density housing.
- **South Character Area** of low density housing bounded by Egham Hill, London Road and Bakenham Lane.
- **North Edge Character Area** of larger properties surrounding the green.
- **University North Character Area** of student residential development integrated within the settlement.
- **University South Character Area** of University grounds to the south of the A30, as a distinct campus surrounded by a wall flanked by the A30 road separating it from the settlement.
- **Rural Area** of open landscape, historic parks and single grand houses and their estates surrounding the settlement.

The RBC has provided a strategic assessment of character areas as part of the Runnymede Design SPD, published in October 2020. These suggested areas are excessively broad for the purpose of the current document.

For further detail on the architectural features that differentiate each character area please refer to the original Urban Area Character Appraisal (September 2009). The Character Appraisal document should still be considered as a reference when it comes to defining the different characters in the Area.

Heritage

Historically, the Area's proximity to Windsor and the Royal Court along with a good quality connections made it an ideal location for grand houses north and west of the green.

Englefield Green Conservation Area was first established in 1970 to protect the open green and the buildings immediately adjoining the open land as this area was considered to be subject to the greatest visual impact. In 1978, the Conservation Area was extended to include the wooded section of the green and the surrounding Victorian and turn of the century buildings. The extension of the designation aimed to protect the local character of these buildings and open spaces.

The majority of the listed buildings within the NF Area are grade II listed. The listed buildings are clustered in the older parts of the Built Up Area. There are two grade I listed buildings, including Royal Holloway College.

Note; As of Dec 2022 the boundary of the Englefield Green Conservation Area is under review by Runnymede Borough Council, and may in the future be changed. Please refer to Runnymede Borough Council Local Plan Policy Maps for confirmation of the boundary.

Takeway: Built-Form Heritage 'Library'

The heritage assets within the NF Area provide a library of features and architectural details that contribute positively to the local character. These features form a trail of clues for identifying the local vernacular that can help define the different character areas and should be recognisable in any future development in the Area.

The landscape and built heritage combined can provide a special 'sense of place' that comes from the past but can be added in a contemporary way to combine the best of the old and the new.

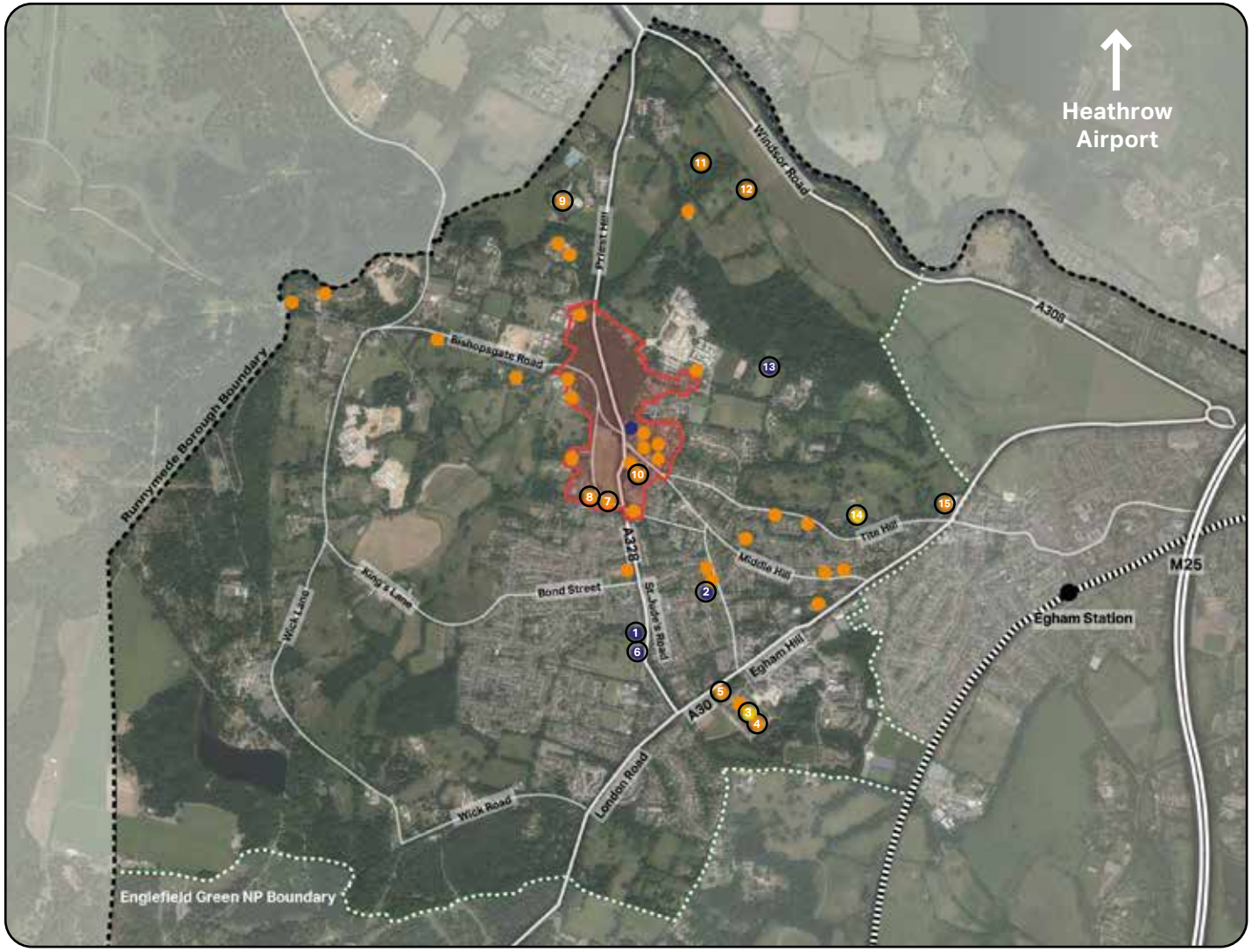


Figure 6: Heritage plan

KEY

- Borough Boundary
- Neighbourhood Plan Boundary
- Englefield Green Conservation Area
- Grade I Listed Buildings
- Grade II Listed Buildings
- Grade II* Listed Buildings
- Railway Line
- Rail Station
- Roads

*1. St Judes Church, Listed Grade II**

2. Methodist church, Listed Grade II

3. Royal Holloway College, Listed Grade I

4. Royal Holloway College Statue in South Quadrangle, Listed Grade II

5. Royal Holloway Entrance Gates, Listed Grade II

*6. Pair of Mausolea, Listed Grade II**

7. The Barley Mow Pub, Listed Grade II

8. Englewick and the Coach House, Listed Grade II

9. St John's Beaumount School, Listed Grade II

10. Bulkeley House, Listed Grade II

11. John F Kennedy Memorial, Listed Grade II

12. Magna Carta Monument, Listed Grade II

*13. Commonwealth Air Forces Memorial, Listed grade II**

14. Tite Hill, Runnymede Park, Listed Grade I

15. Tower Garage, Listed Grade II

Design code application

The zones detailed on this map identify the extent of application of the different design codes proposed in the Current Document.

The different design code zones target different conditions of the NF Area and are as follows:

General Design Codes

- These apply to the Built up Area zone, Historic Core zone and the Rural Area zone.
- The design codes for these zones cover the conditions that any new development proposed within these zones should comply with. They also include conditions for extensions and refurbishments on existing properties within the consolidated housing developments in the zone.
- Additionally, the design codes for these zones provide conditions for new student accommodation. These are more likely to come forward in the part of the zone that matches the extent of the University North Character Area (refer to Character Area Plan), however these conditions cover any educational/student residential scheme that is proposed in the whole of these zones.

Additional Design Codes for the Historic Core

- The design codes for these zones focus on the conditions for potential sites fronting historic streets or as sites at the back of existing properties. They focus on maintaining the Victorian character within the zones. The extent of these zones match that of the Historic Core Character Area.

Additional Design Codes for the Rural Area

- These design codes are additional to the General Design Codes and cover the additional conditions that new developments within the zone should respond to, specifically as in relation to the redevelopment of large higher-end estates within the zone.

Design Codes for the University South Zone

- This zone is not subject to the General Design Codes.
- Any design codes suggested for the development of university uses in the University grounds to the south of the A30 can draw inspiration from the specific design conditions for new developments of student accommodation included within the General Design Codes.
- However, since this design code zone constitutes a distinct campus surrounded by a wall flanked by the A30 road separating it from the settlement, no specific guidance is provided, and further definition could be part of a separate study, that necessarily takes into consideration RHUL stakeholders' input into design.

Note that the 'Built up Area' is the area of denser housing in the NP area, and its boundary does not coincide with the boundary of the Green Belt. Built up Area in the Green Belt is subject to Green Belt Planning regulations.

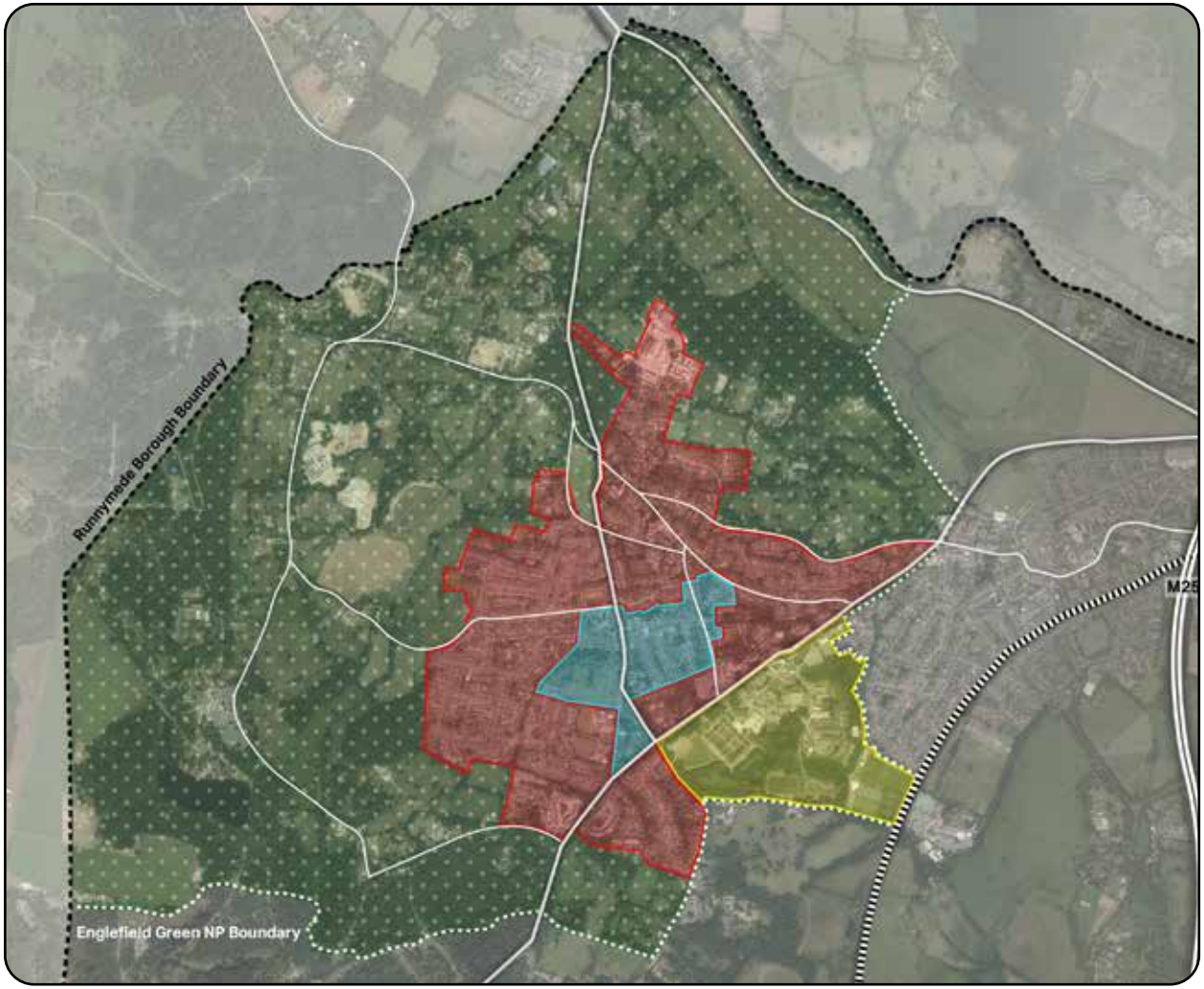


Figure 7: Design code zones plan

KEY

Built up Area	University South
Historic Core	Rural Area

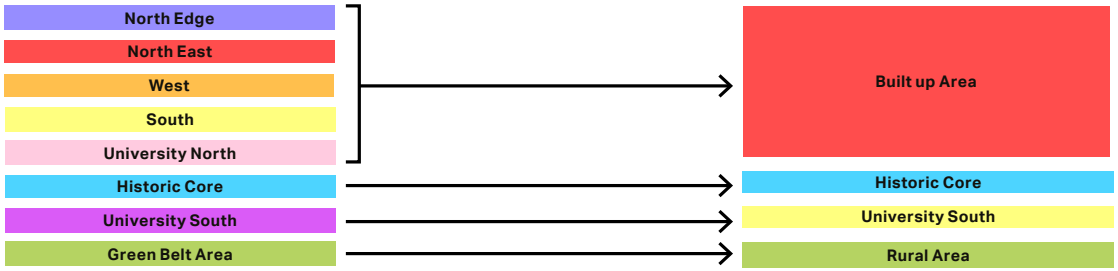
What is the relation between the Character Areas and the Design Code Zones in Englefield Green?

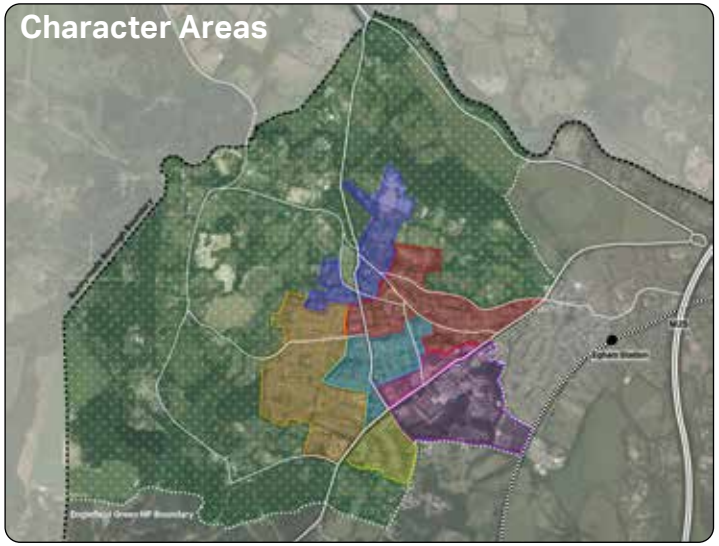
Character Areas

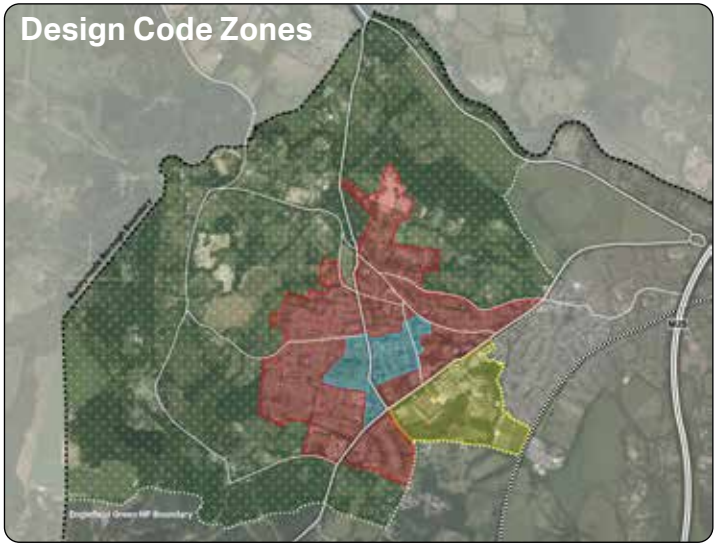
'Areas with the same character'

Design Code Zones

'Areas where the same design codes apply'







Character Areas

Character Areas differentiate regions within the NF Area with common characteristics in relation to elements of the built form, layout, density, architecture and public realm configuration. Much of the distinction between character areas derives from the period when the areas of housing were constructed.

Zones

Zones differentiate regions within the NF Area where the same design codes apply.

The boundary definition of the Zones does not necessarily coincide with that of the Character Areas. Normally some character areas can be grouped, to make the interpretation and use of the design codes clear and because the nature of some character areas is homogeneous enough to do so.

In this case, all the Character Areas with an identifiable urban character (North Edge, North East, West, South & University North) have been grouped under one single zone, being the Built up Area zone. Each of the remaining zones correspond with each of the remaining Character Areas (Historic Core, University South and Rural Area).

DESIGN PRINCIPLES

04

4. DESIGN PRINCIPLES

The design principles in this section provide a number of aims that any future development in the NF Area should comply with.

The design principles align with the objectives of the Local Plan, as described in the table, right. They are high level and locally specific and therefore provide a bridge betwen the overarching policies in the Local Plan and the locally specific Design Codes, which are set out in the next section of this report.

The design principles have been grouped into a number of place related themes, as follows: mobility, character, environment & landscape, community, housing and sustainability.

How do the Design Principles in Englefield Green relate to the objectives of the Local Plan?

Local Plan Objectives		Design Principle
Strategy for Sustainable Development	**ID Code**	
The spatial strategy 2015 to 2030	HO.01	Housing
Spatial development strategy	HO.02	Housing
Quantum of development	HO.03	Housing
Spatial distribution	HO.04	Housing
Transport and Infrastructure	MO.01	Mobility
Active & Sustainable Travel	MO.02	Mobility
Infrastructure Delivery	CO.01	Community
Transport & Physical Infrastructure	MO.03	Mobility
Social & Community Infrastructure	CO.02	Community
Green & Blue Infrastructure	EN.01	Environment
Sustainable Design	SU.01	Sustainability
Renewable/Low Carbon Energy	SU.02	Sustainability
Supporting Local People	**ID Code**	
Health & Wellbeing	CO.03	Community
Housing	HO.05	Housing
Affordable Housing	HO.06	Housing
Loss of Housing Units	HO.07	Housing
Gypsies and Travellers	CO.04	Community
Older People	CO.05	Community
Students	CO.06	Community
Self-Build & Custom Build Housing	HO.08	Housing
Open Spaces	CO.07	Community
Local Green Spaces	CO.08	Community
Playing Pitches	CO.09	Community

Local Plan Objectives		Design Principle
Enhancing the Environment	**ID Code**	
Townscape and Landscape Quality	CH.01	Character
Environmental Protection	EN.02	Environment
Air Quality	EN.03	Environment
Noise	EN.04	Environment
Land Contamination	EN.05	Environment
Light	EN.06	Environment
Integrating Development with Existing Uses	CH.02	Character
Construction Management	SU.03	Sustainability
Heritage	CH.03	Character
Listed Buildings	CH.04	Character
Conservation Areas	CH.05	Character
Parks and Gardens of Special Historic Interest	CH.06	Character
Scheduled Monuments, CSAIs & AHAPs)	CH.07	Character
Locally Listed and other Non-Designated Heritage Assets	CH.08	Character
Natural Environment	EN.07	Environment
Biodiversity, Geodiversity and Nature Conservation	EN.08	Environment
Thames Basin Heaths Special Protection Area	EN.09	Environment
Flooding	EN.11	Environment
Green Belt	EN.12	Environment
Improving our Economy	**ID Code**	
Runnymede Economic Development Strategy	CO.10	Community
Employment Land Supply	CO.11	Community
Strategic Employment Areas	CO.12	Community
The visitor economy	CO.13	Community
Retail, Commercial Leisure and Town Centre Development	CO.14	Community
Centre Hierarchy, sequential approach & impact assessment	CO.15	Community
Town centre development	CO.16	Community

MO. Mobility

Mobility design principles have the objective to create safe, attractive and convenient connections around the NF Area and to the wider region utilising sustainable modes of transport where possible. Car dependence is high, particularly for commuters, which can cause congestion during peak hours. To support growth and limit the negative impacts on the roads, walking and cycling should be promoted by creating direct and memorable routes. Public transport should be used to support active travel and provide improved links between places. The development of e-bikes and e-scooters is likely to influence the future mobility in the Area, and it will need to be incorporated into design, from a transport infrastructure perspective to the provision of suitable storage and charging.

MO.01. Transport & infrastructure

Provide frequent public transport links that are located in convenient locations near vital services, such as GP surgeries and other local centres.

MO.02. Active & sustainable travel

Enhance the accessibility and connectivity between people and places with active travel (walking and cycling) and sustainable modes of transport. New travel options (e-bikes and e-scooters) should be part of mobility design.

MO.03. Transport & physical infrastructure

Improve local and strategic road networks to ease congestion and support growth. Look at transport hubs and how they can further connect to the wider area .

CH. Character

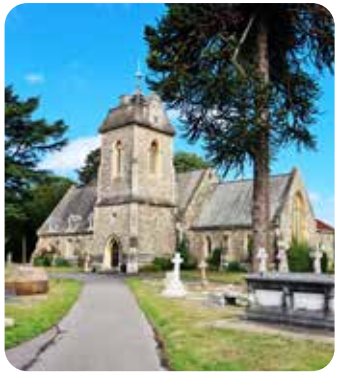
The character of a place is made of many different elements that come together to create a unique sense of identity. Any proposals will need to respect the existing character as well as create attractive and resilient places that contribute positively to the townscape, public realm and landscape setting of the Area. These design principles describe the key elements that contribute to the Area's character. New proposals should pay particular attention to the layout, form, scale, materials and detailing in the area.

CH.01. Townscape & landscape quality

Development must respond to the local context, including the built, natural and historic character as well as contributing positively to the townscape, public realm and landscape setting.

CH.02. Heritage

Development affecting heritage assets should be designed to protect and enhance the significance of the asset and its setting. Reuse and adaptation of heritage assets will be encouraged where it is sympathetic and creative.



CH.03. Listed buildings

Appropriate development that seeks to maintain and enhance the special architectural and historic interest of Listed Buildings will be supported. Proposals should not adversely affect the building or its setting.

CH.04. Conservation areas

Development will need to respect the existing local context and established character and be in keeping with the character and appearance of the Conservation Area.

CH.05. Integrating development with existing uses

Development should be effectively integrated with existing businesses and community facilities.

CH.06. Parks & Gardens of Special Historic Interest

Proposals affecting registered parks or gardens will need to protect the character and appearance of the park or garden. Where possible lost historical or architectural features should be reinstated.

CH.07. Scheduled Monuments, CSAIs & AHAPs, Designated Heritage Assets.

Development should not adversely affect the survival or overall heritage significance. Proposals that improve historic and protected assets will be supported.

CH.08. Locally Listed & other Non-Designated Heritage Assets

It is important to retain assets that have architectural or historic interest which contributes to the character of the area. This includes the historical landscape.

EN. Environment & landscape

Development proposals will need to take a proactive approach to mitigate their impact and to adapt to the specific landscape within and surrounding the Area, which includes the Thames Basin SPA.

New development should also look to actively tackle climate change to futureproof the proposals, taking into account the long-term implications for flood risk, biodiversity and landscapes.

New developments should mitigate any detrimental effects that they impose on the natural environment, while enhancing the existing landscape features and promoting habitat creation.

EN.01. Green & blue infrastructure

Proposals will need to provide multifunctional green and blue infrastructure to provide multiple benefits such as biodiversity, recreation and landscape.

EN.02. Environmental protection

Pollution has adverse impacts on the natural environment as well as on the health of the population, therefore development will need to be mitigated or reduced to an acceptable level.

EN.03. Air quality

Proposals within or nearby AQMAs will need to undertake an Air Quality Assessment and ensure suitable measures are undertaken in relation to air quality.

EN.04. Noise

Englefield Green is affected by noise from road and Heathrow Airport. Developments will need to effectively manage noise and through the layout and design of proposals mitigation measures should be put in place.

EN.05. Land contamination

Development proposed on land which is suspected of being affected by historic or current land contamination must have the site investigated and, if necessary, remediated.

EN.06. Light

Lighting schemes including street lighting, illuminated advertisements and floodlighting for outdoor activities must be well-designed to avoid impact on dark skies, residential dwellings and wildlife while enhancing public safety.

EN.07. Natural environment

The natural environment should provide a range of spaces for wildlife, exercise and landscape.

EN.08. Biodiversity, geodiversity & nature conservation

Development should seek to create or expand habitats that will bring a net biodiversity gain.

EN.09. Thames Basin Heaths Special Protection Area

No development can take place within 400m of the SPA. Development within 5km will need to take special measures to mitigate potential effects on the SPA.

EN.10. SAMM

Development within the SPA 5km boundary may need to contribute to funding SAMM measures which will be used strategically across the SPA to monitor the existing habitats and wildlife.

EN.11. Flooding

New development should follow a sequential approach to the layout of sites to minimise flood risk. The management of flood risk over the lifetime of the building also needs to be considered.

EN.12 Green Belt

The reuse or extension of existing buildings, outdoor sport and recreation on previously developed land in the Green Belt is considered appropriate if it does not affect the openness of the Green Belt. Any other development is generally incompatible.

CO. Community

New development should contribute to local infrastructure provision to build better places for residents. They should encourage inclusive places, that cater for the different needs or different types of people promoting health and well-being through convivial and safe public open spaces.

CO.01. Infrastructure delivery

The timely delivery of infrastructure projects will be important to ensure the needs of the occupiers of new developments are met and placing additional burden on existing facilities is avoided.

CO.02. Social & community infrastructure

The loss of existing infrastructure will be resisted. New facilities should be designed flexibly to allow for multiple activities and be accessible by active and sustainable modes of travel.

CO.03. Health & wellbeing

New developments should provide opportunity for people to walk and cycle (including e-bike & e-scooter mobility) and promote recreation and social interaction. Residential led schemes should also allow residents to grow their own food, where possible.

CO.04. Gypsies and travellers

The Local Plan sets out the needs of Gypsies and Travellers within the borough as well as site allocations.

CO.05. Older people

Proposals for specialist accommodation for older people will be supported. Proposed development will be expected to have readily accessible public transport, shops and local services.

CO.06. Students

Purpose built or refurbishment to existing buildings to deliver student housing is acceptable when it is accessible by shops and facilities and students can directly and safely access the South campus of RHUL.

CO.07.Open spaces

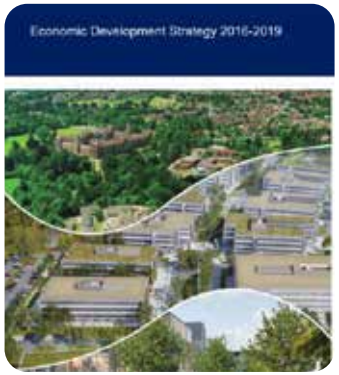
Existing open spaces must be protected, maintained and enhanced. Developments of 20 dwellings or more will need to provide new or enhanced provision of open space.

CO.08. Local green spaces

Special protection is provided for locally listed green spaces. Construction on green spaces and green corridors listed in the Neighbourhood Plan should be avoided.

CO.09. Playing pitches

The loss or displacement of existing playing pitches will not be permitted unless it can be demonstrated that it is no longer needed, the benefit of a proposal outweighs the loss or a replacement pitch can be provided.



CO.10. Runnymede Borough Council Economic Development Strategy

Business expansion should be promoted, to maintain a competitive advantage, a dynamic workforce, better infrastructure and encourage innovation.

CO.11. Employment land supply

Employment floorspace is available to accommodate the predicted future growth in the area's economy.

CO.12. Strategic employment areas

There are five designated employment areas within Runnymede which make up the core supply of employment land. They are protected as Strategic Employment Areas, the closest one is in Egham.

CO.13. The visitor economy

New development should offer a high-quality visitor experience that contributes to tourism, arts and cultural heritage, to aid quality of life, social and cultural well-being and economic growth.

CO.14. Retail, commercial leisure and town centre development

Englefield Green acts as a local centre providing everyday goods and services to the community which should aim to be retained.

CO.15. Centre hierarchy, sequential approach and impact assessment

As a local centre, any new development within the centre of Englefield Green must be appropriate in terms of scale and design.

HO. Housing

New developments should encourage different housing types to reflect different size, type and tenure of housing needs for a range of people including but not limited to: families with children, older people with disabilities, travellers, people who rent their home and people wishing to commission or build their own home.

New developments should deliver an affordable housing mix, type and size that reflects the established needs in the most relevant district needs assessment.

Development should seek innovative housing solutions and have appropriate levels of space within the dwellings as well as use passive design principles.

HO.01. The spatial strategy 2015 to 2030

The spatial strategy aims to balance the social and economic needs for development with the need to protect the environment and other assets that contribute to the area's character.

HO.02. Local Plan 2030

The Local Plan sets out the preferred locations for growth with consideration to the quantum and spacial distribution of development needs.

HO.03. Quantum of development

The borough will work to deliver the quantum of development specified in the 2030 Local Plan, whilst protecting important existing land uses and designations .

HO.04. Spatial distribution

Growth should be driven by the principles of sustainable development. Englefield Green is expected to accommodate some growth, whilst respecting its position as a Local Centre.

HO.05.Housing

New residential development should provide high-quality homes for all in appropriate locations, as well as catering for the different needs of the population.

HO.06. Affordable Housing

Proposals of 10 or more dwellings will be expected to provide 35% affordable housing which includes 10% of homes for affordable home ownership.

HO.07. Loss of housing units

There should not be a net loss of existing housing unless the development will provide a social or community service or facility or due to environmental considerations.

HO.08. Self-build & custom build housing

Self-build and custom homes are encouraged when appropriately sized and in suitable locations. Large developments of over 50 dwellings should consider custom and self-build plots within the housing mix.

SU. Sustainability

New developments should encourage and support innovative and proactive approaches to design and opportunities to deliver decentralised energy systems powered by a renewable or low carbon source and associated infrastructure, including community-led initiatives.

New developments should strive for good quality design that meets climatic targets for CO2 emissions and that can be constructed sustainably maximising opportunities for recycling.

SU.01. Sustainable Design

Development proposals should incorporate secure waste and cycle storage, protect and enhance biodiversity, maximise opportunities for solar gain and consider implementing electric charging points.

SU.02. Renewable/Low Carbon Energy

Stand-alone and community led renewable, low carbon energy sources will be supported. Developments must show that they use less energy, supply energy efficiently and use renewable energy.

SU.03. Construction Management

Some developments may need to submit and implement a Construction Management Plan.

General Design Codes

05

5. General Design Codes

General Design Codes

The design codes in this section give parameters and guidelines within the consolidated residential estates and suburbs that constitute most of the Built up Area, the Historic Core and the Rural Area.

Descriptions of the extent and character of the Historic Core and the Rural Area are given under the relevant sections.

The extent of the Built up Area zone includes the Character Area North Edge, North East, West, South and University North.

The consolidated urban areas are defined by a heterogeneous mix of (predominantly) housing ranging from:

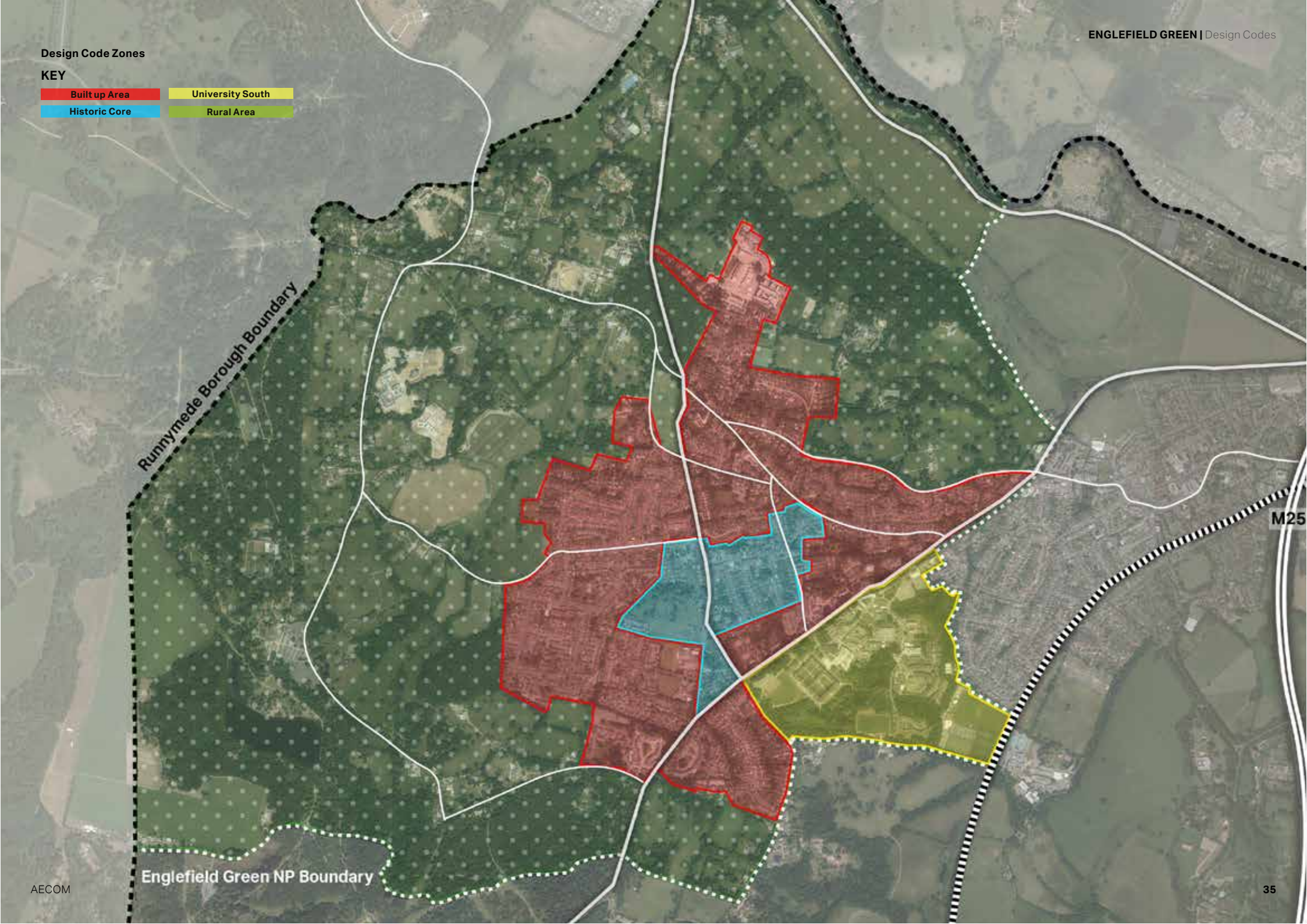
- **Character Area North East:** Housing in mainly detached, with good sized gardens. Houses tend to be 3 to 4 bedroom on average.
- **Character Area North Edge:** Housing is detached and the largest in the area, with generous gardens and curtilage. The new Royalton 'Magna Carta Park' development on the old Brunel university site adds to the typological variety of the character area.
- **Character Area West:** Composed by a range of Victorian semi detached and terraced housing, through post war bungalows, to different 50s, 60s, 70s and 80s housing estates, including some blocks of flats. Houses tend to be 2 to 3 bedroom on average.
- **Character Area South:** Housing in this area, bounded by Egham Hill, London Road and Bakenham Lane, tends to be mainly 3 to 4 bedroom with with good sized gardens and a leafy street character.
- **Character Area University North:** This area is formed by the bulk of student residential development integrated within the settlement. This area still contains large pockets of planted trees, many of them protected.

NB: For the avoidance of doubt, all design codes in this zone also apply to the Historic Core and Rural Area zones, given that parts of these zones are built up. In the case of conflict, the design codes for a zone in which the development is being proposed will take precedence.

Lodge Close. *Example of properties in the Character Area North East within the Built up Area Zone, as detached properties with generous gardens.*

Ashwood Road. *Example of the variety of character of properties in the Character Area West, within the Buikt up Area Zone. Semi detached properties to the right and flats to the left of the image*

Harvest road. *View of student accommodation in Character Area University North within the Built up Area Design Code Zone, barely in keeping with the existing settlement pattern of Englefield Green.*


Design Code Zones
KEY
Built up Area
University South
Historic Core
Rural Area
Runnymede Borough Boundary
M25
Englefield Green NP Boundary

MO.01. Transport & infrastructure

Street Typologies (I)

Main Access Street

This street provides the main access spine of a new development. It connects the development to the rest of the settlement. Connecting to the village centre by bike, e-bike, e-scooter and walking should be a priority for new developments.

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 as 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.

Street Typologies (II)

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 stager 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 the perception of safety.
- Cul-de-sacs are typically backing onto the open land in Englefield Green. 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.

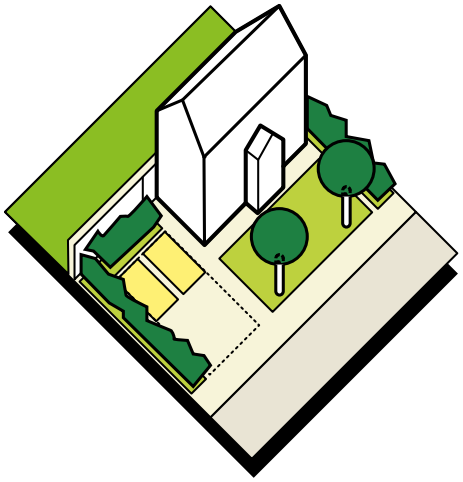
Street Typologies (III)

Edge Street / Lane

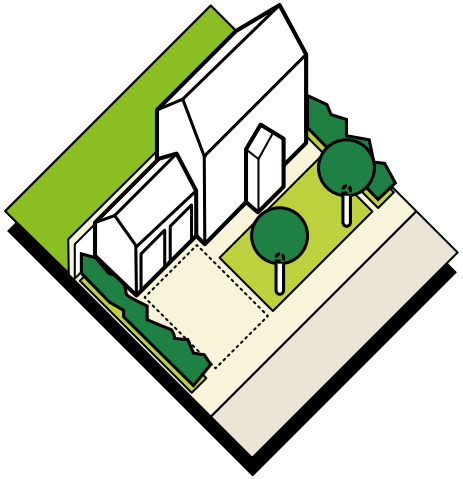
Actions:

- 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. This buffer future-proofs the development against potential development that might front to the edge lane in the future.
- Connect the edge lane to paths and other public rights of way.

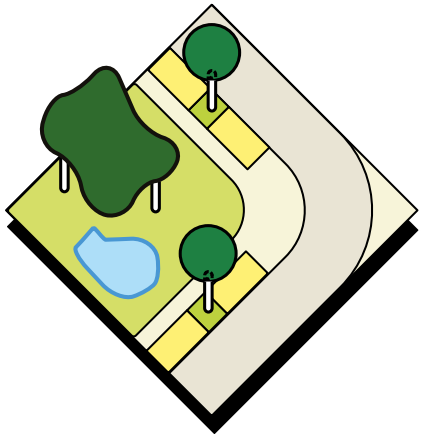
On-plot parking on driveway



On-plot parking on garage

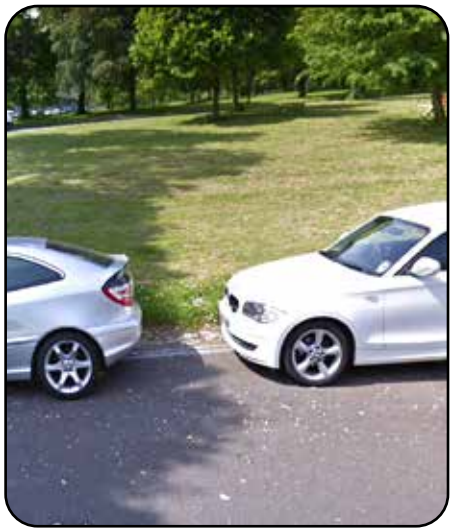


On-street parking adjacent public open space



King's Lane. *On-plot parking on driveway*

Alderside Walk. *On-plot parking on garage*



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

Car parking solutions

Car parking design should be safe and should not undermine the quality and amenity of the streets.

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 minimize 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.

On-plot garages / car ports

Actions:

- Garages should preferably be designed as 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.

On-street 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.

Other forms of parking

- Generally, parking courtyards and flat-over-garages are not desirable in residential areas.

MO.02. Active & sustainable travel

Links to the countryside
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 village or an area of distinct character, new developments should visually acknowledge that fact.
- 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.

Connected developments
Creating new walking routes which are well connected to existing ones is a prerequisite for any new development. Connecting to the village centre by bike, e-bike, e-scooter and walking should be a priority for new developments.

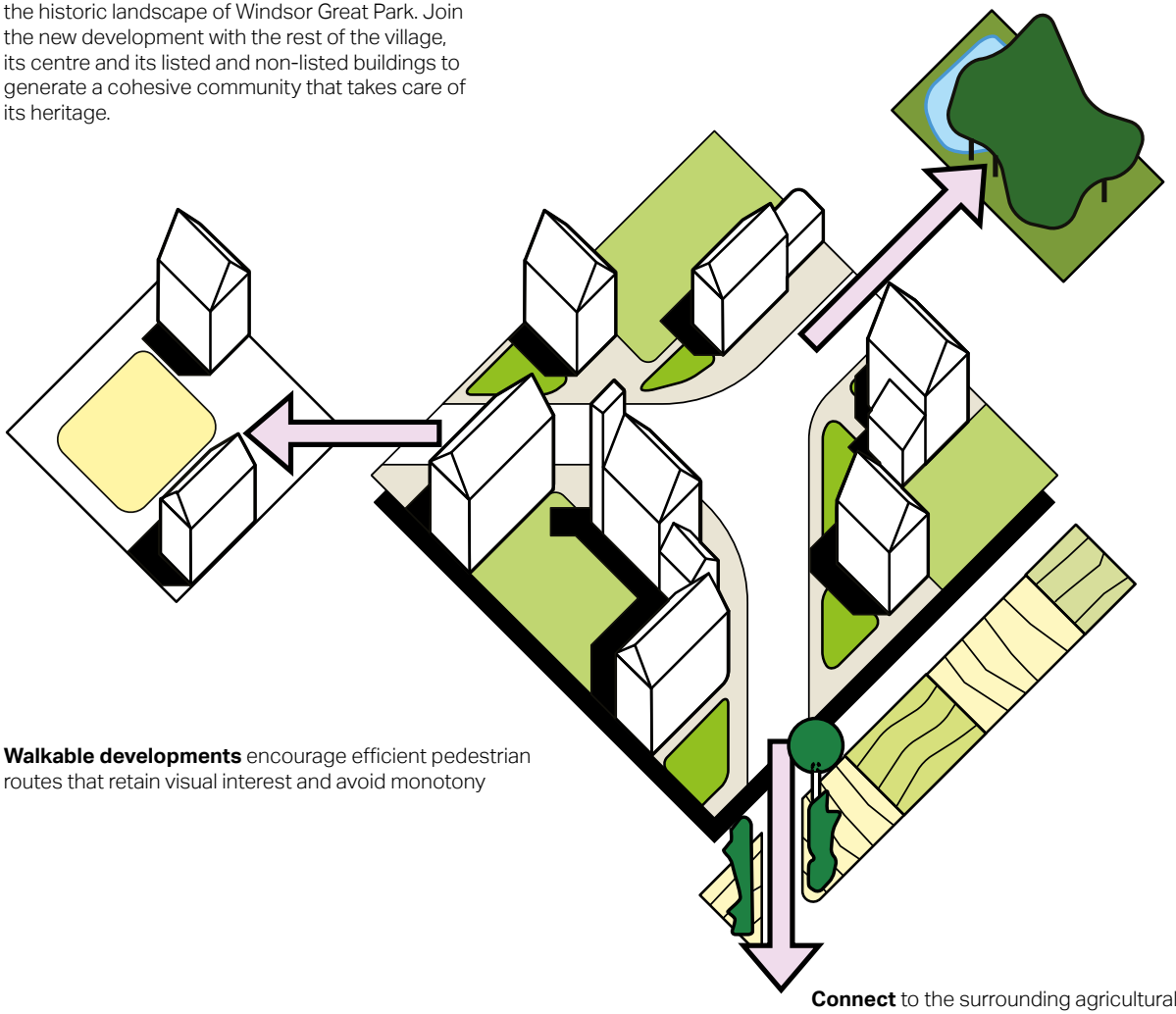
Actions:
- Generally, lay out walking routes so that they follow the shortest and straightest distance between two points. However, take into consideration landscape and visual interest in the journey, to reduce monotony and increase interest along the trip.

Bicycle infrastructure
The manner in which the public road network is designed, built and managed can have a significant effect on the utility and safety of cycling. The cycling network may be able to provide the users with direct, convenient routes minimizing unnecessary delay and effort in reaching their destinations and foster leisurely trips.
Actions:
- Consider what type of cycling infrastructure is most adequate to the size and type of development considering widened roads, bike paths, bike lanes, cycle tracks, rail trails and, where permitted, sidewalks.

Bicycle storage
Actions:
- A straightforward 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.
- For residential units, covered and secured cycle parking should be provided within the domestic curtilage. The most appropriate location to avoid clutter on the streetscape is to provide space for bicycles within garage sheds or in secure bike storage boxes on the rear gardens.
- Access from the street to rear gardens should be provided via secured gates. Bulky bike storage on front gardens should be avoided.

Connect to high quality natural areas and the open countryside and the Green Belt, creating natural corridors for residents to enjoy

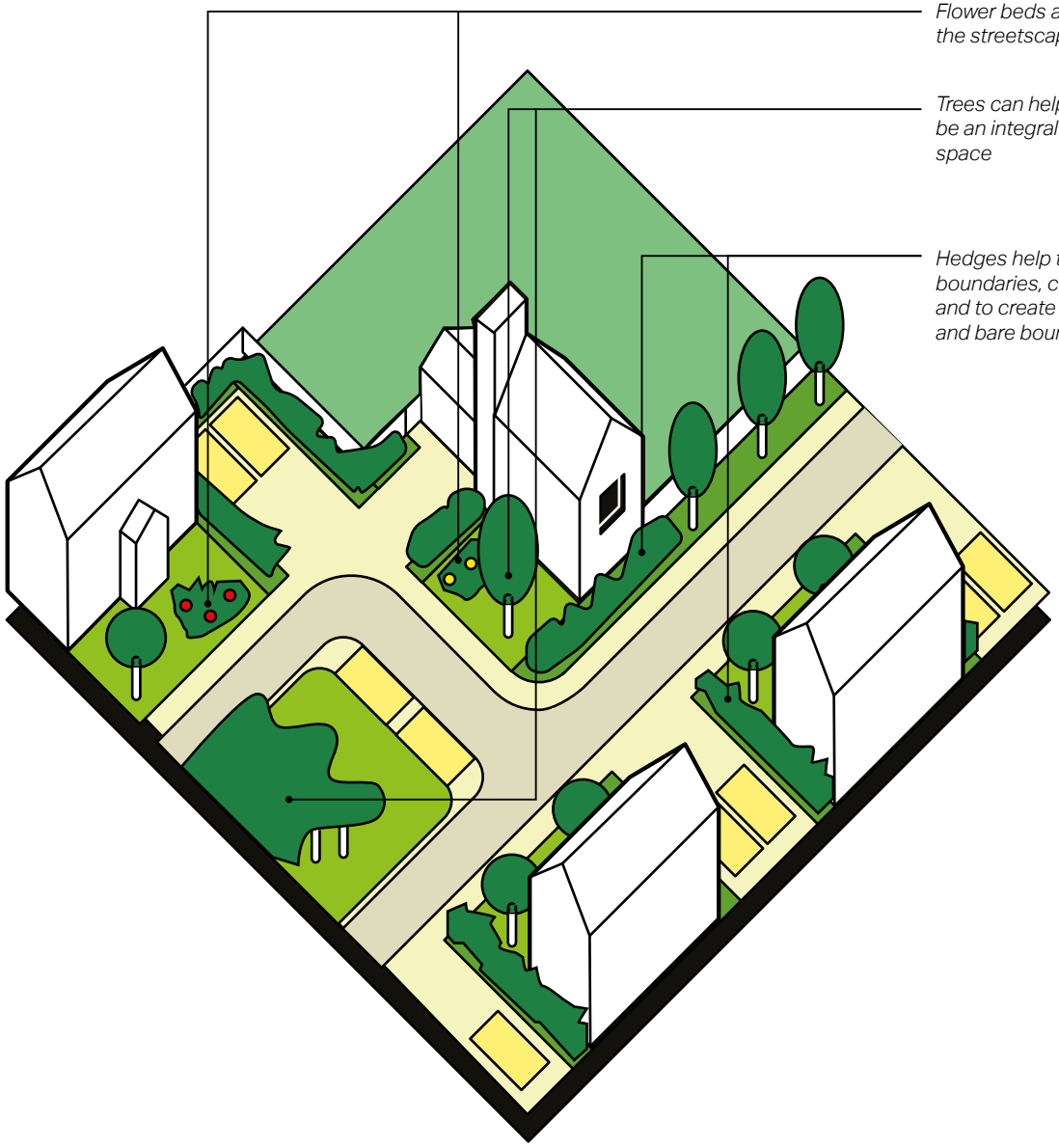
Connect to valuable assets in Englefield Green and the historic landscape of Windsor Great Park. Join the new development with the rest of the village, its centre and its listed and non-listed buildings to generate a cohesive community that takes care of its heritage.



Walkable developments encourage efficient pedestrian routes that retain visual interest and avoid monotony

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

CH.01. Townscape & landscape quality



Sites facing existing streets / rear sites

When development is likely to impact existing streets by facing directly onto them or if it is located in rear sites, guidance detailed in the Historic Core Design Code Zone should be taken as reference.

- *Actions:* Refer to code CH.01 in the Built up Area Design Code Zone for guidance on how to approach the conditions above.

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 and 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:

- Existing trees should be retained as much as possible.
- 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 there should be planted at least two new trees.

Wayfinding & perception

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.

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.

Building lines

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

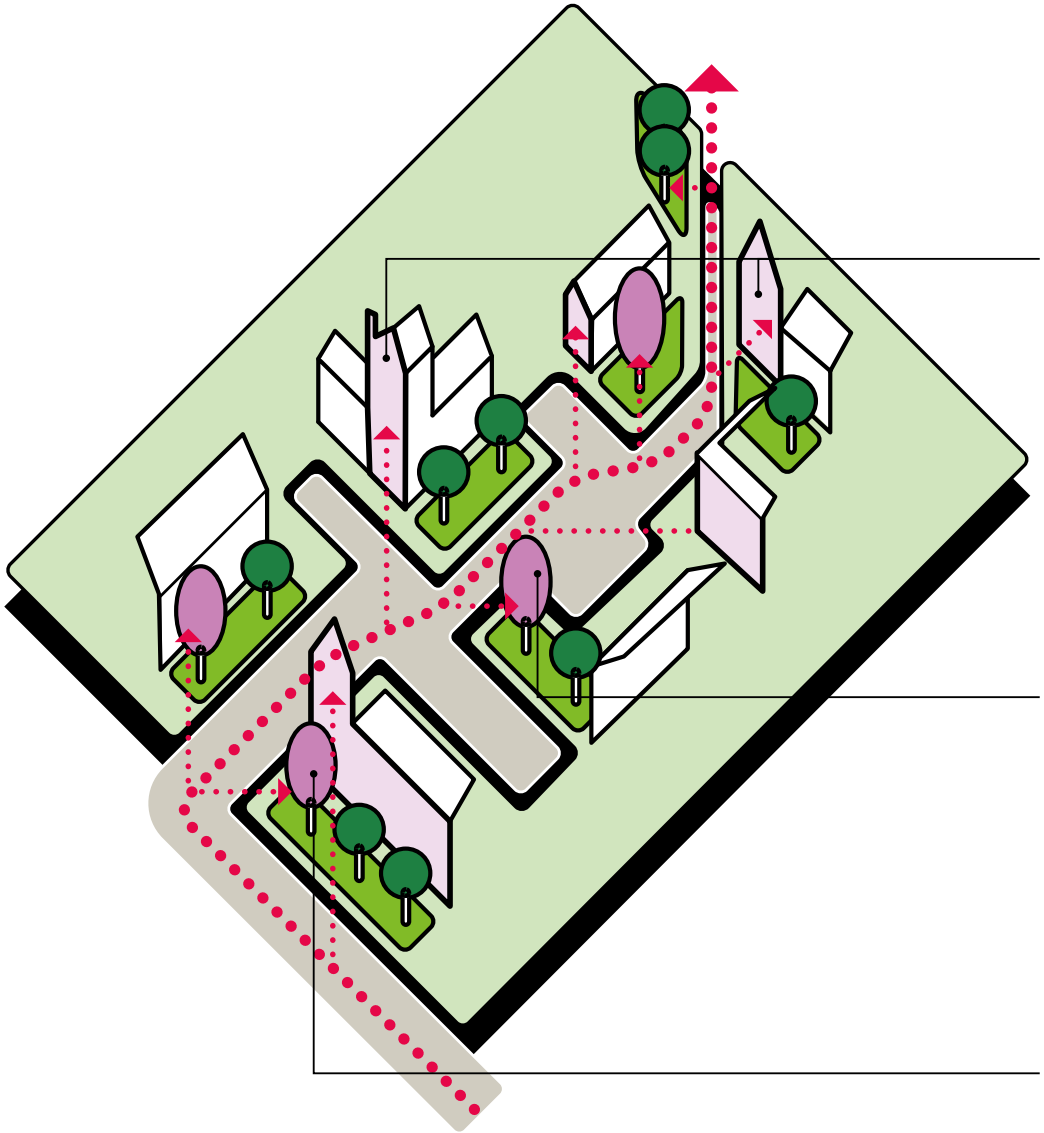
Actions:

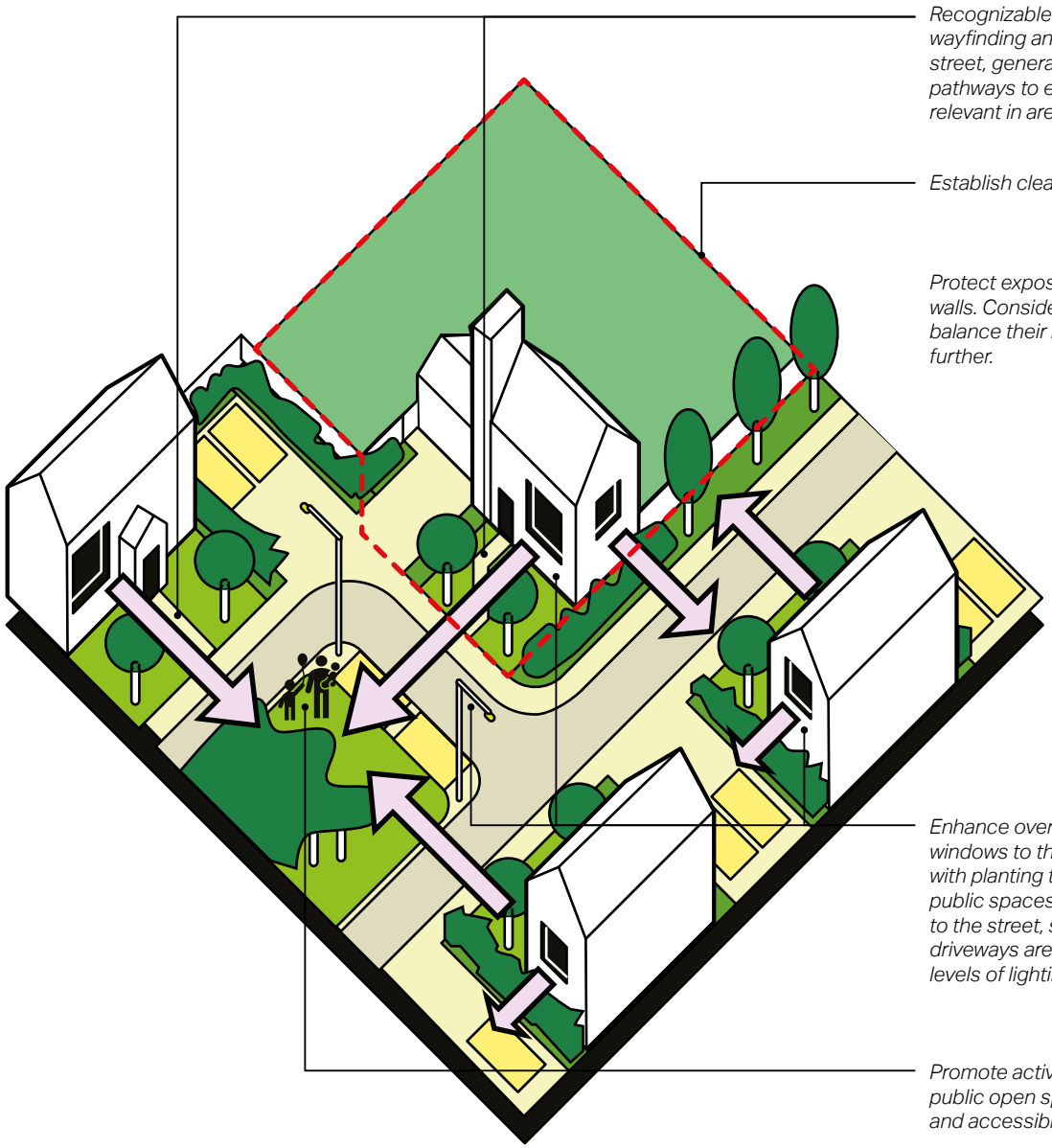
- The building line should have subtle variations in the form of recesses and protrusions but should generally form a unified whole.
- Boundary treatments should reinforce the sense of continuity of the building line and help define the street.
- Boundary treatments should not impair natural surveillance.

Setbacks

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.





Recognizable entrances and routes improve wayfinding and reduce ambiguity on the street, generating a feeling of security. Clear pathways to entrances are particularly relevant in areas with large front gardens

Establish clear ownership boundaries

Protect exposed gardens with brick or stone walls. Consider landscaping and planting to balance their bareness and to shelter them further.

Enhance overlooking by designing safe windows to the street. They can be buffered with planting to increase privacy. Make sure public spaces and privately-owned spaces to the street, such as front gardens and driveways are well-overlooked. Provide good levels of lighting on the public realm.

Promote activity on the street, by providing public open spaces, generous pavements and accessible street furniture

Overlooking

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-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.

Buildings turning a corner

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

Actions:

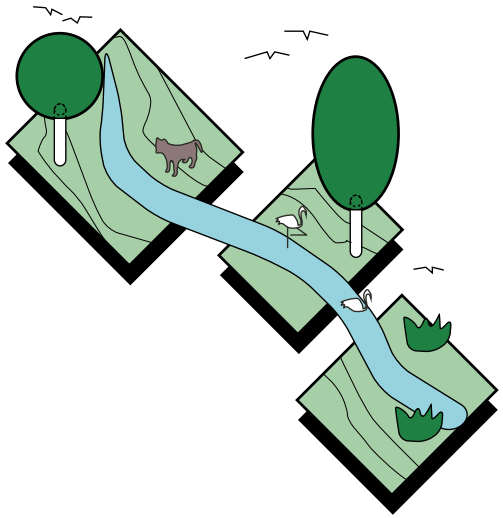
- Animate both façades on a corner buildings with doors and/or windows. Consider decorative architectural feature elements for these building types, given their prominence and their ability to create local character.
- As well as relating carefully to existing heritage features, landmark buildings should also be innovative and interesting. Promote good architecture and ensure that places are distinct 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.

EN.01. Green & blue infrastructure

The existing green & blue infrastructure should be protected, maintained and enhanced to deliver multiple benefits and services for biodiversity, recreation and landscape.

Actions:

- New development should not hinder the continuity of green and blue infrastructure.
- New development should not culvert watercourses or result in the loss of river banks.
- New development should make appropriate provision to protect, enhance, improve and maintain accessible networks of Blue Infrastructure, including through de-culverting and re-naturalisation of hard banks if appropriate;
- Where appropriate, new development should enable public access to blue infrastructure.
- Include measures to allow for the natural movement of fish within the watercourse where barriers to fish movement (e.g. weirs) are present.
- New development should make use of SuDS strategies to create/improve Blue Infrastructure.

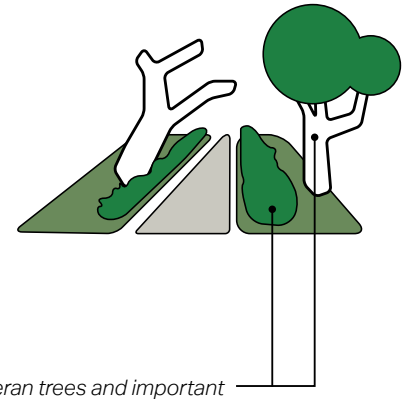


EN.02. Environmental protection

Nature Conservation

Actions:

- Identify priority habitats where richness of wildlife has been identified as a contributing factor in its designation, such as Ramsar sites, Special Protection Areas and Special Areas of Conservation, Sites of Special Scientific Interest and National Nature Reserves and Ancient Woodland, ancient or veteran trees.
- Propose new areas that may be in future identified as a Nature Improvement Area
- Retain and conserve important trees and hedgerows and protect veteran trees with new TPOs.



Protect veteran trees and important trees and hedgerows

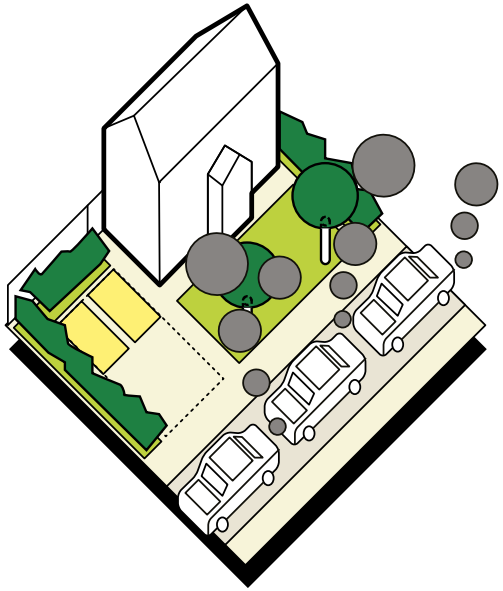
EN.03. Air Quality

Air pollution mitigation

Even if air quality across the RBC is generally good, road traffic is the major source of pollution in Runnymede, the main air pollutants are nitrogen dioxide and fine particulates.

Actions:

- New schemes should take action to reduce road congestion and follow the recommendation in relation to bike infrastructure and storage outlined in these design codes.



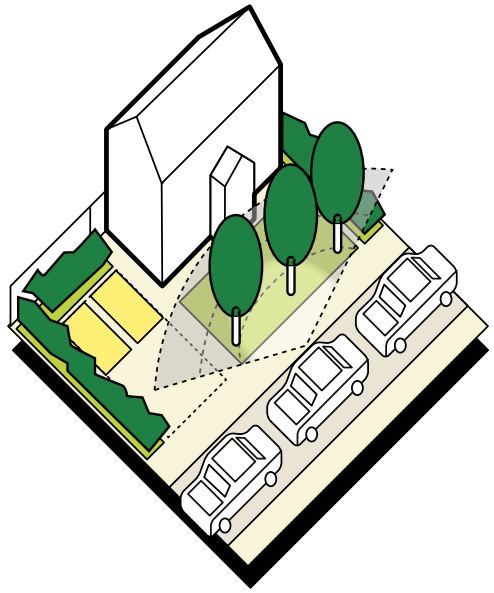
EN.04. Noise

Noise mitigation

Where new development could result in significant adverse effects on the landscape and on visual amenity, appropriate mitigation measures should be provided. Conversely, effects of existing infrastructure, traffic noise and pollution on the new homes should be mitigated.

Actions:

- Encourage tree planting and landscaping along the development limits for visual appeal, recreation, to reduce traffic noise and to mitigate pollution effects.
- Create a safeguarded buffer area between the development and the open countryside and existing infrastructures that could result in inappropriate levels of noise on the new homes.



EN.05. Land contamination

Land contamination

Contamination, in most cases, is likely to arise from a previous use of the site, or an adjacent site, that had an industrial activity on it at one time or another.

Actions:

- Establish former uses of the site and adjacent buildings.
- Undertake site walk-over survey.
- Identify contaminants of concern.
- Develop site-specific conceptual model.
- Compile conclusions and recommendations, if a detailed site investigation is needed, design a sampling strategy, take samples and undertake a corresponding risk assessment.

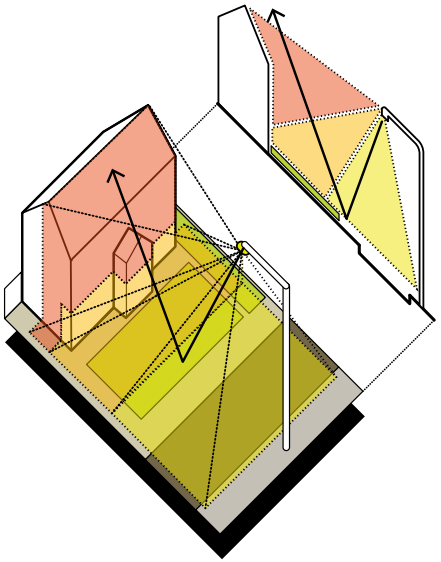
EN.06. Light

Artificial light

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.

Actions:

- Ensure that lighting schemes will not cause unacceptable levels of light pollution particularly in intrinsically dark areas of the countryside.
- Lighting schemes should minimise nuisance to residential dwellings.
- Consider lighting schemes that could be turned off when not needed
- Minimise impact on sensitive wildlife receptors throughout the year.
- The needs of particular individuals or groups should be considered where appropriate (e.g. the safety of pedestrians, cyclists, drivers or older users).



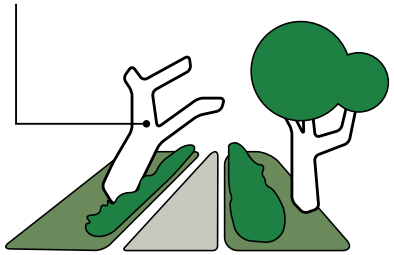
EN.07. Natural environment

Impacts of new development to trees/hedgerows

Actions:

- Loss of trees and hedgerows are only justifiable if trees constitute a hazard and are at risk of falling because of old age and/or disease, or if they intrude into roads and paths and can result in an accident.
- Any loss of hedgerow habitat or important trees should be compensated for through new habitat creation including new native species planting in keeping with the historic landscape character. Plant replacement trees of appropriate species in keeping with the historic landscape character.
- Where impacts to trees and hedgerows are unavoidable the strategy should be to minimise these impacts, such as: removal of only necessary sections of important hedgerows, and minimising the number of breaches.

Loss of trees is only justifiable if they constitute a hazard to visitors



EN.08. Biodiversity, geodiversity & nature conservation

Wildlife corridors

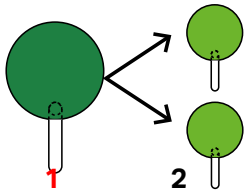
Actions:

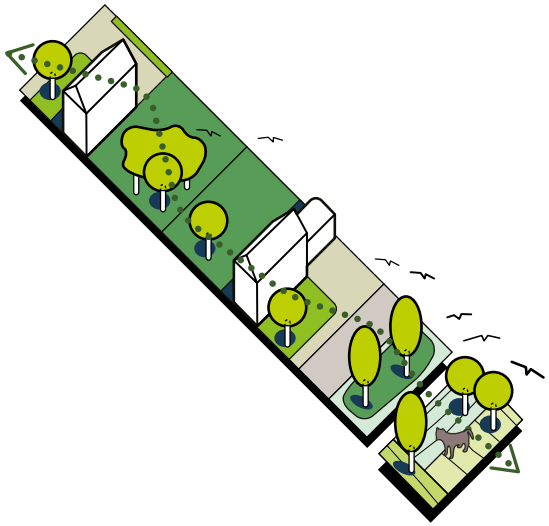
- Provide a connected network of private and public green spaces that includes generous and vegetated back and front gardens, public green spaces, fields and natural open spaces.

Replacement trees

Actions:

- Existing trees should be replaced on a minimum 1:2 ratio if affected by a new development and there are strong reasons to not retain them. New trees should be equivalent in size and quality to the one they are replacing.



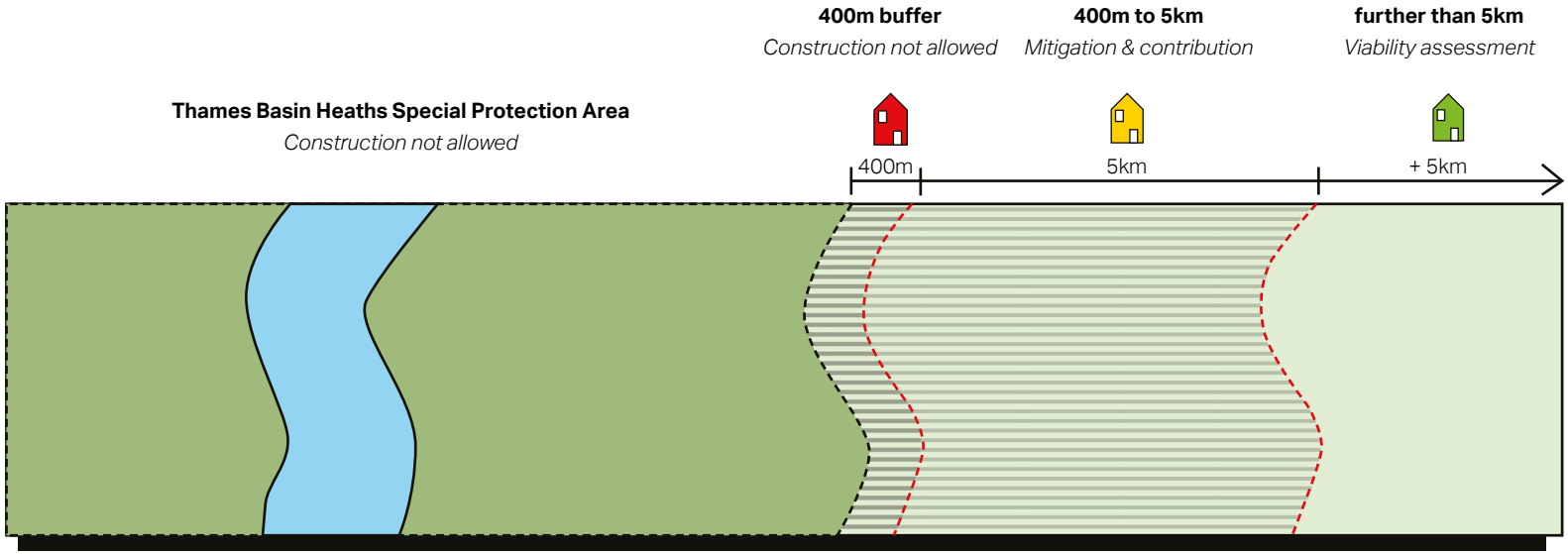


EN.09. Thames Basin Heaths Special Protection Area

The impact on the Thames Basin Heaths Special Protection Area of new development should be carefully assessed, taking consideration of the site's relative location in relation to the protection area.

Actions:

- No new residential development will be permitted within 400m of the boundary of the Special Protection Area.
- New development beyond the 400m Special Protection Area exclusion zone, but within 5km of the Special Protection Area boundary, will need to put in place adequate measures to avoid and mitigate potential effects. Such developments will need to provide financial contributions and satisfy special conditions.
- For sites beyond the 5km zone of influence, a specific viability assessment may be required under the Habitats Regulations Assessment.



EN.10. Flooding

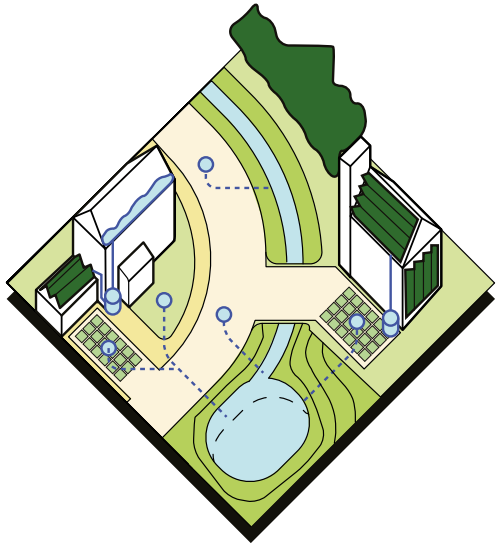
SuDS

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:

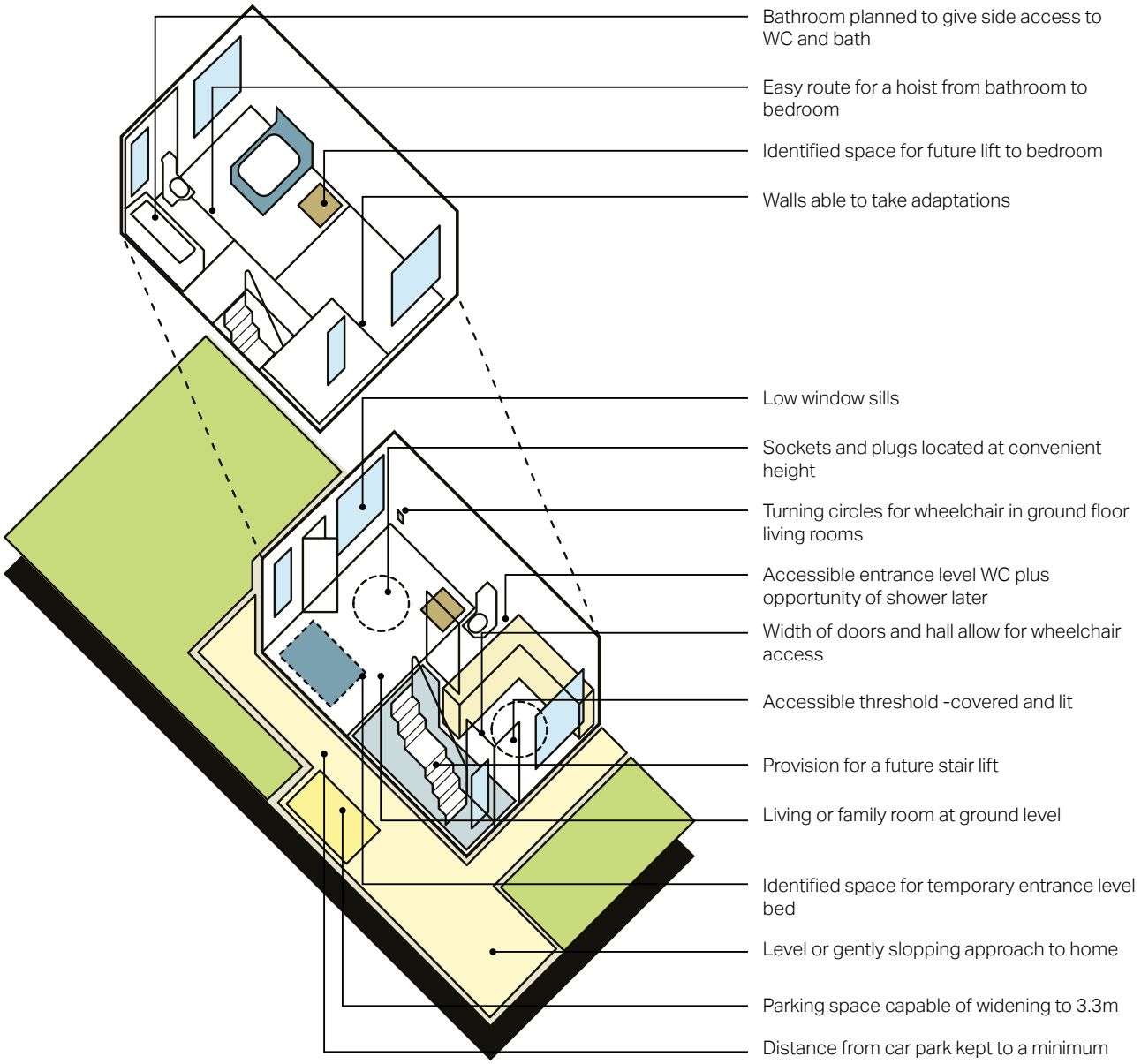
- Infiltration, which allows water to percolate into the ground and eventually restore groundwater; and
- Attenuation and controlled release, which holds back the water and slowly releases it into the sewer network

Actions:

- Make the best use of rainwater harvesting systems, rain gardens, swales, permeable paving, green roofs/walls and ponds to provide the necessary resilience against flooding in new developments.



C0.05.Older People



Flexible housing

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 Building Regulations Part M criteria in the design of new homes and to assess whether they can be retrofitted in existing properties.

The diagram to the left illustrates the main principles of inclusivity, accessibility, adaptability and sustainability.

CO.06. Students

The following design code CO.06 is of application in the Built up Area zone when university developments and/or student residences are proposed within that zone. Such developments are likely to be proposed on the NF Area matching the extent of the Character Area University North, but the codes still apply if such developments are proposed within the Built up Area zone.

The design code CO.06 can be used as guidelines for development of similar characteristics is proposed in the University South Design Code Zone. However, as new designs in that area don't have a great potential to negatively impact the existing urban tissue, the code C0.06 should be applied flexibly and taking into consideration the input that RHUL stakeholders might have on design. Integrating with the surrounding context should take precedence.

Accessibility

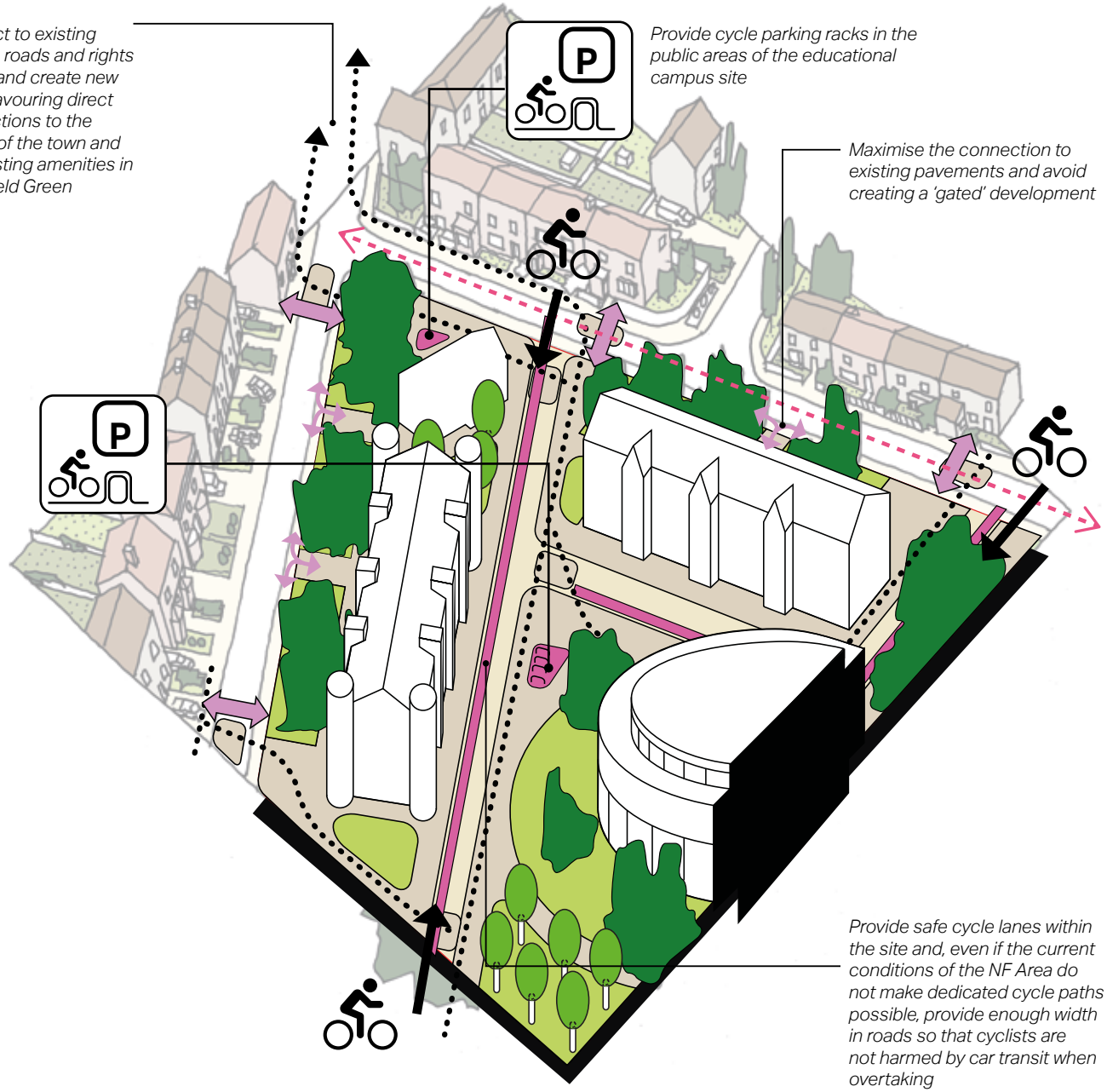
University and student residences should be integrated within the surrounding built environment in the area.

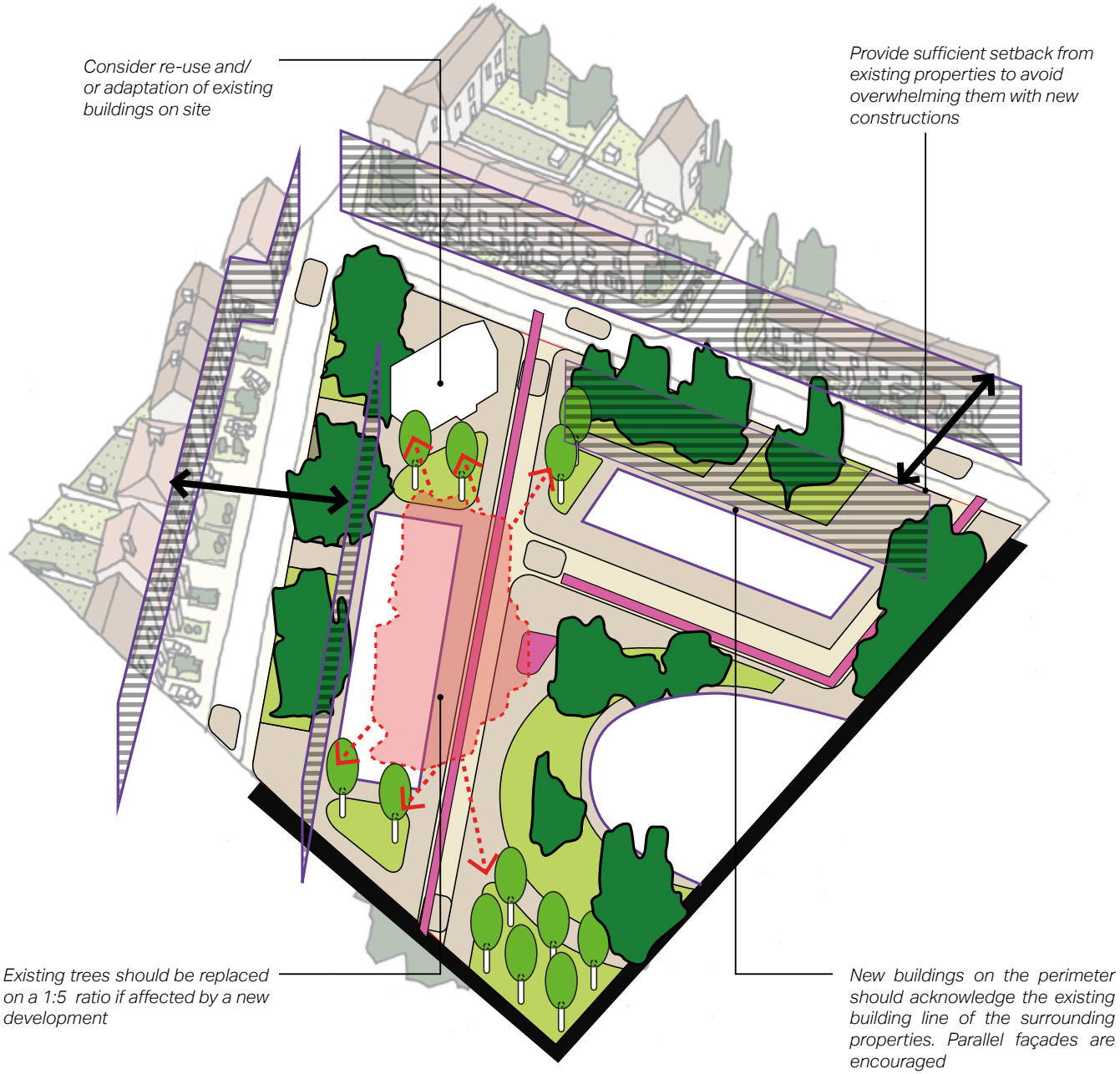
- New educational developments should aim to create permeable networks of connections within development sites as well as connecting to the wider locality and to any existing cycle lanes and public footpaths. In case of creating new links, barriers to vehicle movement should be kept to a minimum.
- Connect to existing streets, roads and rights of way and create new ones, favouring direct connections to the centre of the town and key existing amenities in Englefield Green.
- Avoid the creation of gated educational communities, where students are physically segregated from the rest of the population. Avoid using fences, or walls of any type that prevent the free movement of people from and to the new educational site.
- Maximise walkable and pedestrian-friendly pavements that connect permeable access to existing pavements.

Bicycles

Actions:

- Provide safe cycle lanes within the site and, even if the current conditions of the NF Area do not make dedicated cycle paths possible, provide enough width in roads so that cyclists are not harmed by car transit when overtaking.
- A straightforward way to encourage cycling is to provide publicly available cycle parking racks in the public areas of the educational campus site. Attractive design solutions for racks can encourage its use.
- Within student residences, covered and secured cycle parking should be provided. The most appropriate location to avoid clutter on the streetscape is to provide space for bicycles within garage sheds or in secure bike storage rooms within the building.





Retained and replacement trees

Trees and hedgerows should be conserved. Loss of trees and hedgerows are only justifiable if trees constitute a hazard and are at risk of falling because of old age and/or disease, or if they intrude into roads and paths and can result in an accident. Where impacts are unavoidable to ensure the viability of the development, the following actions should be taken.

Actions:

- Plant replacement trees of appropriate species in keeping with the historic landscape character.
- A tree planted to replace a tree removed due to development will take decades to achieve the biodiversity and amenity value of what has been lost. Existing trees should be replaced on a 3:1 ratio (for each one lost, 3 should be planted), if affected by a new development.

Setbacks, layout and screening

Proposed development should be respectful to existing dwellings in the vicinity.

Actions:

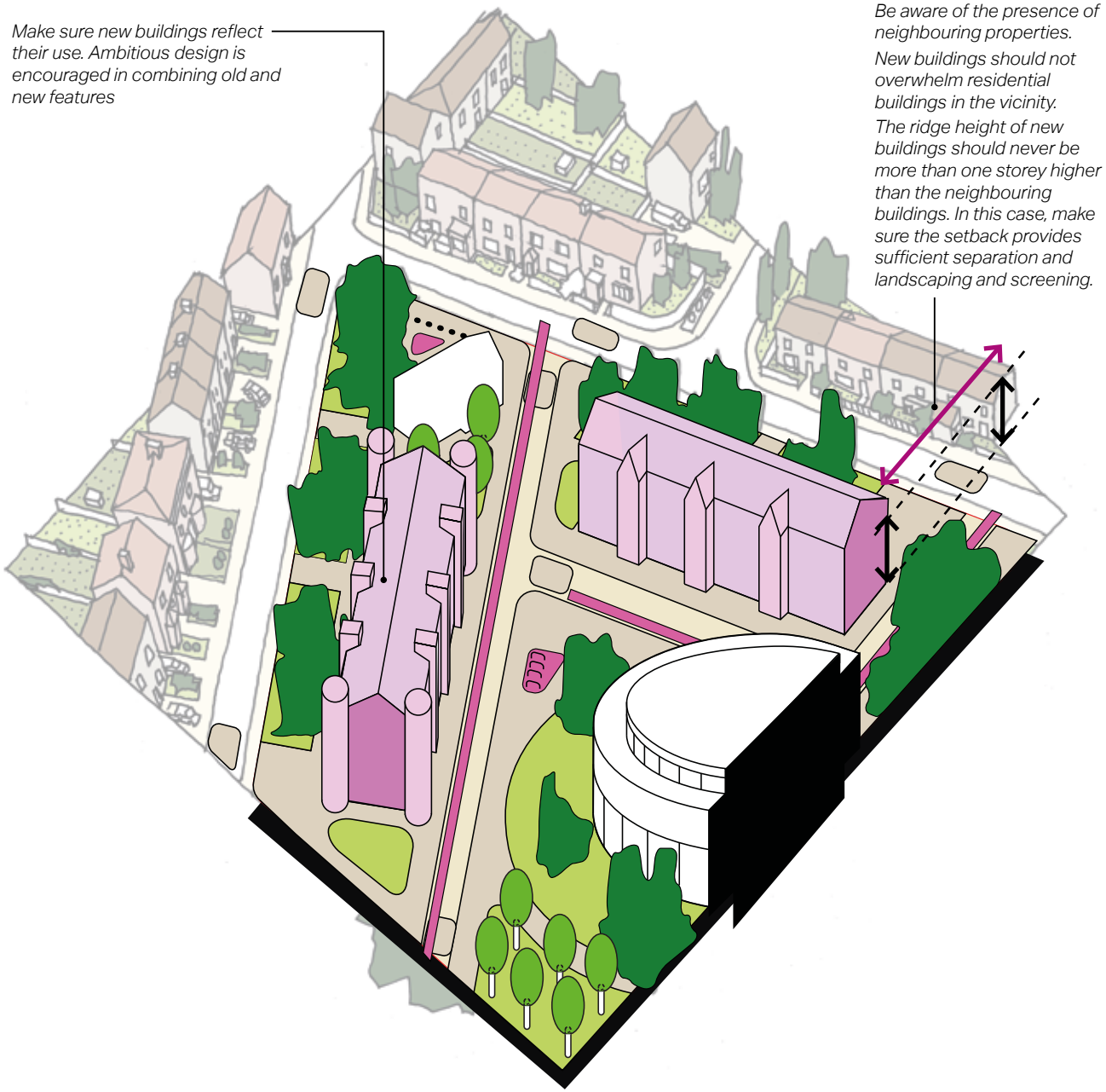
- On the perimeter, new buildings should respect the existing building line of dwellings facing the site, by proposing façades that are parallel to the existing ones.
- The layout should draw parallels with the settlement pattern of the vicinity. A 'peppering' layout, with buildings sprinkled on site is not in keeping with the settlement patterns and should not be encouraged.
- Provide sufficient setback from existing properties to avoid overwhelming them with new constructions.
- Retain any trees on the perimeter of the site to guarantee sufficient screening from the existing built areas to the new constructions. Consider supplementing the buffer with additional planting if necessary.

Architecture

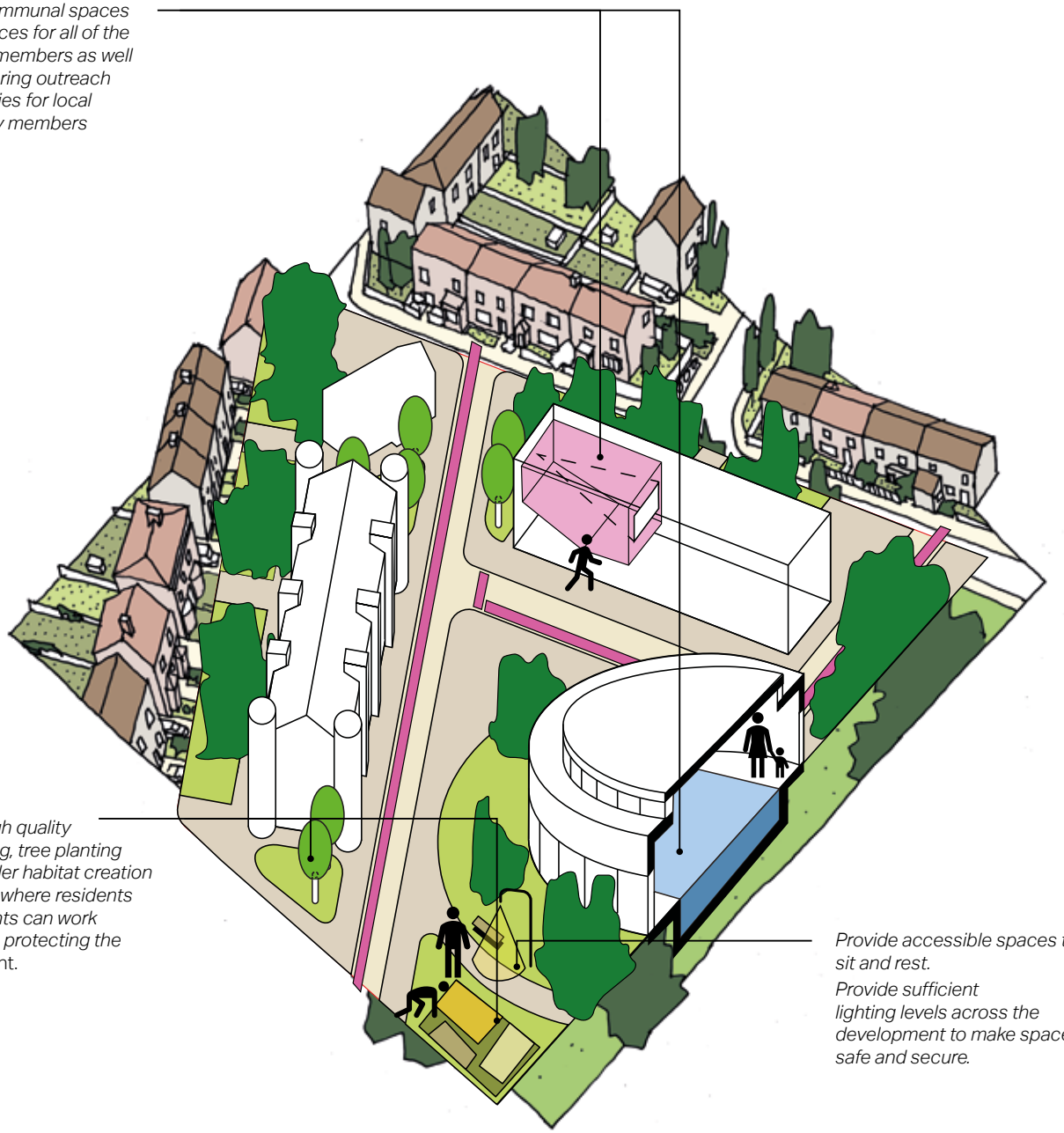
Royal Holloway College, originally a women-only college, was founded by the Victorian entrepreneur Thomas Holloway in 1879 on the Mount Lee Estate in Egham. Sir Nikolaus Pevsner called the original college "the most ebullient Victorian building in the Home Counties", and noted that together with its sister building the Holloway Sanatorium, it represents "the summit of High Victorian design".

Actions:

- Draw on the character of the original buildings, reflecting the striking north and south towers and two large quadrangles and its distinct features to provide a special 'sense of place' that comes from the past but can be added to in a contemporary way to combine the best of the old and the new.
- Ambitious design in keeping with the settlement pattern is encouraged, university buildings should not necessarily match the external appearance of terraced and semidetached properties, however they need to be respectful of the existing construction in the vicinity.
- Make sure new constructions do not overwhelm existing properties in the vicinity. The ridge height of roof of new buildings should ideally match that of neighbouring properties and, in all cases, not be more than a storey higher than that of neighbouring properties. In that case, they need to provide generous setbacks and appropriate planting and tree screening.



Provide communal spaces and resources for all of the university members as well as considering outreach opportunities for local community members



Provide high quality landscaping, tree planting and consider habitat creation strategies, where residents and students can work together in protecting the environment.

Provide accessible spaces to sit and rest.

Provide sufficient lighting levels across the development to make spaces safe and secure.

Shared facilities

A good strategy to integrate the academic development into the community is to consider sharing the access to key proposed educational, leisure and sport facilities with the residents. The specific management and/or any potential cost of the agreement will need to be addressed separately and is not part of these design codes.

Actions:

- Provide communal spaces and resources for all of the university members as well as considering outreach opportunities for local community members of sport facilities, libraries, classrooms,etc.
- Consider the creation of joint opportunities where residents and students can share mutual experience, learning and knowledge in a well-designed setting.

Shared open spaces

Linked to the provision of sufficient amenities for students and residents, open spaces can act as a favourable meeting point where to realise this relationship.

Actions:

- Provide high quality landscaping, tree planting and consider habitat creation strategies, where residents and students can work together in protecting the environment. Consider bird and bat boxes, small allotments and orchards, and gardens.
- Provide spaces to sit and rest that are accessible to the widest range of mobility and age groups.
- Provide sufficient lighting to make open spaces feel safe and secure.

HO.05. Housing

Extensions

General considerations

Extensions to dwellings can have a significant impact on the character and appearance of the building, but also on the streetscene within which they sit. A well-designed extension can enhance the appearance of its street, whereas an unsympathetic extension can have a harmful impact, create problems for neighbouring residents and affect the overall character of the settlement. Even if this section is not mandatory where work falls within the definition of permitted development, it can be considered as a design reference to achieve a cohesive and positive character in keeping with the built form.

Actions:

- Alterations and extensions should reflect local character through the use of characteristic materials and detailing.
- All extensions should be appropriate to the mass, scale and design of the main building and should not exceed the height of the original or adjacent buildings. Two storey extensions should be constructed with the same angle of pitch as the existing roof.
- The form of extensions should respect the shape and style of the roof. Reference should be taken from the host building and the local vernacular to determine the most appropriate proportions for the extension.
- Innovative and creative material and design suggestions in extensions that complement the host building may be appropriate, but should always reflect local character in their form, scale and massing.

General forms

Actions:

- The original building should remain the dominant element of the property regardless of the amount of extensions. The newly built extension should not overwhelm the building from any given point.
- Avoid designs that wrap around the existing building and involve overly complicated roof forms.

Roof extensions

The pitch and form of the roof of buildings adds to its character and extensions should respond to this where appropriate.

Actions:

- Wherever possible, locate roof extensions to the rear of properties to minimise potential impact on the streetscape.
- Favour rooflights as a way of introducing natural light into a roofspace without resulting in negative visual impact.

Extensions to side

Actions:

- Side extensions should be set back from the front of the main building, mirror the roof pitch, replicate or have lower cornice height, and ridges should be below the existing ridge height. Take careful consideration to avoid overshadowing of the neighbouring plot.
- Set-back the extension by at least 50cm from the main facade or at least by 1m if the extension is a car garage.
- A minimum distance of 1m between the property and its boundary (giving a total distance of at least 2m between properties) should be maintained by new side extensions.

Extensions to front

Actions:

- In general, front extensions have a greater impact on the street, and so should be avoided.
- Front extensions should take the form of the existing building, mirror the roof pitch, replicate or have lower cornice height and their ridge should be below the existing ridge height.

Extensions to rear

Actions:

- Rear extensions should take the form of the existing building, mirror the roof pitch, replicate or have lower cornice height, and ridges should be below the existing ridge height. Take careful consideration to avoid overshadowing of the neighbouring plot.

Loss of private amenity

Actions:

- Extensions should not result in a significant loss to the private amenity area (front, side and rear gardens) of the dwelling.

Architectural language & materials

Actions:

- Extensions should consider the materials, architectural features, window sizes and proportions of the existing building and recreate this style to design an extension that matches and complements the existing building. The original building should remain the dominant element of the property regardless of the amount of extensions. The newly built extension should not overwhelm the building.

Permitted development

Permitted development rights allow to extend a house without needing to apply for planning permission if specific limitations and conditions are met. If these were to be exceed, then it is likely that an application for householder planning permission will be required.

For further information, refer to:

- *Permitted development rights for householders: technical guidance*
- *https://www.planningportal.co.uk/info/200130/*

SU.01. Sustainable design

Solar panels

Colour & contrast

Actions:

- The colour and finish of solar panels and how they reflect light should be chosen to fit in with the building or surroundings. The majority of crystalline and thin film panels are dark blue or black; within these shades are a variety of finishes and tones to help make the panels unobtrusive.

Frames

Actions:

- Panels without frames, or black-framed panels, should be used where framed panels would detract from the building. Untreated or natural finished metal panel frames can look out of place and draw unnecessary attention to the panels. Many manufacturers sell panels with frames that are painted or anodised to blend in better with the building.

Size and style

- Consider the style of the building and, if possible, position the solar PV panels so they are in proportion to the building and its features. For example, they can resemble roofing elements such as roof lights or windows.
- The way in which panels are laid out in relation to one another can make a huge difference to the appearance of the system – symmetrical installations tend to work much better.
- Consider how the installation relates to the shape of the roof or building. If possible, covering the whole roof or one of its gables is often advisable.

Surroundings

- Choose plant and tree types and locations so that plants will not grow to shade areas on the property or on neighbouring properties where solar energy systems are installed.
- Design and locate structures so they will not shade areas on the property or on neighbouring properties where solar energy systems are installed.
- Solar PV on adjacent houses of the same type may look out of place if the approaches are very different. If neighbours use different sizes and colours of panels or position them differently in relation to the roofs, it can have a significant impact. Consider using similar components to fit with the prevalent panel style in the area.

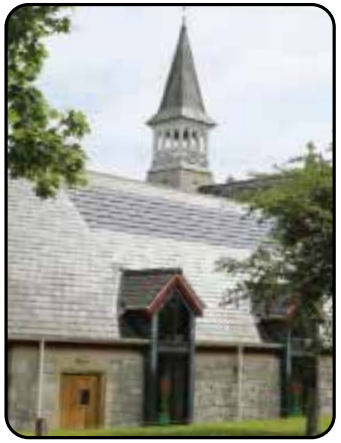
Select a colour and finish that complements the surroundings

Consider frameless panels

Proportions of the panels should be attuned to the language of the building and its feature elements

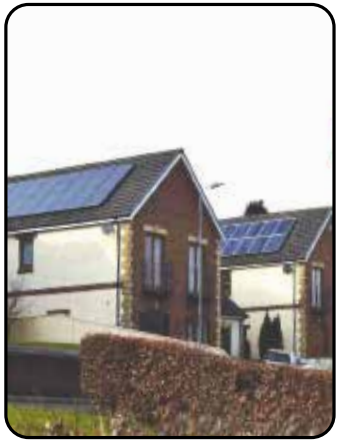
Favour symmetrical arrangements

Often, covering a whole gable is the best way to relate to the general shape of a roof



Plant trees that do not overshadow the panels

Avoid overshadowing neighbouring properties



Maintain a consistent look with neighbouring properties

Orientate green roofs and walls to optimal sunlight radiation and minimise the effect of overshadowing

Protect green roofs and walls from excessive wind levels, in this case the sloping site assists in the protection of the roof

Favour ease of maintenance and accessibility to the green roof

Green roofs and walls should minimise power use and do not need to be heavily engineered solutions. Climbing plant species such as vines are a traditional way of achieving the same effects

Green roofs & walls

Sunlight orientation & overshadowing

Actions:

- Sunlight, orientation and overshadowing from surrounding buildings have to be taken into account. Care must be taken to ensure that the plants receive sufficient but not excessive sunlight to grow.

Wind exposure

Actions:

- Wind speed and exposure varies according to building height, orientation and location. The plants, soils and supporting structures must be able to withstand these forces. The plants and structure must be anchored so they cannot detach from the building and cause damage. The soils should be contained so the wind cannot blow them away.

Services

Actions:

- Green roofs and walls need water, power and drainage for maintenance. Care must be taken to keep roots and leaves out of the drainage system, and this should be factored into design and maintenance. There should be points where the drainage system can be inspected and cleaned out regularly.

Power use

Actions:

- Green roofs and walls should be designed to minimise power use, at that effect, consider the orientation of the roof and walls, and the access to natural light. Where possible, use gravity and not pumps for watering systems.

Installation

Actions:

- Green walls should be separated from the building elevations, so there is no moisture transfer to the wall.
- Special retention measures should be put in place on roofs where the pitch is 7 degrees or above.
- Some roof parapets can lead to ponding and pooling of water. This can overload the roof and impose a high hydrostatic pressure on the roof's waterproof membrane. If the building has parapets, ensure that there is good drainage The fitting of high-water alarm systems should be considered if there is no clear overflow path.

Storage

Bicycles

Actions:

- A straightforward 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.
- For residential units, covered and secured cycle parking should be provided within the domestic curtilage. The most appropriate location to avoid clutter on the streetscape is to provide space for bicycles within garage sheds or in secure bike storage boxes on the rear gardens.
- Access from the street to rear gardens should be provided via secured gates. Bulky bike storage on front gardens should be avoided.

E-bikes & e-scooters

Manual and electrically assisted pedal cycles and scooters are increasingly used as an efficient transport option.

Actions:

- Position cycle parking and charging poings in locations that do not impinge on key pedestrian desire lines, but are still sufficient in volume and convenience of location to be of use.
- Favour electrical charging units that are not excessively bulky to reduce the clutter on the street scene.
- Consider creating specific parking points for scooters, to restrict the detrimental effect of 'peppered-parking' for scotters on the pavement.

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.
- Wheelie bins to the front of properties are only acceptable if the dwellings immediately open onto the street and have no side access or an enclosed rear garden. These are typical terrace housing conditions. In those cases, designs should strive to minimise the presence of wheelie bins on the streetscape, by using hedging, screening or planting to conceal them. Bulky constructions to hold bins on the front garden should be avoided when possible.

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

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

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.

SU.02. Renewable / low carbon energy

Building envelope

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.
- Flexibility should be embedded in the design, in case climatic conditions make thermal mass inappropriate, the design can be re-engineered to lose thermal mass storage capacity (i.e: use trombe walls filled with water, instead of stone, brick or concrete).

Insulation

Actions:

- 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. Simplicity is key in airtightness design. The fewer junctions, the simpler and more efficient the design will be.

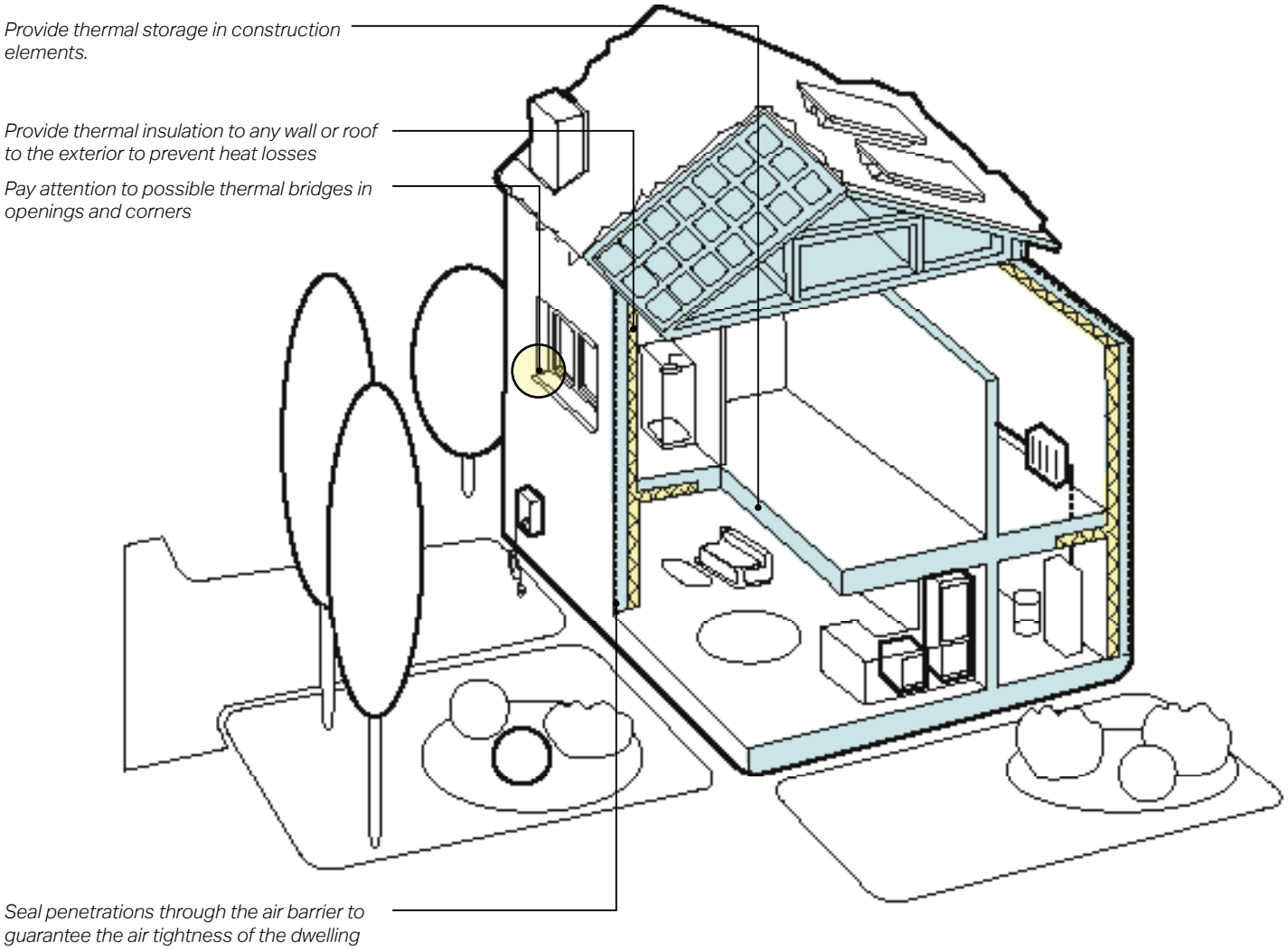
Actions:

- 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.

Passivhaus

Actions:

- Overall, new buildings should satisfy current building regulations but aspire to passivhaus standards to futureproof development from the effects of climate change.

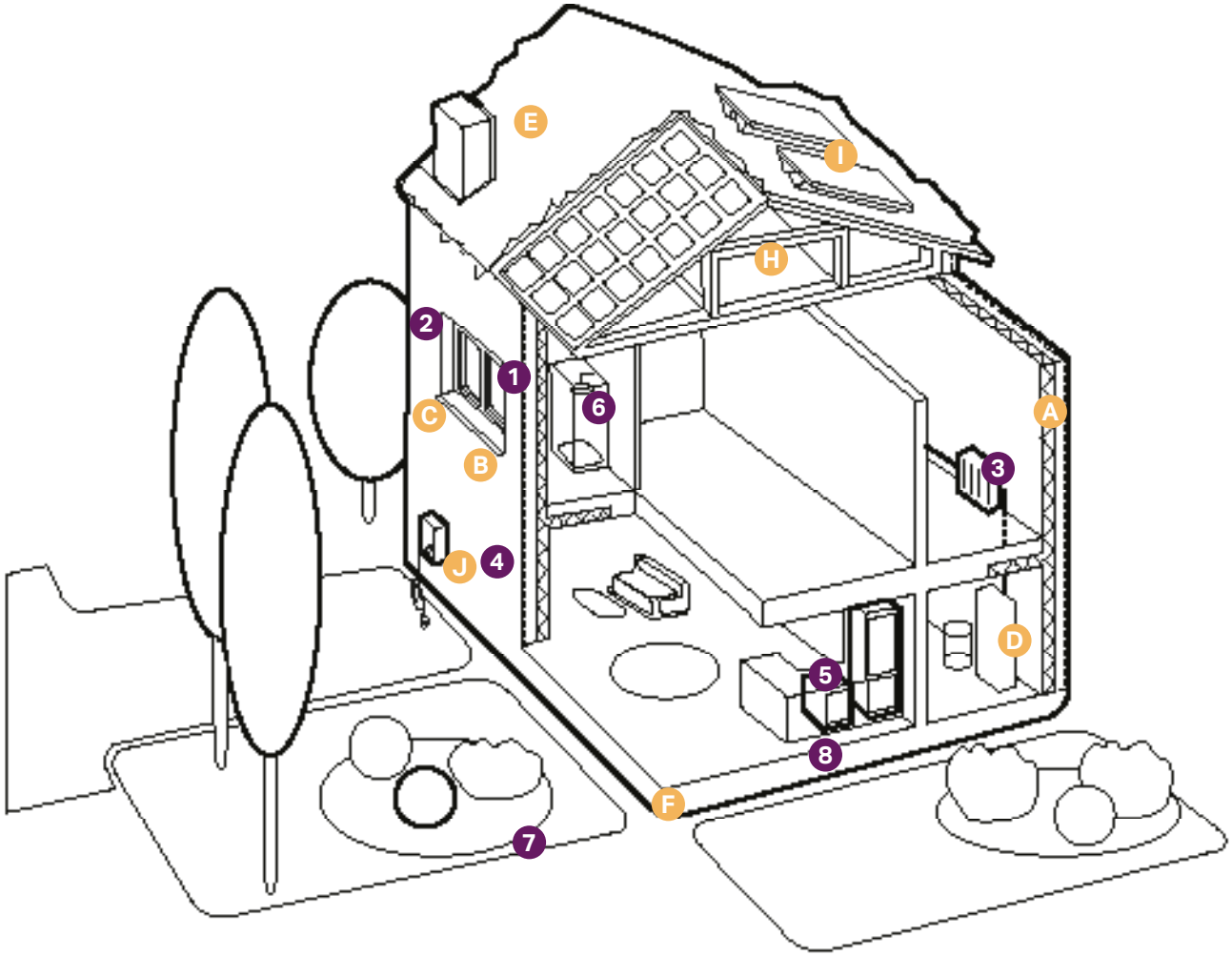


Low carbon development

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 brick 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**


HALLOWEEN
OPENING
Sunday
Roasts
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Additional Design Codes for the Historic Core

06

6. Additional Design Codes for the Historic Core

Additional Design Codes for the Historic Core Zone

The design codes in this section provide parameters and guidelines (in addition to the General Design Codes) that focus on sites within the historic consolidated residential and commercial core of the Built Up Area.

The extent of Historic Core zone matches that of the Character Area Historic Core. Following the additional codes in this section will make sure that any development of underused sites, derelict sites or sites facing the street or rear sites at the back of properties will maintain the Victorian character area.

This late 19th century area supports many of the community facilities in Englefield Green, including shops, public houses, schools and church. It maintains the distinctive character of a village core. The majority of buildings survive close to their original form, including some original shop fronts, institutional buildings and places of worship.

St Jude's Road and Victoria Street form the centre of the Historic Core Design Code Zone. St Jude's Road remains fairly unscathed in terms of buildings and shops. In Victoria Street a number of former shops, particularly on the Armstrong Gun side, have now either reverted to residential or been demolished to make way for houses, new flats, new offices and car parking. A number of shops remain on the other side of the street but many have been refurbished, occupied by companies and used as offices as opposed to high street retail.

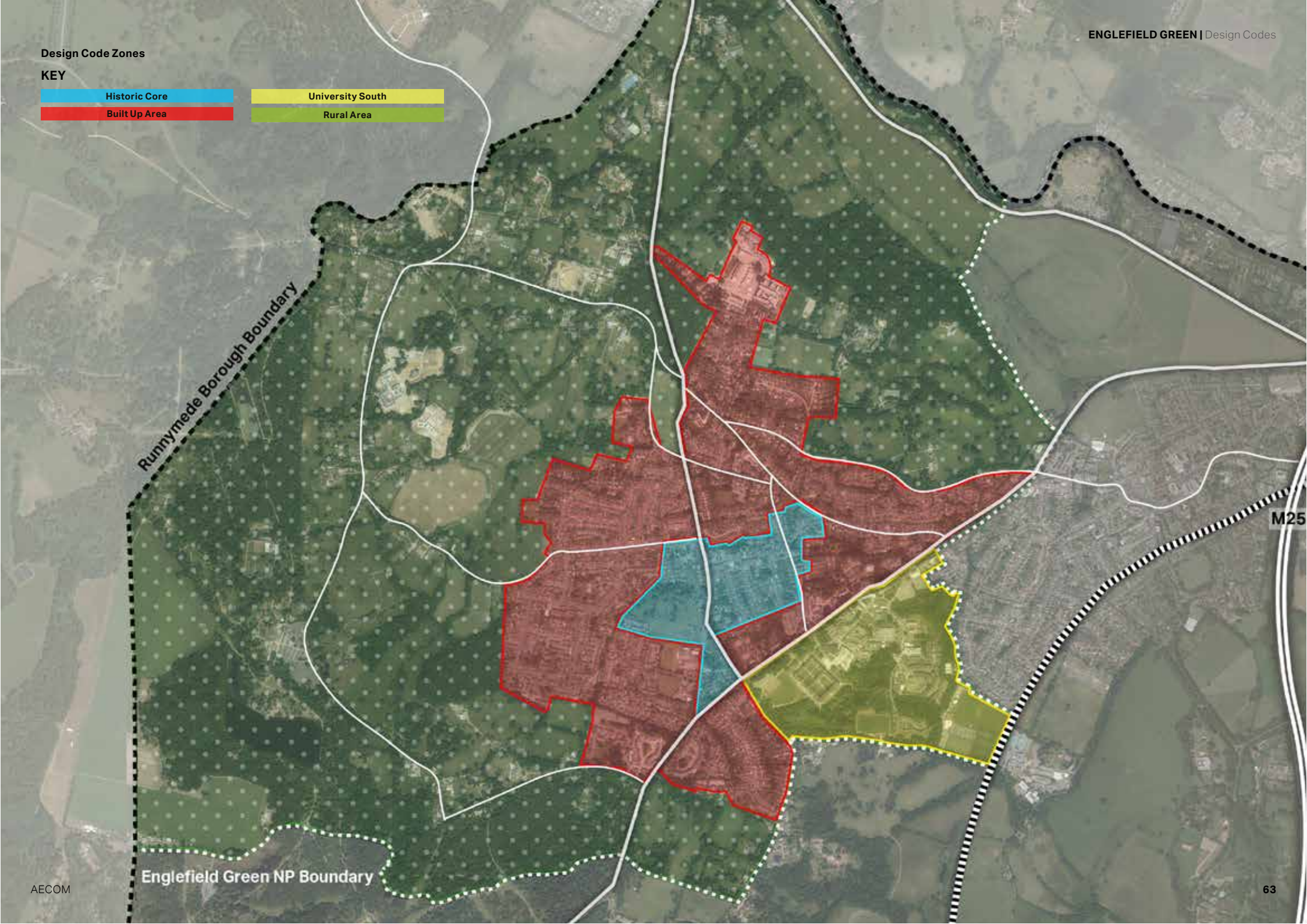
The cemetery is located centrally within the village next to the St. Jude's church and opposite the local shops and services. As a local open space, it is important to the character of the village and provides vital amenity and services for the residents.

Victoria Street. *View of the commercial core of Englefield Green.*

Design Code Zones

KEY

- Historic Core
- Built Up Area
- University South
- Rural Area



CH.01. Townscape & landscape quality

Sites fronting an existing street

Planting

- Planting and high quality landscaping is particularly relevant when located in the main facade. It should be provided when there is an existing setback in adjacent properties to maintain the building line.
- Planting should also be used to end views of existing properties to the site and provide buffers with existing neighbouring sites.

Wayfinding

Sites should aspire to be as permeable as good safety practises allows.

- Provide physical connection to the main street from buildings located at the back of deep sites and enhance connectivity to adjacent properties

Serial vision, building lines & setbacks

- Maintain the main building line towards the main street.
- Provide optimal setback from adjacent buildings to avoid direct overlooking of existing dwellings and concentrate the mass of the building to the open spaces of neighbouring properties.
- Make use of additional volumes and special architectural and decorative features that enhance the end of views from neighbouring properties to the new buildings.

Safe & lively spaces

- If car parking provision is envisioned, consider the use of parking courtyards hidden from the main street. Make sure that dwellings have multiple aspects to reduce the visual presence of the car parking in the interior of the living spaces. Overlooking and optimal lighting of the courtyard is nonetheless desirable to increase safety.
- Provide high quality landscaping and planting to buffer the presence of parking courtyards to the dwellings.

Shops and commercial fronts

- Shops are expected on the ground level when the neighbouring properties also display this use. Refer to code CO.14. In this section for further information on shopfront design.

Parking

- Car parking provision on new developments in the Historic Core is essential. On street parking is at capacity in the area. As a general rule, car parking provision should be sufficient to guarantee that the development does not pose strain on the existing on-street capacity, and ideally contributes to ease the pressure on it.

Maintain existing trees and use high quality landscaping and planting to guarantee the privacy of neighbouring back gardens

Consider sloping the roofline down from the centre of the ensemble to match the level of the property fences at its lowest point

Generally, buildings should be 1 storey, any construction of additional levels should be consulted upon

Break the mass of the development into disaggregated volumes to reduce the overall scale of the building on the site

Provide a distinct entrance to the site and any access corridor. Small bold constructions are encouraged they can provide an attractive view from the street.

Rear sites

Planting

- Planting and high quality landscaping should be used when there is risk of overlooking from the site towards the back garden of surrounding properties as a measure of privacy.
- Any existing tree should be retained and losses would need to be strongly justified.

Wayfinding

Site entrances should be recognisable from the street.

- Provide a distinct entrance to the site and any access corridor. Be considerate to existing properties and do not overwhelm the side elevations of existing dwellings.
- It is generally advisable to recess the entry from the existing building line to liberate the side elevations of existing dwellings.
- At the same time, consider a creating a potent front elevation to the access corridor, small bold constructions are encouraged. Whilst being sympathetic to the material palette and traditional materials, it can serve as bicycle and refuse storage and as a recognisable and attractive statement access gate from the street.

Serial vision, building lines & setbacks

- Break the mass of the development into disaggregated volumes to reduce the overall scale of the building on the site.
- Any building in direct contact with the surrounding back gardens should be one storey and provide blank elevations to the neighbouring garden. Any construction over one storey should be consulted directly with the neighbour and approved by the relevant authority.
- Consider sloping the roof line down from the centre of the ensemble to match the level of the property fences at its lowest point. This can create a highly contextual and vibrant development.

Safe & lively spaces

- Attach the development to existing fencing in a simple and clear fashion to avoid unnecessary nooks and corners.
- Provide lighting to the open spaces within the site. Make sure no unnecessary overspill affects neighbouring gardens.

CH.02. Heritage

Materials & features

Facade materials

The building materials tend to reflect an areas history and location, which then informs the distinctive character of a place. New development and redevelopments in the Historic Core should use the local materials in the design code zone.

- *Brick:* The local brick is predominantly rich hues of reds and orange, often with burnt headers. Gault, corner and coursing bricks at first floor are also common in lighter shades such as yellow and cream. New development should use bricks of a similar colour that are characteristic of the Historic Core.
- *Render:* Traditionally a smooth floated finish in a limited range of naturally occurring colours. The local vernacular rendering is generally light colours such as white or cream. It is recommended to keep rendering to subtle tones.
- *Stone:* Stone is not generally a material that is present in the Historic Core, therefore should not be used as the main building material. The only exception is the characteristic use of slate for roofing.
- *Weatherboarding:* Some gables display shaped timber.

Colours

The combination of colours used in the built environment contribute to the atmosphere and identity of a place.

Actions:

- A range of colours are currently used within the Historic Core, including white, reds, oranges, grey and hints of black.
- The colour palette for any new development should compliment the existing building colours and materials.

Windows & openings

Windows are the 'eyes' of a building and are crucial to its character.

Actions:

- A limited range of traditional window patterns are characteristic of traditional houses in the NF Area and provide appropriate models where a period effect is sought or required.
- Where possible, timber windows should be selected over uPVC alternatives; they can allow a finer profile to be achieved and if they are maintained properly they tend to be more durable.
- Aluminium windows can also offer a much greater range of design possibilities than uPVC alternatives, however these should not be considered as best option when choosing what material windows are made from.
- It is important that for good internal lighting the default position is for large windows on new development.

Images above show facade materials and colour examples in the Historic Core

Images above show architectural details and features of the Historic Core

- In general traditional styled windows look best when painted white; although other colours are welcomed as they add interest to the street scene. If the timber weatherboarding is painted in darker colour (grey or black) windows could also be coloured like the rendering of the building to blend in.
- Lintels frame a window and they should be designed with care. Timber lintels are the simplest form, characteristic of vernacular construction in timber-frame or brick areas.
- Ground floor windows can be larger and deeper than upper floor windows, as they add more animation to the streetscape.
- Windows should be set back from the facade to animate and provide interest to elevations. A setback depth of 75 to 100mm is standard in the Historic Core.

Roofs

A strong roofline and the different roofscapes are integral to this area's character.

Actions:

- The most common roof types within the central area pitched and hipped roofs.
- The predominant material used for roofing is natural slate.
- Strong roof lines can be created using a continuous line. This can be articulated with a variation in heights and slight setbacks.

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 the Historic Core.
- Architectural detailing shall typically display elements that equate to those on existing traditional buildings which provide interest, scale and texture to form and elevations.

Front doors, dormers & bay windows

- Front doors should display a traditional panel door, with or without glass.
- 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 Historic Cores's vernacular.

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.

Meter Boxes

- Meter boxes should be designed into the proposal 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. External meter boxes can be avoided through the use of smart meters.

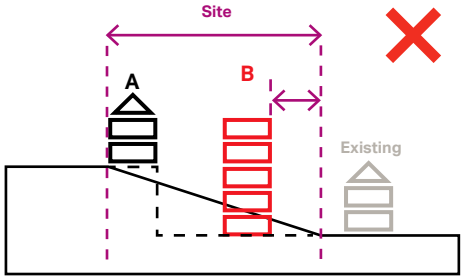
Bicycle and refuse storage

- For residential units, covered and secured cycle parking should be provided within the domestic curtilage. The most appropriate location to avoid clutter on the streetscape is to provide space for bicycles within garage sheds or in secure bike storage boxes on the rear gardens.
- The most appropriate location to avoid clutter on the streetscape is to provide space for waste bins in rear gardens.

Front garden rails

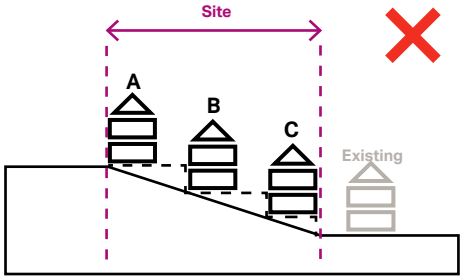
- When there is a front garden iron rails on brickwork or simply an iron rail are encouraged.

Images above show positive front garden boundary treatments (brick and rails) in the Area



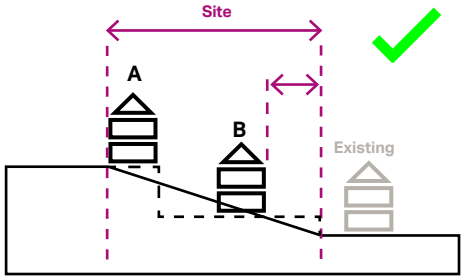
Example 1: Not Valid

Even if house A is 2 storeys+pitch, residential building B is providing a generous setback to the existing property and the slope is terraced to minimise impact, the building typology is a block of flats and the number of storeys is 5, and therefore not valid.



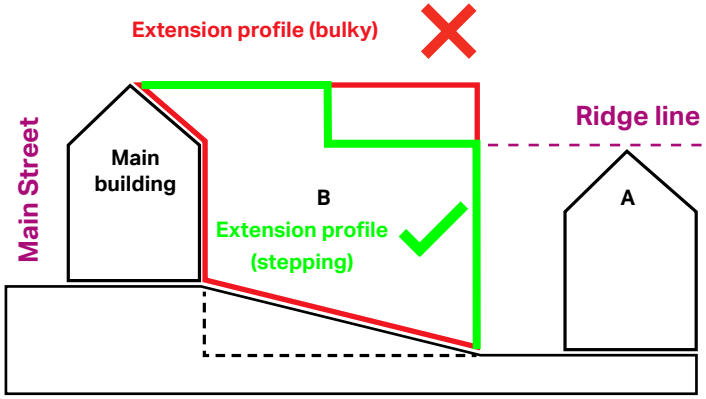
Example 2: Not Valid

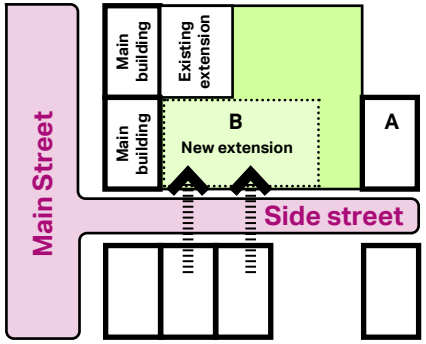
Even if all buildings are houses and the slope is terraced to guarantee a maximum number of 2 storeys+pitch, house C is not respecting the setback to the existing property, and therefore the example is not valid.



Example 3: Valid

Both buildings are houses and the slope is terraced to guarantee a maximum number of 2 storeys+pitch, house C is respecting the setback to the existing property, and therefore the example is valid.





Example 4: Main building facing main street and extension facing side street

New rear extensions should not dominate existing buildings or the side streets and the buildings on them. The elevation to the side street should follow the slope of the street and be stepped to never surpass the height of the ridge line of neighbouring buildings.

Architecture

Building typologies

The residential typologies in the historic core are: detached, semi-detached and terraced, up to 2.5 storeys. Along Victoria Street and St. Jude's Street the ground floor is used for shops. Some civic buildings rise up to 5 storey in this area. Some residential buildings are 2.5 storeys to the main street and their rear extensions rise to 5 storeys where the slopes allows.

Actions:

- New residential buildings should match the existing residential typologies: detached, semidetached and terraced houses. Blocks of flats should be avoided.
- New residential buildings should not be over 2 storeys + pitch.
- New buildings should setback from the boundary with existing properties by a distance that does not overwhelm existing buildings
- When the sloping condition of the site can result in buildings over 2 storeys + pitch that even if respecting setbacks and maximum number of storeys, overwhelm neighbouring properties, the proposal should mitigate that effect by terracing the site as per the diagram to the left.
- Follow the conditions for shop fronts and images in the next pages
- New rear extensions should not dominate existing buildings or the side streets if they are visible from them. The profile of the extension should follow the slope of the street and be stepped to match the height of the ridge line of neighbouring buildings.

CO.14. Retail, Commercial Leisure & Town Centre Development

Reflect the building

- Consider the overall proportion, form, and scale of the building's upper floors when designing new shop-fronts and alterations to shop fronts. Unnecessarily large shop-fronts or signage can detract from or even cover historically valuable architecture and, more generally, create a disjointed appearance.

Reflect the street & historic styles

- Integrate the shop front with the established streetscape, introducing a sense of variety but responding to the overall character of the settlement. This includes using the right materials, responding to a dominant scale and proportion, and following an established pattern.

De-clutter

- Unnecessary visual clutter should be avoided. This includes reducing unnecessary advertisements, plastic foliage or other elements stuck onto the shopfront, and removing general detritus such as visible AC units, wires and intrusive roller shutter boxes.

Structure and form

- Incorporate traditional elements such as fascia boards, cornices, pilasters, appropriately sized uninterrupted stall risers avoid large expanses of unbroken glazing. These elements create an appropriate architectural frame that results in a well proportioned shopfront.
- Whilst the exact proportion and detailing varies due to context, all shopfronts should incorporate an adequate architectural frame.
- Avoid the use of modern frame shapes and profiles.

Materials

- Historically, shop fronts and signs were constructed using timber. Use wood as the most appropriate material.

Signage

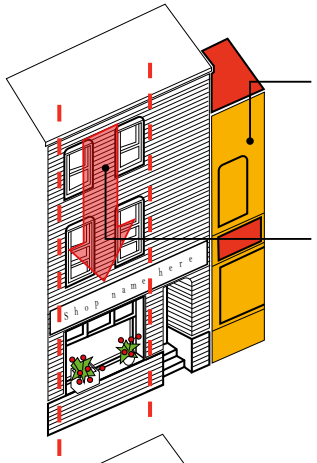
- The fascia is the most important area of a shopfront for advertising the business. Maintain the signage within the established proportions and confines of the fascia board. Large box signs or additional flat boards should be avoided as they create disproportionate depth and height.
- The most appropriate signage at fascia level is individual letters applied or painted directly onto the fascia board.
- No signage should be shown on the upper floors of the building.
- Hanging signs should be appropriately sized in relation to the building and street. They should not dominate the pavement space. They should use an appropriate material, shape, and form avoiding large box signs.
- Hanging signs should be held by slender, well-designed, brackets using a quality material.

Lightning

- Avoid using visually distinct sources of illumination that result in disproportionate signage, such as internally-illuminated box signs.

Safety

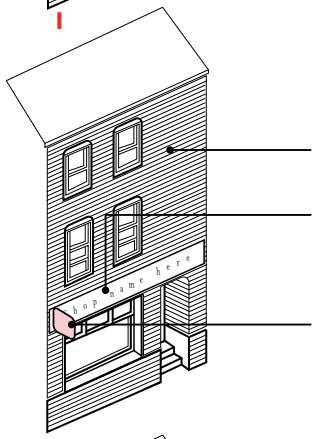
- Avoid using external roller shutters and grilles. Favour the use of internal open grilles which cover only the glazed part of the shop front.
- Conceal alarms from the shop front facade and integrate them discretely within the shop front design or to the side of a building.



Character & design

Integrate the shop front with the surrounding streetscape. Consider adjacent buildings and typical details in the area

Reflect the building on the shop front. Incorporate the overall proportion, form, and scale of the building's upper floors into the design of the shop front.



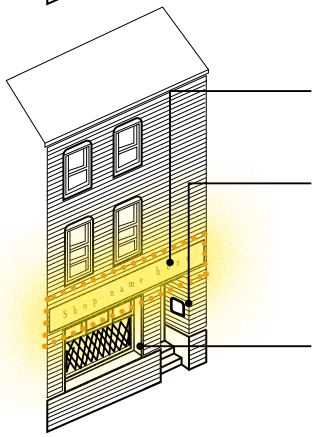
Signage

Avoid unnecessary visual clutter

Signage should not be placed on upper floors

Use the fascia as the predominant position for signage

Hanging signs should be in proportion to the building and street and should not dominate pavements



Lighting & safety

Avoid using internally-illuminated box signs

Conceal alarms from the shop front facade and integrate them in the design

Avoid using external roller shutters and grilles. Favour the use of internal open grilles which cover only the glazed part of the shop front

Images above show positive examples of shop fronts on Victoria Street & other locations within the Historic Core

DESIGN CODES: RURAL AREA

07

7. Additional Design Codes for the Rural Area

Additional Design Codes for the Rural Area

The majority, but not all, of the housing in this zone is of mansion size (above 10,000 ft area) with very large grounds (1 to 10 hectares). The additional design codes in this section therefore focus on conditions for redevelopment of older Mansions and/ or old manorial estates that exist within this zone.

These additional codes assume are intended to encourage proposals that use an existing footprint to create an ensemble of a number of upmarket houses. The aim of the additional codes for this zone is to maximise the use of land when the redevelopment of these sites is suggested, (subject always to Green Belt National, Local and Neighbourhood planning policies) and to encourage their replacement with a harmonious ensemble of outstanding properties fully integrated in the community.

The design code *CH.04: Conservation Area* included in this section gives guidance on the redevelopment of sites of similar conditions to those in the previous paragraph when they are in the vicinity of the Green.

NB

- As the conservation area and the Green abut the Built up Area Design Code Zone and the Rural Area Design Code Zone, the design code CH.04 should be applied equally to both zones.
- National and Regional Planning Policy, such as that in the NPPF and the Local Plan, will be key considerations in the design of any scheme, e.g. those located in the Green Belt, and it is recognised that these policies may limit the ability of a proposal to meet **all** of the design code requirements in this section, which covers land that falls within the Green Belt.

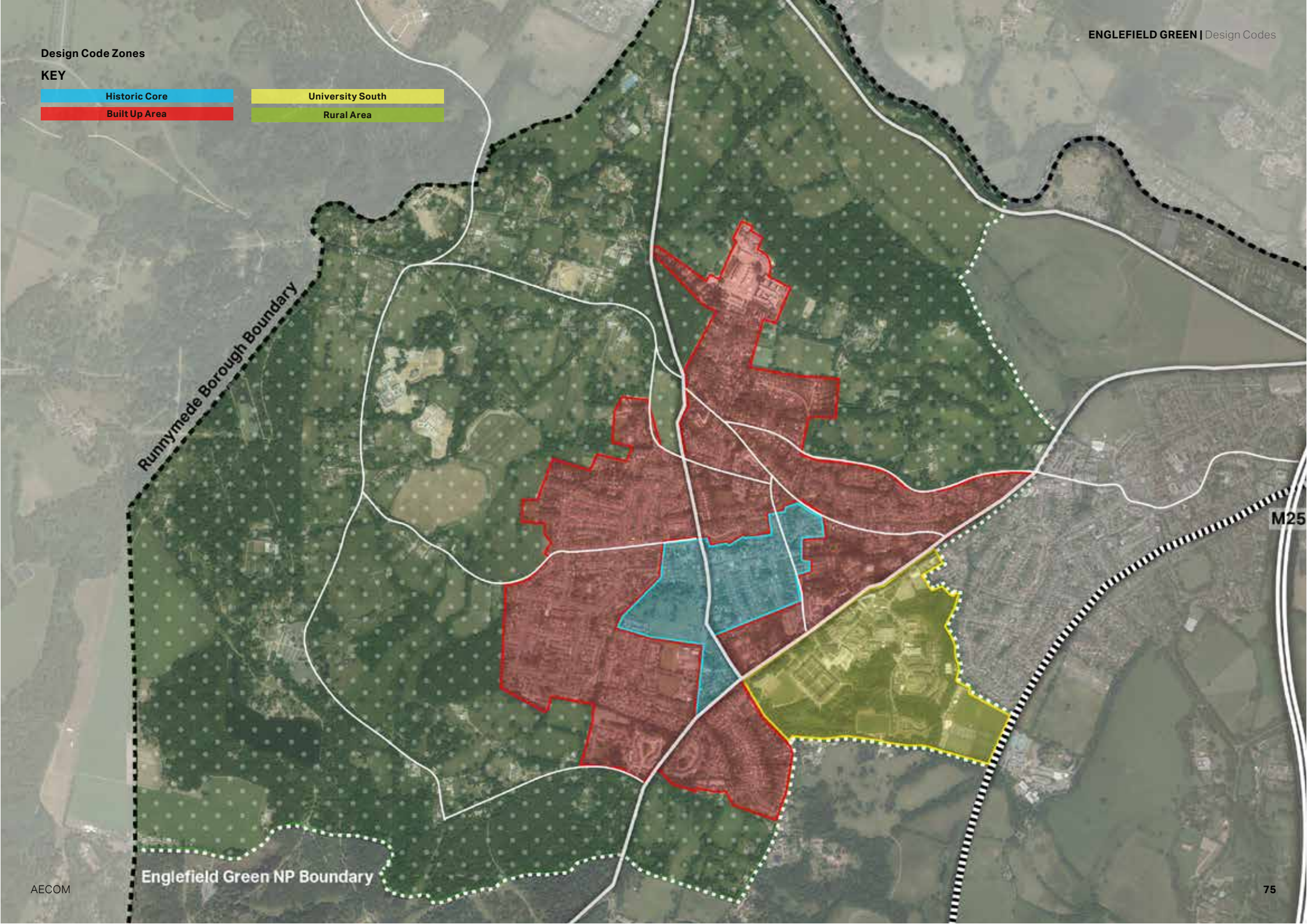
Cooper's Hill Lane. *View of Richardson House, exemplary of the type of bigger properties in the open land*

View of Englefield Green. *View of the green and listed buildings facing it.*

Design Code Zones

KEY

- Historic Core
- Built Up Area
- University South
- Rural Area



CH.01. Townscape & landscape quality

Planting

Ornamental planting on the formal garden and front gardens

Flower beds, bushes and ornamental trees contribute to the livelihood of the formal garden. Together with the planting within the front curtilage of each property, ornamental species add interest and colour to their surroundings and become an identity and expressive feature of the new development.

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.

Reference trees

Trees can normally be used to mark reference points and as feature elements in the streetscape. When planted in intersections and key locations and help with privacy whilst enhancing the wayfinding and distinctiveness of the area.

Buffer trees

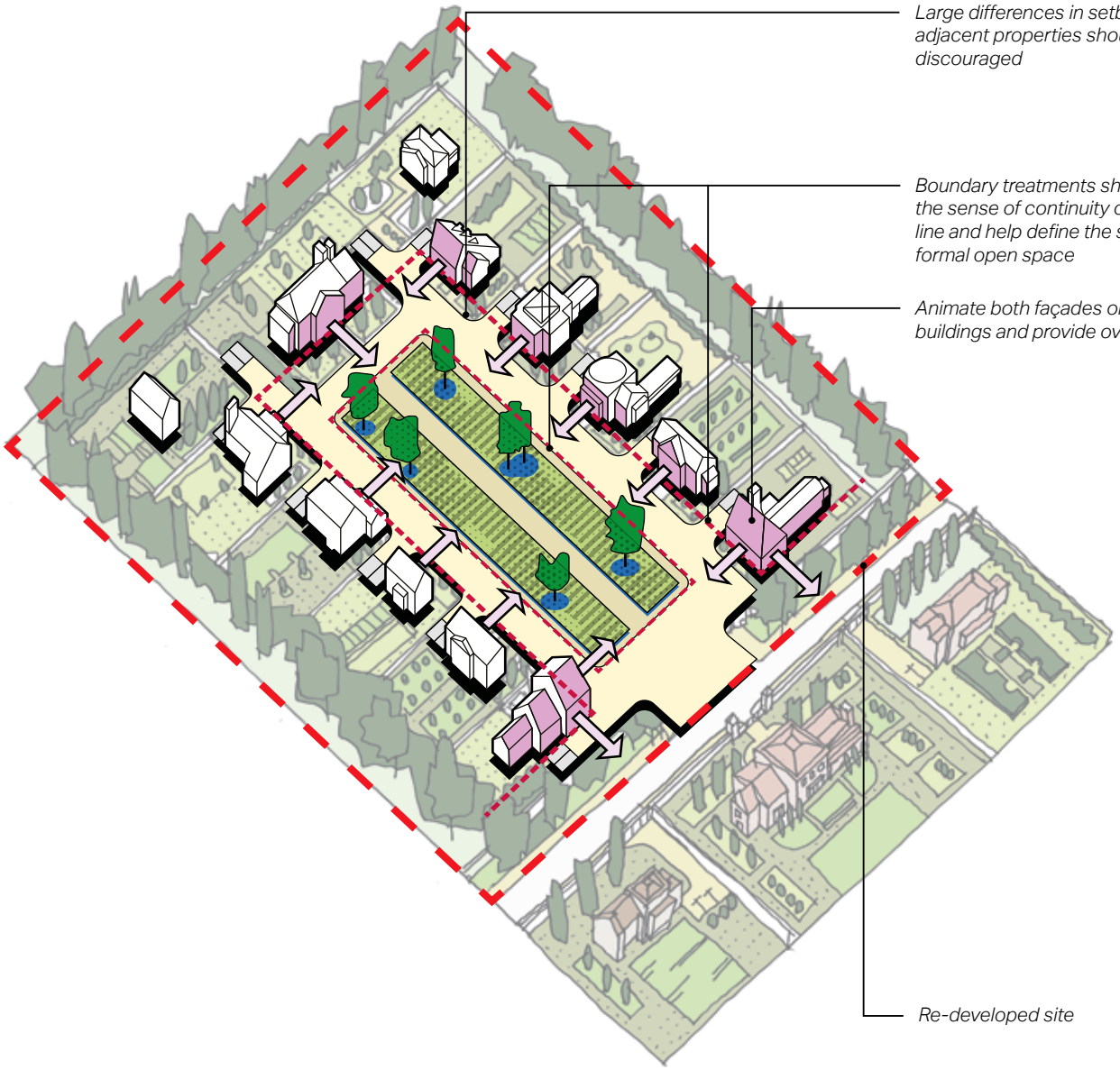
Trees can also be used as buffer between the back of the properties and the open landscape. They are a key element in reducing the bareness of property boundary walls to the street.

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:

- Existing trees should be retained as much as possible.
- 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 there should be planted at least two new trees.



Wayfinding & perception

Building lines

The way buildings sit in relation to the formal open space 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 and formal open space. Generally, planting and low walls should be favoured as boundary treatments inside developments that are already secured with high walls and gated to the exterior. The feeling of 'gated community bunker living' should be avoided.
- Boundary treatments should not impair natural surveillance.

Setbacks

Actions:

- A coherent street frontage should be achieved by coordinating the setback between buildings and the street/formal open space. Large differences in setbacks for adjacent properties should be discouraged.

Overlooking

A feeling of safety and community can be achieved by maximising overlooking to the open spaces.

Actions:

- Provide safe and large windows to the open space, both at ground and upper levels.
- Carefully use planting to provide a balance between the need to provide overlooking to the exterior and privacy to the interior of properties.

Buildings turning a corner

Actions:

- Animate both façades on corner buildings with doors and/or windows. Consider decorative architectural feature elements for these building types, given their prominence and their ability to underline special conditions, such as the main entrance to the development site.

CH.04. Conservation area

Conservation Area

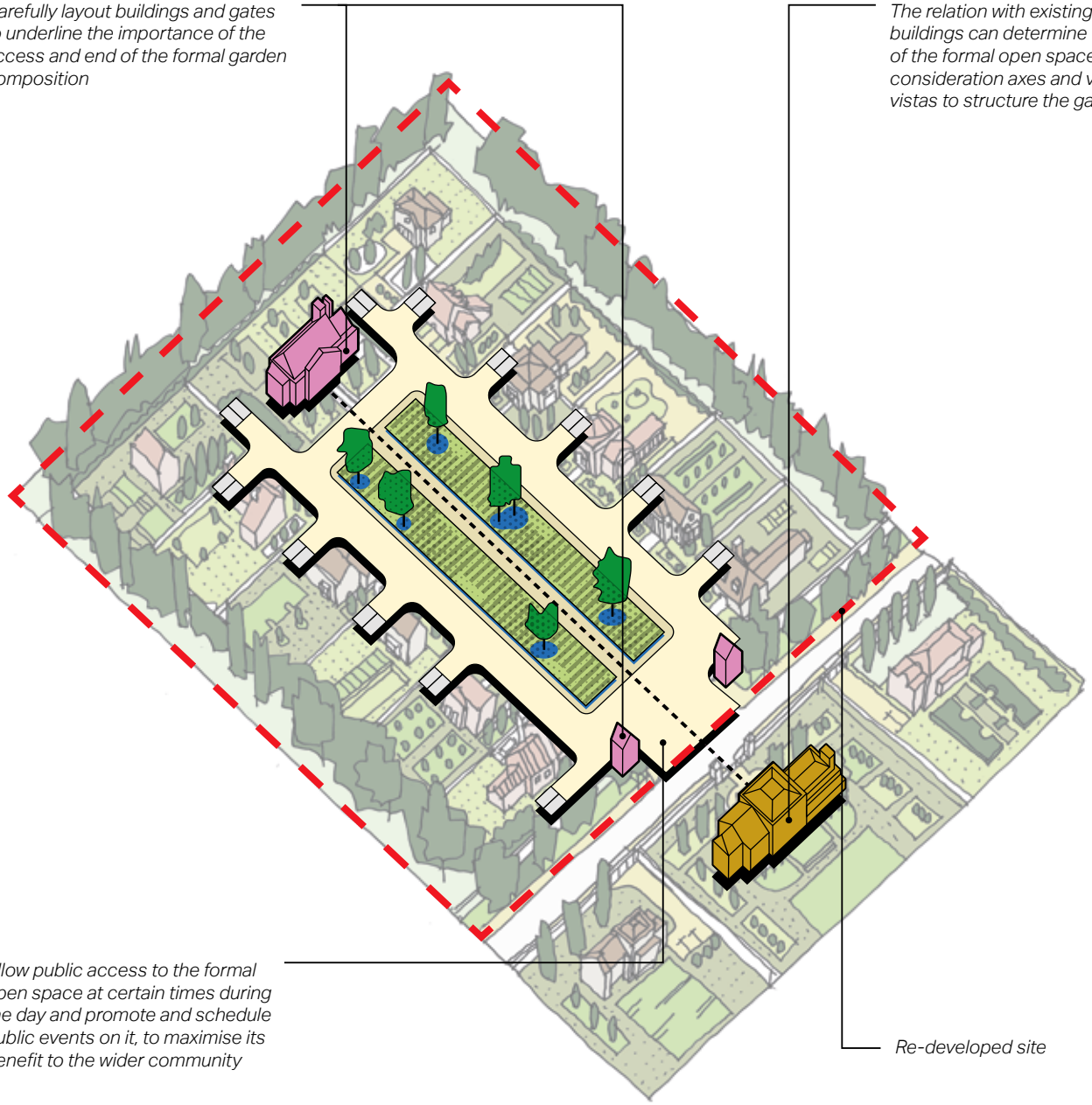
- The Conservation Area includes buildings and land immediately adjoining the principal open area of Englefield Green. To the north it also comprises the wooded part of the Green with its surrounding development of mainly Victorian and turn of the century housing, some of which has considerable character

Actions:

- Consider the visual impact of properties when fronting the Green, maximise overlooking and provide direct access towards the open space.
- Use traditional features that do not clash with the general feel of the area, in particular when building façades are fronting the Green.
- Use high quality materials in keeping with those in the NF Area in the boundary treatment of any walls and fencing to the exterior. Provide high quality planting and landscaping if appropriate to mitigate the presence of property walls.
- Acknowledge the potential of those buildings fronting the Green to become landmarks to the Conservation Area.
- Consider the opportunity to connect visually and physically any formal open green spaces within the new development to the Green.

Englefield Green

CO.07. Open Spaces



Formal open spaces

New developments in the NF Area could utilise formal open space to structure the rest of the built development around it.

Formal open spaces traditionally refer to spaces with well defined boundaries that display high standards of horticulture with high quality and detailed landscaping.

Actions:

- Take into account pre-existing heritage and landmark buildings or viewpoints and vistas in the NF Area to place strong and meaningful axes that can structure the composition of the formal open space.
- Use the newly built buildings and/or gate buildings and gates to mark the start and end of the formal open space composition.

Accessibility

Actions:

- Maximise the benefit of the garden to the rest of the community by allowing passers-by to access the formal garden during daytime on selected hours. A green, publicly accessible garden is a functional, safe and healthy space that tights bonds within the different members of the community.
- Schedule fairs and public events to happen in the garden, enhancing its public purposefulness, reach and benefits.

Traditional English garden examples

DESIGN CODES: UNIVERSITY SOUTH

08

8. DESIGN CODES: UNIVERSITY SOUTH

University South Design Code Zone

The University South Design Code Zone is limited to the RHUL grounds to the south of the A30. This campus is fenced off with a perimeter wall and is separated from the rest of the settleement by the road.

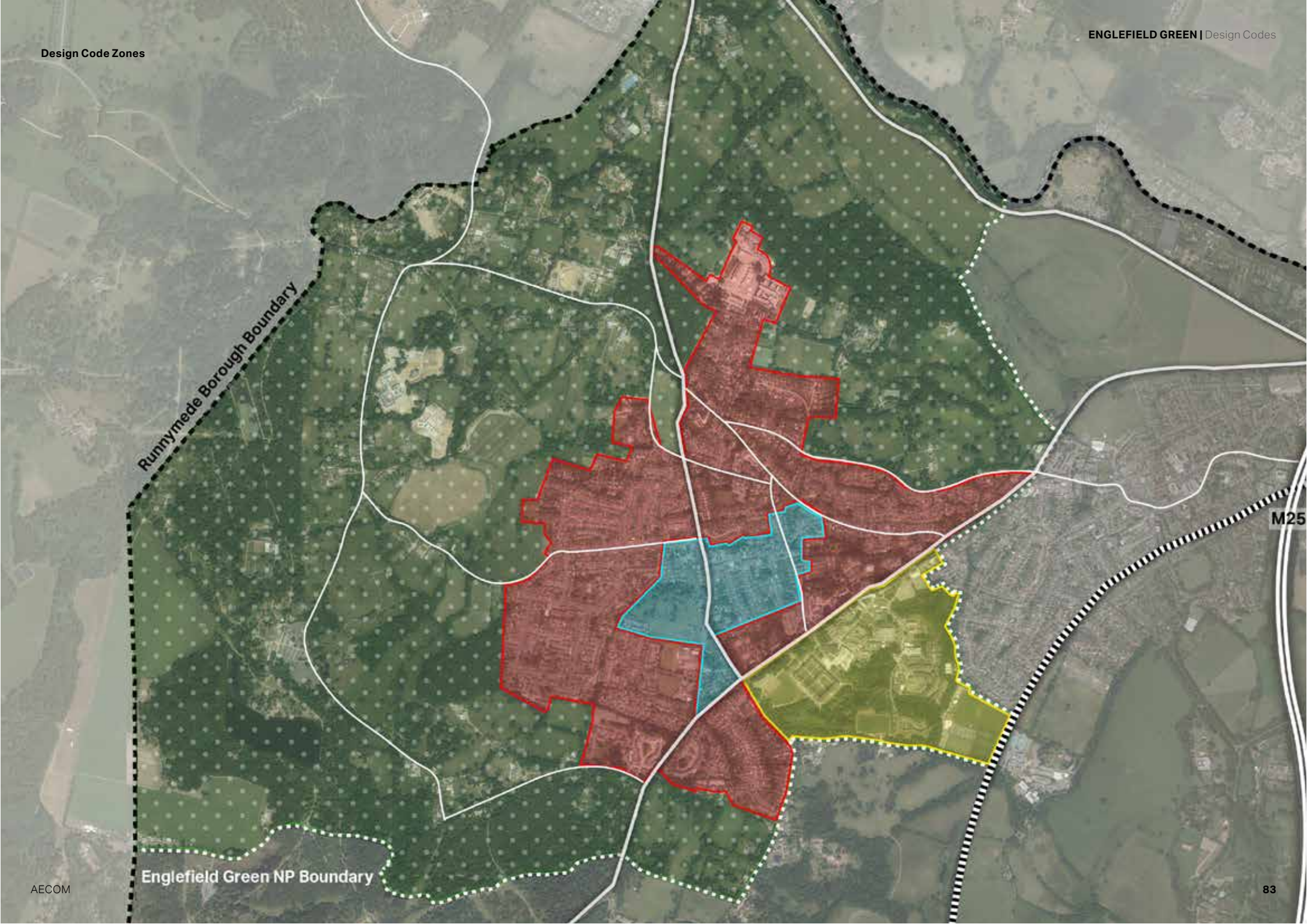
This campus was founded by the Victorian entrepreneur Thomas Holloway in 1879 on the Mount Lee Estate. Sir Nikolaus Pevsner called the original college *"the most ebullient Victorian building in the Home Counties",* and noted that, together with its sister building the Holloway Sanatorium, it represents *"the summit of High Victorian design".*

The Founder's Building, with its striking north and south towers and two large quadrangles and its distinct architectural features coexists with new ones, such as the Emily Wilding Davison Building, completed in 2017, that holds a new library and student services centre.

Generally, the design code *CO.06 Students* detailed in the Built up Area zone is of application in the University South zone. However, as new designs in the University South Zone don't have a great potential to negatively impact the existing urban tissue, the code C0.06 should be applied flexibly and taking into consideration the input that RHUL stakeholders might have on design. Consequently, no new specific codes (other than the design code CO.06) are detailed in this section.

Aerial view of the RHUL campus south of the A30 and separate from the Urban Area, with the original building and recent extensions and additions.

Design Code Zones



DELIVERY
09

9. DELIVERY

These desing codes consider the spatial and contextual character of the NF Area and subsequently set out the conditions that any development in the NF Area should follow. It demonstrates how future developments might create high quality places in a way which responds to and enhances the rich character of the Area.

These design codes can be a valuable tool for securing context-driven, high quality development in the Area, especially on potential sites that might come forward in the future. They 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.

These design codes are anticipated to be used by different stakeholders in the planning and development process in the various ways summarized 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.
Neighbourhood Authority	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.

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