locality

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Babworth

Design guidance and codes

Final report August 2023

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Quality information

Prepared by	Check by	Approved by
Angus McNeill Peel Urban Planner	Ben Castell Director	Ben Castell Director
Jack Wilton-Cooley Graduate Planner		

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1. Introduction

The purpose of the design guidance and codes is to ensure that development which may occur in Babworth is of a high quality design and suited to its context.

1.1 Purpose

This document sets out design guidance and codes based on the existing features of Babworth. The design guidance and codes within this document will be used by different users: by applicants preparing schemes in Babworth, by Babworth Parish Council (SG) when commenting on planning applications and by Bassetlaw District Council (BDC) when determining planning applications. It sets out the expectations for proposals and ensures that they will consider Babworth's key defining characteristics.

1.2 Process

Through the Department for Levelling Up, Housing and Communities Neighbourhood Planning Programme led by Locality, AECOM was commissioned to provide design guidance to support the group.

The SG provided guidance and local knowledge to inform this design guide. Figure 1 provides a brief overview of the key milestones of the preparation of this guide.



Figure 01: Diagram illustrating the process to prepare this design guide

1.3 Policy context

This section outlines the national and local planning policy and guidance documents that have influenced, and should be read in conjunction with, this design guide.

National Policy Guidance

2021 National Planning Policy Framework

Department for Levelling Up, Housing and Communities

Development needs to consider national level planning policy as set out in the National Planning Policy Framework (NPPF) and the Planning Practice Guidance (PPG). In particular, NPPF Chapter 12: Achieving well-designed places stresses the creation of high-quality buildings and places as being fundamental to what the planning and development process should achieve. It sets out a number of principles that planning policies and decisions should consider ensuring that new developments are well-designed and focus on quality.

2021 National Design Guide Department for Levelling Up, Housing and Communities

The National Design Guide illustrates how well-designed places that are beautiful, enduring and successful can be achieved in practice. Well-designed places have individual characteristics which work together to create its physical character. The guide introduces the 10 characteristics of well-designed places.

2021 National Model Design Code Department for Levelling Up, Housing and Communities

This report provides detailed guidance on the production of design codes, guides and policies to promote successful design. It expands on the 10 characteristics of good design set out in the National Design Guide. This guide should be used as reference for new development.

2020 Building for a Healthy Life Homes England

Building for a Healthy Life (BHL) is the new (2020) name for Building for Life, the government-endorsed industry standard for well-designed homes and neighbourhoods. The new name reflects the crucial role that the built environment has in promoting wellbeing. The BHL toolkit sets out principles to help guide discussions on planning applications and to help local planning authorities to assess the quality of proposed (and completed) developments, but can also provide useful prompts and questions for planning applicants to consider during the different stages of the design process.

2007 Manual for Streets Department for Transport

Development is expected to respond positively to the Manual for Streets, the Government's guidance on how to design, construct, adopt and maintain new and existing residential streets. It promotes streets and wider development that avoid car dominated layouts by placing the needs of pedestrians and cyclists first.

Local Policy Guidance

Draft Bassetlaw Local Plan

Bassetlaw District Council

The Council is producing a new Local Plan in order to help guide development in Bassetlaw over the Plan period from 2020 – 2037. This is one of the most important strategies that the Council produces.

2013 Successful Places Supplementary Planning Document (SPD)

Bassetlaw District Council

This SPD supports the design policies in the Bassetlaw Development Plan. It sets out the expected approach to the design process; identifies and explains the key design principles that should shape a design; and identifies relevant considerations in respect of management and maintenance.

2014 A guide to good shopfront design and signage Supplementary Planning Document Bassetlaw District Council

This supplementary planning document (SPD) is intended to provide guidance to anyone proposing new, repairing or replacing shopfronts. Policy DM4 of the Bassetlaw Core Strategy and Development Management Policies DPD requires development to be of high quality design, whilst policy DM8 is specific in its requirements for proposals for new shopfronts or alterations to shopfronts that affect heritage assets (see below).

The purpose of any shopfront is to attract shoppers. A shopfront that is well designed gives a favourable first impression of a business and collectively of the town or village in which it is located. Conserving or reinstating traditional shopfronts not only enhances an area but can have economic benefits by increasing tourism and footfall.

2012 Residential Parking Standards Supplementary Planning Document Bassetlaw District Council

This Supplementary Planning Document (SPD) forms part of the Bassetlaw Local Development Framework. It has been produced to expand upon Policy DM13: Sustainable Transport in the Core Strategy & Development Management Policies DPD, setting out the approach that the Council expects developers to take when establishing parking requirements for new residential development proposals. It will be revised and updated as appropriate in line with changes to higher tier policies or to local circumstance

1.4 Area of study

1.4.1 Overview

According to the 2021 Census the parish had a population of 1,488. The parish of Babworth is located immediately west of Retford which is a large market town providing a range of retail services and employment uses. Babworth is located within the administrative boundaries of the district of Bassetlaw within Nottinghamshire.

The parish of Babworth is bordered to the west by Blyth Road (A1) which runs from London to Edinburgh, the road becomes a motorway (A1(M)) at Blyth which is a village 5 miles northwest of Babworth parish. Straight Mile Road (A620) is the primary vehicular artery running through the parish from east to west connecting Retford to Ranby and onwards westwards to Worksop. Mansfield Road (B6420) connects Retford to the A57 and A614 offering connections to Worksop, Sheffield, Ollerton and the south of the county. The East Coast Main Line passes through the north east of the parish connecting London King's Cross to Leeds, Newcastle, and Edinburgh. The Sheffield to Lincoln line crosses through the middle of the parish.

The parish's main settlement is Ranby, located 4 miles west of Retford and 5 miles east of Worksop. Babworth is a small hamlet located 1 mile from Retford. There is a large prison located in the middle of the parish. The nearest train station is located at Retford Station which has four platforms, two of which serve northbound and southbound trains, with the other two serving northern trains on the Sheffield to Lincoln Line.





Figure 02: St Martin's Church of England Church (above). Figure 03: Land west of Retford Road (below).



Retford Road

Blyth Road

Straight Mile

Warsfield Road

0

Figure 04: Neighbourhood Area map.

© Earthstar Geographics SIO

1.4.2 History

Prior to the Norman conquest, Babworth was known as Babvrde, when the land holdings of the parish consisted of "six and a hald bovats of land".

Throughout the middle ages, the parish changed hands between several families and developed slowly around Babworth Hall.

Babworth in the 19th century is described as containing "the hamlets of Great and Little Morton, Morton Grange, and Ranby, contains nearly 6000 acres, of excellent forest land, mostly enclosed". At this time, John, B, Simpson held the land which hosted a steward's house, and farming buildings.

Babworth is well known for its connection with the Pilgrim Fathers of the USA, specifically the early settlers of the Plymouth Colony in presentday Massachusetts. Richard Clyfton of Babworth was parson at All Saints Church between 1586 and 1605, living in the now Grade II listed Haygarth House. Two of Clyfton's friends were William Brewster and William Bradford who were passengers aboard the Mayflower. Babworth retained its connections with early American heritage when the Rector was Frank Wilberforce who was the great-grandson of William Wilberforce, who led the campaign to abolish slavery.

The parish has several Grade II listed structures as well as one Grade I structure at All Saints Church.

pre-1066

Babworth (Babvrde) belongs substantially to Earl Tosti and is part of the King's Manor of Bodmeschell.

1086

Roger de Busli buys the whole of the land, the **Domesday Book certifies it** to be one carcucate and a half, with a border, pasture wood two quarents long, and one broad.

The Earl of Lancaster and Robert de Saundeby are certified to have been the lords of Babworth.

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Nearly the whole of Babworth becomes the property of Sir Thomas de Grendon who later sells it to Sir William Trusbutt.

J Bridgeman Simpson inherits 18th century **Babworth Hall** and commissions Humphry Repton who produces The Red Book of proposed alterations to the property including the landscape.

15th century All Saints Church in Babworth is restored, and a stained glass by Charles Eamer Kempe is added.

The Hall and grounds are renovated according to The Red Book.



1.4.3 Landscape

The parish lies on a relatively flat landscape ranging from 18m Above Ordnance Datum (AOD) at the eastern edge of the parish, to approximately 40m at its highest point along the Straight Mile Road towards Ranby.

The Chesterfield Canal runs across the northern portion of the parish, with a small strip of Flood Zone 3 affected land in the southwest of the parish.

One of Babworth's defining characteristics is the presence of woodlands which are scattered in small pockets throughout the parish. The majority of the wooded clusters consist of broadleaved and low density woods, with mixed woods and young trees also evident.

All Saints Church and Babworth House are surrounded by woodpasture and parkland which are designated as priority habitats. There are also several pockets of deciduous woodland, also a priority habitat, across the wooded areas of the parish.

The surrounding landscape is also broadly agricultural in nature with open arable farmland.





Figure 06: Spectacle Wood. Figure 07: Track near Bowman Hill.



1.5 How to use the guide

The intention of the design guidance and codes is to secure locally distinctive, high quality development in Babworth. It will be used differently by various users during the planning and development process, as summarised in **Table 1**.

The Design Guide can be used to facilitate a process of co-design, ensuring the consideration of local preferences and communicating expectations for design quality. The Design Guide will not automatically secure optimum design outcomes but can help facilitate proactive conversations around design.

Stakeholder	How they will use the design guidelines
Applicants, developers and landowners	To consider and refer to during the design evolution of proposal.
Local Planning Authority	As a material planning consideration during the consideration of any pre- application enquiry and determination of planning applications.
Parish Council	As a guide when commenting on planning applications, ensuring that the design guide is 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.

Table 01: Stakeholders and how they may use this design guide

Design guidance and codes

02



2. Design guidance and codes

This section sets out the principles that will influence the design of new development and inform the retrofit of existing properties in the Neighbourhood Area. Local images are used to exemplify the design guidelines and codes.

The design guidance and codes support the Neighbourhood Plan and should be read in conjunction with other relevant policies.

2.1 Introduction

The design guidance and codes have been prepared to be consistent with and complementary to the design related policies and SPDs adopted by Bassetlaw District Council. This document aims to apply highly specific guidance for development within Babworth parish, in accordance with the views of local residents as represented by the Neighbourhood Plan SG. It is important that any new development in Babworth enhances the local character of the area, sits appropriately within the Bassetlaw landscape, and aligns with the aspirations of the local community.

The codes are organised as follows, specific guidance is included under the following headings:

- Form and layout (FL)
- Rural character (RC)
- Green features (GF)
- Sustainable futures (SF)

2.1.1 What is guidance and what is a code?

Codes are to be understood as specific instructions which give clear directions for the development of design proposals.

Additional suggestive information including diagrammatic information should be understood as best-practice guidance only.

2.2 Form and layout (FL)

FL 01. Inward and outward views

Views and vistas towards the countryside from the village and landmarks within Babworth are fundamental to the parish's landscape and historic setting.

The following principles should be considered by development proposals:

- How the scale and design of development, including landscape screening, can be provided in a way that is not visually intrusive;
- How the fabric of the village, including the settings and views of designated heritage assets, can be protected and enhanced;

- iii. How to incorporate appropriate landscape and built features to create and strengthen views and vistas or foster landmarks, helping with legibility. For example, mature trees and other landscape features at entrances to the development provide wayfinding for pedestrians;
- iv. How to maintain existing visual connections to the surrounding countryside and long views out of the settlement; and
- v. How to generate short-distance views broken by buildings, trees or landmarks to help create memorable routes and places, and easily intelligible links between places. This should include orientating buildings to maximise the opportunities for memorable views and visual connectivity.



Figure 13: An indicative diagram highlighting the design principles respecting views and vistas.



Figure 14: View of Chesterfield Canal from Ranby (left). Figure 15: View of All Saints' Church, Babworth (top, right). Figure 16: Landscape view south of Ranby (bottom, right).

FL 02. Layout of buildings

The parish of Babworth owes much of its character to the nucleated pattern of development within the settlements of Ranby and Babworth.

In addition to establishing a rich streetscape, development should lay out buildings in a manner that responds to the context of the site within the wider village.

The following principles should be considered by development:

i. The contribution of the development to the village as a whole, rather than in isolation.

- ii. The existing building layout, density of housing and pattern of development.
- Provide adequate separation distances between facing windows to ensure privacy is maintained (refer to the Bassetlaw Local Plan). In exceptional circumstances where separation distances cannot be achieved, provide planting to screen development. Any proposed landscaping must maintain solar access and the amenity of the street and neighbours.

Additional design principles for development on different types of sites within the village - edge, infill and gateway are provided over the following pages.





FL 02.1 Village edge

New development often occurs at the edges of a settlement. Development on the edge of settlements plays an important role in defining the interface between the settlement and surrounding countryside. Most new housing developments in Babworth and Ranby are likely to be at the village edge.

The following principles should be considered by village edge development:

 Gradually transition edge of settlement development to the surrounding countryside context with a soft, low density edge. Visually permeable boundaries (e.g. low hedgerows or timber post and rail fencing) towards the open countryside is encouraged to form a gradual transition from the village built form. surrounding countryside and long views out of the village. Development density should allow for spaces between buildings to preserve views of countryside setting and maintain the perceived openness of the settlement edge.

- iii. Building elevations along the existing edge of the settlement should connect into it and should provide an attractive and positive frontage. Development interfaces with back-to-back or front-to-front relationships should be created across the existing settlement edge, and front-to-back relationships avoided.
- iv. Incorporate a comprehensive layered landscape buffer to the countryside to avoid an abrupt boundary to the village.



ii. Maintain visual connections to the

Figure 18: An indicative diagram highlighting the design principles for edge development.

FL 02.2 Gateway

A gateway site is normally situated at the edge of a settlement, near a main route into the settlement. It plays an important role in marking the transition from one space to another, and is a point of arrival to, and departure from, a settlement. This sense of arrival and departure can often be achieved by a noticeable change in scale or enclosure. Gateway buildings or features are therefore prominent and should reflect the local character.

The following principles should be considered by development at a gateway site in Babworth:

i. Locate a building or a group of buildings at the corner of the site and along the main route. If a gateway site is developed with a number of buildings, the corner of the site should act as the key landmark. The corner building could be slightly taller or display another built element, signalling its importance within the grouping.

- ii. Fenestration contributes to the character of a building. Long stretches of blank (windowless) walls should be avoided, including on side elevations, except where this is in keeping with the character (e.g. farmyard-type buildings).
- iii. A gateway site should respond to existing development and landscape on the opposite side of the main route into the settlement.
- As well as buildings acting as gateways, iv. high quality landscaping features can also be used to fulfill the same function, especially tree planting.



Figure 19: An indicative diagram highlighting the design principles for gateway development.

FL 02.3 Infill

Infill sites will vary in scale, context and location within a settlement. Any new infill can have significant impact on the character and appearance of the settlement.

The following principles should be considered by infill development:

- i. Infill development should complement the streets. Its scale, density, massing and layout should reflect the context within which it sits;
- ii. Infill development should utilise an architectural style that compliments and aligns with the local vernacular;
- iii. The building line of new development should be in conformity with the existing buildings; and
- iv. The density of any new infill development should reflect the character of the immediate area and location within the village. The optimum density will respond to surrounding densities, whilst making efficient use of land.





Figure 21: An indicative diagram highlighting a site with infill (bottom image).

FL 02.4 Canalside development

Ranby village is characterised by the Chesterfield Canal which runs along the western edge of the settlement parallel to the Blyth Road. The canal runs onwards to Retford to the east and Worksop to the west.

Waterways can be integral to the creation of a sense of place in an area, and development adjacent to waterways have an opportunity to respond positively to these attractive landscape features.

Canalside development is likely to occur in Ranby, therefore the following principles should be applied to development adjacent to the canal:

- i. Where possible, routes should be oriented parallel to the canal course to allow for visual engagement. This can also serve to improve wayfinding.
- ii. Properties should generally be fronted onto the canalside, with primary entrances and fenestration facing the canal.
- iii. Developments adjacent to the Chesterfield Canal should utilise the water course as a primary landscape feature and to inform the overall layout of the development.



Figure 22: Illustrative diagram demonstrating frontages engaging with canal and creating visual connection with the watercourse.



Figure 23: Example of new build dwellings which positively engage with the canal, Lancashire. Source: canalrivertrust.org.uk.

FL 03. Extensions and modifications

Extensions and alterations to dwellings have the opportunity to revitalise existing housing stock and enhance the streetscene.

The Planning Portal¹ contains more detailed information on building extensions and alterations, setting out what is usually considered to have deemed consent (permitted development) and what requires planning permission.

The following principles should be considered by all development involving extensions and alterations:

- i. The original building should remain the dominant element of the property, in terms of scale and form, regardless of the number of extensions. Extensions must be appropriate for the scale, massing and character of the main building, and should complement both the streetscape and the village setting. Overly complicated extensions and associated roof forms should be avoided.
- Extensions should not result in unacceptable harm to the neighbouring occupiers by way of loss of privacy, overshadowing or being of an overbearing nature. Extensions should make a positive impact on the streetscape.
- iii. The design of extensions and alterations to designated heritage assets and non-designated heritage

assets should consider the unique character of the building and its heritage significance so that the heritage asset is conserved and enhanced.

- Side extensions should be set back from the front of the main buildings and retain the proportions of the original building. This is in order to reduce any visual impact of the join between existing and new.
- v. Extensions should consider the materials, architectural features, window sizes and proportions of the existing building, and respect these elements to design an extension that matches and complements the existing building. A range of roof heights adds interest to the village roofscape and enhances the integration of extensions with original buildings.
- vi. It may be most appropriate for extensions on significant or notable buildings to be clearly different from the original building. This can allow the merits of the original building to stand out. However such a decision should always be based on an understanding of the building's character.

¹ Planning Portal can be accessed <u>here</u>.

Design treatment in



Design treatment in case of loft conversion:



Figure 24: Illustrative diagrams displaying positive and negative examples of built extensions (above).Figure 25: Illustrative diagrams displaying positive and negative examples of dormer additions (below).

2.3 Rural character (RC)

RC 01. Relate to the landscape

Natural landscaping provides a range of benefits to the community and to the environment, including landscape amenity, enhanced biodiversity, improved community health and climate resilience.

Gardens, local woodlands, and the surrounding countryside are some of the Neighbourhood Area's greatest assets. To ensure new development complements the existing built form, it is important that development seeks to conserve and enhance the landscape character.

The following principles should be considered by development proposals:

- i. Residential development in the Neighbourhood Area is characterised by generous gardens including front gardens.
- Existing mature hedges and trees, must be preserved wherever possible, preferably incorporating them into the new landscape design.
- iii. Consider tree canopy size when locating new trees and favour fewer, larger trees for greatest long-term benefit.

- iv. Aim to achieve biodiversity net gain and enhance the natural environment. Create new habitats and wildlife corridors with a connected native landscape. This could be by aligning back and front gardens, installing bird boxes or bird bricks into walls or improving habitats at ponds.
- Provide adequate buffers between development and habitat areas to preserve specific ecological functions. Roadside verges, hedges and trees should be favoured as natural buffers.
- vi. Consider landscape design at the outset of development, ensuring adequate dimensions for planting including canopies and root systems that are clear of infrastructure and utilities.



Figure 26: An indicative diagram highlighting a wildlife habitat corridor.



Figure 27: Examples to display Babworth's landscape character.

RC 02. Rural scale

Dwellings in the Neighbourhood Area are generally of a modest scale and are typically comparable in size and height. Rooflines are between one and two storeys in height (three storey dwellings can be found in the parish in either dormer style or with a subfloor). This similarity creates a sense of cohesion across the Neighbourhood Area.

The following principles should be applied to new development:

- New dwellings should generally not exceed two storeys in height so as not to disrupt the low-lying roofscape in the Neighbourhood Area.
- ii. In the case of multi-dwelling developments, these should be of a low density in line with the surrounding Neighbourhood Area.
- iii. Generous setbacks and built gaps should be incorporated in new developments to protect the sense of openness within both Ranby and Babworth villages.



Figure 28: Dwelling on Blyth Road which is partially setback from the road which reduces its physical presence, allowing it to blend into the surrounding landscape.



Figure 29: Two storey development on Beechwood Crescent.

RC 03. Boundary treatments

Boundary treatments are responsible for creating a distinction between public and private space in the built environment.

Boundary treatments in Ranby are varied between low-rise solid structures such as walls and fences, and natural boundary treatments such as shrubs, hedgerows, or trees.

The following principles should be considered by new development:

- i. Boundary treatments at the front of a dwelling should be low-rise to retain visual connections across the street.
- Planted boundary treatments are encouraged to enhance natural habitat networks and improve local biodiversity.
- Where solid boundary treatments are utilised such as walls, these should be finished in either a similar material or a complementary material, compatible with the property they belong to.
 Boundary treatments should be considered from the outset, rather than as an after thought.



Boundary treatments



Trees/shrubbery

Figure 30: Successful examples of boundary treatment in the parish area..

RC 04. Informality

Babworth's rural character is supported by the informal nature of the built environment. This is created by variety in material, form, era, style, orientation, and setbacks between properties.

To protect this character, the following principles should be applied in new developments:

- i. New developments should reflect the informal layout of the village by slightly staggering setbacks, orientation, and rooflines.
- ii. Developments must avoid monotony in appearance and form in order to reflect the village's organic layout and appearance where individual dwellings have been added over time in an incremental fashion.
- iii. In cases of multi-dwelling developments, multiple facade styles should be provided to avoid a monotonous street frontage.



Figure 31: Chequers Inn, Ranby, which displays multiple eras of architectural styles and a variety of materials contributing to a visually rich scene from the Chesterfield Canal towpath.

2.4 Green features (GF)

GF 01. Gardens

Across the parish, various green spaces such as gardens, grass verges, public greenspace, woodland, and agricultural land combine to create a green network which acts as a habitat for local flora and fauna while improving visual amenity in the area.

- i. Front and back gardens should be included where possible in new dwellings.
- ii. Gardens should have limited hardscaping to retain the presence of planted elements.

- iii. There should be an equal or greater amount of garden space to parking space per property.
- iv. Shared garden space as well as open greenspace will be welcomed as a part of multi-dwelling developments.
- v. The layout of buildings and gardens should consider orientation so that sunlight is optimised.



Figure 32: Illustrative diagram displaying a series of gardens acting as a network of green space and improving natural habitats as well as providing a seamless transition into open countryside.

GF 02. Mature trees and hedgerows

The prevalence of green elements in this area contributes to the pleasant and enclosed feel There are numerous mature trees and shrubs across the parish which create soft boundaries, frame views, improve visual amenity, and provide enclosure and cooling in the warmer months.

The following principles should be adhered to in regards to retaining and planting trees and hedgerows:

- i. Mature trees should be retained where possible, in the event that trees are lost due to development, they should be replaced on a 2:1 ratio.
- ii. Existing trees and shrubs should be incorporated in the design of new development proposals to avoid the unnecessary loss of flora and to provide habitat for wildlife.



Figure 33: Example of mature trees and shrubbery to the south of Babworth which frame outward and inward views while creating a sense of enclosure and within the landscape.

GF 03. Car parking solutions

Cars a fact of life in rural areas. However, to maintain the amenity of the street and village, the design of car parking must be well considered by development. Furthermore, in accordance with sustainable aspirations for the Neighbourhood Area, new development must also provide for electric vehicle charging.

The following principles are recommended for car parking of new development:

- i. Where garages are proposed, they should be located to the side or rear of the dwelling. If a garage is proposed to the front of a dwelling, it must be designed and arranged so that it is sensitive to context of the site.
- Garages and openings must be of a sufficient size to allow for car parking, bicycle parking and residential storage.
- iii. Garages must be finished with the same architectural features and materials as the main building. Gable roofs will be preferable to skillion (flat) roofs which look 'tacked-on' to the side of a dwelling.

- iv. Ensure maneuvering areas for car parking does not dominate the street frontage, allowing for a generous front garden typical of Babworth.
- v. Driveways should be constructed from porous materials to minimise surface water run-off, such as cobble, gravel or other permeable finishes.
- vi. Electric vehicle charging facilities should be incorporated into new development as they are likely to substantially increase in mode share.

Design treatment of car parking provision.





2.5 Sustainable Futures (SF)

SF 01. Net zero housing

The following section elaborates on energy efficient technologies that could be incorporated in buildings and at broader Neighbourhood Area design scale as principles.

Use of such principles and design tools should be encouraged in order to contribute towards a more sustainable environment.

Energy efficient or eco design combines all around energy efficient appliances and lighting with commercially available renewable energy systems, such as solar electricity and/or solar/ water heating and electric charging points.

Figure 34 shows possible design measures, which are listed to the right and building fabric considerations. Please note that some measures, such as double/triple glazing, draught proofing and solar panels, may be problematic in the Conservation Area, or for buildings that are historic or used as second homes or holiday lets.



treated wooden floors

point

Airtight constructions help reduce heat loss, improving comfort and protecting the building fabric. Airtightness is achieved by sealing a building to reduce infiltration- which is sometimes called uncontrolled ventilation.

Simplicity is key for airtight design. The fewer junctions the simpler and more efficient the airtightness design will be. Provide acoustic insulation to prevent the transmission of sound between active (i.e. living room) and passive spaces (i.e. bedroom), and attached dwellings.

Thermal insulation can be provided for any wall or roof on the exterior of a building to prevent heat loss. Particular attention should be paid to heat bridges around corners and openings at the design stage. Consider the thermal mass of building materials to even out variations in internal and external conditions, absorbing heat as temperatures rise and releasing it as they fall. This can be beneficial during the summer and winter.

Thermal storage in construction elements can be provided, 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. Mass can be combined with suitable ventilation strategies.

Figure 35: An indicative diagram highlighting general considerations to reduce the carbon impact of existing and new dwellings

SF 02. Flood mitigation and water quality

Within the parish there is land at risk of flooding, including land that falls within Flood Zone 3.

National and local planning policy requires development to respond to climate change and flooding, including through the use of sustainable urban drainage systems (**SuDS**). SuDS are a range of approaches to manage surface water in a sustainable way to reduce flood risk and improve water quality and the overall urban environment. They work by reducing the amount and rate at which surface water reaches a waterway or combined sewer system.

Development across the Neighbourhood Area, not only in flood risk areas, should consider water management strategies. SuDs should be considered early in the design process to ensure they are sensitively designed and contribute positively to the landscape. A number of overarching principles can be applied to the design of SuDs:

- i. Manage surface water as close to where it originates as possible.
- Reduce runoff rates by facilitating infiltration into the ground or by providing attenuation that stores water to help slow its flow so that it does not overwhelm water courses or the sewer network.
- iii. Improve water quality by filtering pollutants to help avoid environmental

contamination. Some of the most effective SuDS are vegetated, using natural processes to slow and clean the water whilst increasing the biodiversity value of the area.

- iv. Form a 'SuDS train' of two or three different surface water management approaches.
- v. Best practice SuDS schemes link the water cycle to make the most efficient use of water resources. Typically, the most sustainable option is the collection of surface water to reuse, for example, in a water butt or rainwater harvesting system, as these have the added benefit of reducing pressure on important water sources. Where reuse is not possible, two alternative approaches using SuDS include.
- vi. Infiltration allows water to percolate into the ground and eventually help restore groundwater.
- vii. Attenuation and controlled release - holds back the water and slowly releases it into the infrastructure network.



Figure 36: Diagram showing the best use of harvesting water systems rain garden, swales, permeable paving, green roofs

SF 03. Waste storage and servicing

With modern requirements for waste separation and recycling, the number and size of household bins has increased. This can lead to an untidy and cluttered appearance when refuse storage is not given due consideration.

The following principles should be considered by development:

- Provide waste storage at the side or rear of housing, accessed by a side or rear gate. If waste storage needs to be provided to the front of dwellings, ensure that the design and location of storage is well considered and sympathetic to the streetscene.
- ii. Create a specific enclosure of sufficient size for all the necessary bins;
- iii. Refer to the local architectural materials palette to consider complementary material(s) for the waste storage enclosure.



Figure 37: Example of successful waste storage enclosure improving visual amenity and biodiversity.



3. Checklist

Because the design guidelines and codes in this chapter cannot cover all scenarios, this concluding section provides a number of considerations based on established good practice against which the design proposal should be evaluated.

The checklist can be used to assess all proposals by objectively referring to the below. Not all the considerations will apply to every development. The relevant ones, however, should provide an assessment as to whether the design proposal has taken into account the context and provided an adequate design solution.

As a first step there are a number of ideas or principles that should be present in all proposals. These are listed under 'General design guidelines for new development'. Following these ideas and principles, a number of questions are listed for more specific topics.

General design guidelines for new development:

- Integrate with existing paths, streets, circulation networks and patterns of activity;
- Reinforce or enhance the established settlement character of streets, greens, and other spaces;
- Harmonise and enhance existing settlement in terms of physical form, architecture and land use;
- Relate well to local topography and landscape features, including prominent ridge lines and long-distance views;
- Reflect, respect, and reinforce local architecture and historic distinctiveness;
- Retain and incorporate important existing features into the development;
- Respect surrounding buildings in terms of scale, height, form and massing;
- Adopt contextually appropriate materials and details;
- Provide adequate open space for the development in terms of both quantity and quality;
- Incorporate necessary services and drainage infrastructure without causing unacceptable harm to retained features;

- Ensure all components e.g. buildings, landscapes, access routes, parking and open space are well related to each other;
- Make sufficient provision for sustainable waste management (including facilities for kerbside collection, waste separation, and minimisation where appropriate) without adverse impact on the street scene, the local landscape or the amenities of neighbours;
- Positively integrate energy efficient technologies;
- Ensure that places are designed with management, maintenance and the upkeep of utilities in mind; and
- Seek to implement passive environmental design principles by, firstly, considering how the site layout can optimise beneficial solar gain and reduce energy demands (e.g. insulation), before specification of energy efficient building services and finally incorporate renewable energy sources.

Street grid and layout:

- Does it favour accessibility and connectivity? If not, why?
- Do the new points of access and street layout have regard for all users of the development; in particular pedestrians, cyclists and those with disabilities?
- What are the essential characteristics of the existing street pattern; are these reflected in the proposal?
- How will the new design or extension integrate with the existing street arrangement?
- Are the new points of access appropriate in terms of patterns of movement?
- Do the points of access conform to the statutory technical requirements?

3

Open spaces, views and character:

- What are the particular characteristics of this area which have been taken into account in the design; i.e. what are the landscape qualities of the area?
- Does the proposal maintain or enhance any identified views or views in general?

3

Open spaces, views and character:

- How does the proposal affect the trees on or adjacent to the site?
- Can trees be used to provide natural shading from unwanted solar gain? i.e. deciduous trees can limit solar gains in summer, while maximising them in winter.
- Has the proposal been considered within its wider physical context?
- Has the impact on the landscape quality of the area been taken into account?
- In rural locations, has the impact of the development on the tranquillity of the area been fully considered?
- How does the proposal impact on existing views which are important to the area and how are these views incorporated in the design?
- Can any new views be created?
- Is there adequate amenity space for the development?
- Does the new development respect and enhance existing amenity space?
- Have opportunities for enhancing existing amenity spaces been explored?

Local green spaces, views and character:

- Will any communal amenity space be created? If so, how this will be used by the new owners and how will it be managed?
- Is there opportunity to increase the local area biodiversity?
- Can green space be used for natural flood prevention e.g. permeable landscaping, swales etc.?
- Can water bodies be used to provide evaporative cooling?
- Is there space to consider a ground source heat pump array, either horizontal ground loop or borehole (if excavation is required)?

4

Gateway and access features:

- What is the arrival point, how is it designed?
- Does the proposal maintain or enhance the existing gaps between settlements?
- Does the proposal affect or change the setting of a listed building or listed landscape?
- Is the landscaping to be hard or soft?

5

Buildings layout and grouping:

- What are the typical groupings of buildings?
- How have the existing groupings been reflected in the proposal?
- Are proposed groups of buildings offering variety and texture to the townscape?
- What effect would the proposal have on the streetscape?
- Does the proposal maintain the character of dwelling clusters stemming from the main road?
- Does the proposal overlook any adjacent properties or gardens? How is this mitigated?
- Subject to topography and the clustering of existing buildings, are new buildings oriented to incorporate passive solar design principles, with, for example, one of the main glazed elevations within 30° due south, whilst also minimising overheating risk?
- Can buildings with complementary energy profiles be clustered together such that a communal low carbon energy source could be used to supply multiple buildings that might require energy at different times of day or night? This is to reduce peak loads. And/or can waste heat from one building be extracted to provide cooling to that building as well as heat to another building?

Building line and boundary treatment:

- What are the characteristics of the building line?
- How has the building line been respected in the proposals?
- Has the appropriateness of the boundary treatments been considered in the context of the site?

7

Building heights and roofline:

- What are the characteristics of the roofline?
- Have the proposals paid careful attention to height, form, massing and scale?
- If a higher than average building(s) is proposed, what would be the reason for making the development higher?
- Will the roof structure be capable of supporting a photovoltaic or solar thermal array either now, or in the future?
- Will the inclusion of roof mounted renewable technologies be an issue from a visual or planning perspective? If so, can they be screened from view, being careful not to cause over shading?

8

Household extensions:

- Does the proposed design respect the character of the area and the immediate neighbourhood, and does it have an adverse impact on neighbouring properties in relation to privacy, overbearing or overshadowing impact?
- Is the roof form of the extension appropriate to the original dwelling (considering angle of pitch)?
- Do the proposed materials match those of the existing dwelling?
- In the case of side extensions, does it retain important gaps within the street scene and avoid a 'terracing effect'?
- Are there any proposed dormer roof extensions set within the roof slope?
- Does the proposed extension respond to the existing pattern of window and door openings?
- Is the side extension set back from the front of the house?
- Does the extension offer the opportunity to retrofit energy efficiency measures to the existing building?
- Can any materials be re-used in situ to reduce waste and embodied carbon?

Building materials & surface treatment:

- What is the distinctive material in the area?
- Does the proposed material harmonise with the local materials?
- Does the proposal use high-quality materials?
- Have the details of the windows, doors, eaves and roof details been addressed in the context of the overall design?
- Does the new proposed materials respect or enhance the existing area or adversely change its character?
- Are recycled materials, or those with high recycled content proposed?
- Has the embodied carbon of the materials been considered and are there options which can reduce the embodied carbon of the design?
 For example, wood structures and concrete alternatives.
- Can the proposed materials be locally and/or responsibly sourced?
 E.g. FSC timber, or certified under BES 6001, ISO 14001 Environmental Management Systems?

10

Car parking:

- What parking solutions have been considered?
- Are the car spaces located and arranged in a way that is not dominant or detrimental to the sense of place?
- Has planting been considered to soften the presence of cars?
- Does the proposed car parking compromise the amenity of adjoining properties?
- Have the needs of wheelchair users been considered?
- Can electric vehicle charging points be provided?
- Can secure cycle storage be provided at an individual building level or through a central/ communal facility where appropriate?
- If covered car ports or cycle storage is included, can it incorporate roof mounted photovoltaic panels or a biodiverse roof in its design?

