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# Moggerhanger

Design Guidance and Codes

**Final Report**

January 2024

Delivering a better world

### Quality information

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# Contents

|          |                                      |           |
|----------|--------------------------------------|-----------|
| <b>1</b> | <b>1. Introduction</b>               | <b>5</b>  |
|          | 1.1 Purpose                          | 5         |
|          | 1.2 Process                          | 6         |
|          | 1.3 Planning policy context          | 7         |
| <b>2</b> | <b>2. Local character analysis</b>   | <b>10</b> |
|          | 2.1 Area of study                    | 10        |
|          | 2.2 History of development           | 12        |
|          | 2.3 Settlement pattern               | 15        |
|          | 2.4 Movement network                 | 16        |
|          | 2.5 Landscape and open space network | 18        |
|          | 2.6 Topography and flood risk        | 19        |
| <b>3</b> | <b>3. Design Guidance and Codes</b>  | <b>24</b> |
|          | 3.1 Introduction                     | 24        |
|          | 3.2 Design Codes                     | 25        |
| <b>4</b> | <b>4. Checklist</b>                  | <b>46</b> |

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**Introduction**

**01**

# 1. Introduction

**The purpose of the design guidance and codes is to ensure that development which may occur in Moggerhanger 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 Moggerhanger. The design guidance and codes within this document will be used by different users: by applicants preparing schemes in Moggerhanger, by the Neighbourhood Plan Steering Group (SG) or Moggerhanger Parish Council when commenting on planning applications and by Central Bedfordshire Council (CBC) when determining planning applications. It sets out the expectations for proposals in the Neighbourhood Area (NA) and ensures that they will complement Moggerhanger parish's key defining characteristics. These guidelines therefore apply to both the Moggerhanger village, but also the small

hamlet of Chalton to the north. The report includes the following chapters:

**Chapter 1** sets out a brief summary of the scope of this report and outlines existing policy context.

**Chapter 2** provides an analysis of the landscape character and built form within the Neighbourhood Area (NA). This analysis has informed the design guidelines and codes.

**Chapter 3** presents a set of bespoke design guidance which is specific to the NA. This guidance aims to influence future development, of any scale, including infill development and house extensions.

**Chapter 4** provides an overarching checklist for new development. This aims to outline the considerations relevant for all types of future development.

The design guidelines and codes set out in Chapter 3 will provide a detailed framework that should be followed by any future design proposals that come forward within the village to ensure they meet a consistent, high quality standard of design and positively contribute to the unique character of Moggerhanger.

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

## 1.2 Process

The Neighbourhood Plan SG are volunteers from the local community who are preparing the Neighbourhood Plan for Moggerhanger.

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:** Steps undertaken to produce this document.

## 1.3 Planning 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

#### 2023 - National Planning Policy Framework Department for Levelling Up, Housing and Communities (DLUHC)

Relevant national planning policy is contained within the National Planning Policy Framework (NPPF, July 2021). The NPPF was first published on 27 March 2012 and updated on 24 July 2018, 19 February 2019, 20 July 2021, 5 September 2023 and 19 December 2023. Paragraph 133 states that: *“Design guides and codes provide a local framework for creating beautiful and distinctive places with a consistent and high quality standard of design. Their geographic coverage, level of detail and degree of prescription should be tailored to the circumstances and scale of change in each place, and should allow a suitable degree of variety”*.

#### 2020 - Building for a Healthy Life

##### Homes England

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 and promote active travel.

#### 2010 Manual for Streets 2

##### Department for Transport

A companion guide to ‘Manual for Streets’ that extends its practices beyond residential streets to encompass both urban and rural situations.

#### 2021 - National Design Guide

##### Department for Levelling Up, Housing and Communities (DLUHC)

The National Design Guide (Department for Levelling Up, Housing and Communities, 2021) illustrates how well-designed places that are beautiful, enduring and successful can be achieved in practice.

#### 2021 National Model Design Code (Part 1 and Part 2)

##### 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.



## Local Policy Guidance

### (2021) Central Bedfordshire Local Plan 2015-2035

#### Central Bedfordshire Unitary Authority

The Central Bedfordshire Local Plan is the key strategic planning document for Central Bedfordshire and will guide and support the delivery of new infrastructure, homes and jobs. It sets out the long-term vision and objectives for the area, what is going to happen, where, and how this will be achieved and delivered over the next 20 years.

The plan divides Central Bedfordshire into component areas according to their main spatial, settlement, environmental and infrastructure features. Moggerhanger falls under **The Central Area**, which is defined by the following features:

- Limited options for strategic growth due to constrained infrastructure and settlement pattern.
- A large number of recent permissions due to speculative development, resulting in piecemeal development.
- Limited scope for residential growth due to lack of network capacity.

Moggerhanger is also designated as a **Small Village in the settlement hierarchy**.

Under policy HAS40, land adjacent to Park Road has been allocated for approx. 30 dwellings on a site with an area 1.45 ha.

### (2023) Central Bedfordshire Design Guide Supplementary Planning Document

#### Central Bedfordshire Unitary Authority

This Design Guide is a Supplementary Planning Document (SPD) that supports the Central Bedfordshire Local Plan 2015 -2035 and provides guidance on how the policies within the Local Plan should be applied. It should be read alongside the National Planning Policy Framework 2021, the Design: Process and Tools National Planning Practice Guidance, the National Design Guide 2021, the National Model Design Code 2021, any design related policies and guidance contained within Neighbourhood Plans (where it exists) and any approved Design Codes or Masterplans for the area.



Central  
Bedfordshire

### Central Bedfordshire Local Plan

2015 - 2035

July 2021

**Local character analysis**

02

## 2. Local character analysis

**This chapter details the local context and key characteristics of the parish. It provides an analysis of the NA's heritage, built environment, streetscape, views, landscape and topography.**

### 2.1 Area of study

Moggerhanger is a village and civil parish in the county of Bedfordshire. The village is located 7.5 miles east of Bedford, and 2.2 miles west of Sandy which is located on the East Coast Main Line running between London King's Cross Station and Edinburgh Waverley Station, broadly parallel to the A1.

The village is bisected by the Bedford Road A603 which connects the A421 and the A1.

The parish has a population of 672 as of the 2021 census which is an increase of 52 since the 2011 census. The village includes a pub, a village hall, a primary school, the St John's Hospice, and a number of small motor and farm businesses. The nearest services centre is in Sandy, which hosts retail outlets and grocery stores.

Moggerhanger Park sits southwest of the village, accessed by Park Road. The park is made up of 15 acres of land on part of the estate of Moggerhanger House.



**Figure 02:** St John the Evangelist Church.



**Figure 03:** Southeasterly view of Moggerhanger Park..



**Figure 04:** Map showing the Neighbourhood Area of Moggerhanger Parish.

## 2.2 History of development

There are 27 listed buildings recorded within the Moggerhanger Parish Boundary, consisting of one Grade I, one Grade II\* and 25 Grade II listed buildings. There is also one Grade II registered park and garden located within the parish.

There are several concentrations of listed buildings: in Moggerhanger Park, along Blunham Road and St John's Road in the centre of Moggerhanger, and Willow Hill Farm to the west. Other listed buildings are situated at the edges of the parish.

The buildings are mostly timber-framed with rough-cast render or brick infilling as well as a small number of stone rubble buildings. Common roofing materials include tiles or thatch, making up 46% and 35% of the buildings, respectively. Of the listed buildings 52% are of 18th century date, followed by 22% of 17th century and 19th century date and 4% of 16th century date. The earliest building is the 16th century Bridge Farmhouse (NHLE 1113883), a Grade II listed building situated at the eastern edge

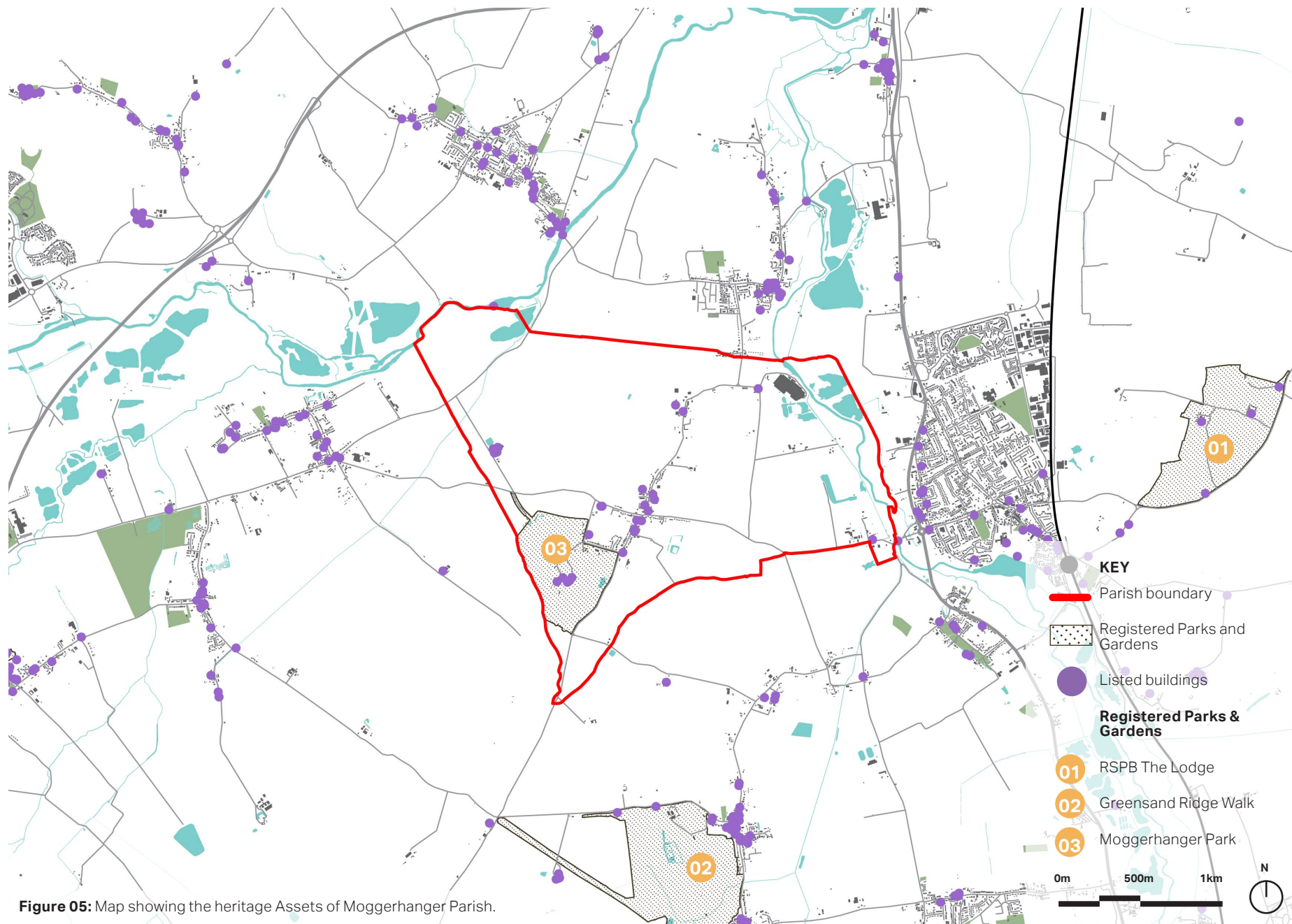
of the parish. The house consists of a single storey of timber-framed construction with colourwashed roughcast exterior and a thatched roof.

Within Moggerhanger village, there are 13 listed buildings. These buildings mostly consist of houses as well as a church and a granary. These are all of post-medieval date, the majority of 17th and 18th century date. The houses are a mixture of one and two storey buildings, almost all built with timber-framing and faced with roughcast. The Parish Church of St John the Evangelist (NHLE 1321720), the Old Vicarage (NHLE 1312297) and 57 and 59 Bedford Road (NHLE 1137438) are later structures, built in the 19th century. The church is located to the north-eastern end of the village, within a surrounding churchyard. It is constructed of coursed limestone rubble with bands of ironstone and ashlar dressings, in the Early English Gothic style. The village has been extended in the 20th century in all directions with the addition of modern houses. An 18th century public house, The Guinea, at the centre of the village was demolished

in the 1960s and a new public house was constructed on the old foundations. A former village hall was also dismantled in the 1970s at the northern end of the village and rebuilt on the foundations.

Chalton hamlet, which sits to the north of the parish, incidentally predates the Moggerhanger village settlement and contains its own significant structures, including the Grade II listed Chalton Farmhouse and Granary at Chalton Farm.

Moggerhanger Park (NHLE 1001369) is a late 18th century park, designed by Humphry Repton. The park covers an area of c.53ha in a roughly triangular shape, to the south-west of Moggerhanger village. Within the park sits the Grade I listed Moggerhanger House (NHLE 1137422). The main approach runs from the north-west corner of the park along a row of lime trees to the house. The grounds include a pleasure garden including lawns and trees



**Figure 05:** Map showing the heritage Assets of Moggerhanger Parish.

around the house and a kitchen garden to the west. The garden is divided from the wider parkland to the south by a sunken fence. The parkland has been used as farmland, although was previously well-wooded. The 18th century layout remains mostly intact.

Moggerhanger House is an 18th century country house, restored in 1995. It was remodelled by Sir John Soane between 1790 and 1812 and is recognised as his most complete example of domestic architecture. The house comprises a three storey brick range in a rectangular plan, with additional one and two storey blocks. The building is of a generally restrained design with Classical motifs including a hexastyle Doric porch. Within the grounds are four associated listed

buildings, including a Grade II\* listed 18th century stable block (NHLE 1113882) and Grade II listed 19th century carriage house (1393650) to the south-west of the main house. The remaining features include an 18th/19th century icehouse (NHLE 1390954) and kitchen garden walls (NHLE 1390953) to the west of Moggerhanger House. The outbuildings were all of red brick construction and were designed by Sir John Soane during the re-modelling of the house.

The concentration of listed buildings at Willow Hill Farm comprises a pair of 17th century cottages (NHLE 1137440), and four 18th century barns (1137443, 1137445, 1113885, 1113886) surrounded by



**Figure 06:** Northwesterly view of Moggerhanger Park.



**Figure 07:** Entrance to The Old Vicarage, Grade II listed dwelling on Blunham Road.

## 2.3 Settlement pattern

Moggerhanger has a nucleated linear settlement pattern, with development focused along the main thoroughfares of Bedford Road (A603), Blunham Road, St John's Road and Park Road. There is a degree of severance between the northern and southernmost parts of the built-up area due to the physical and visual presence of the A603.

The main built-up area also features a number of cul-de-sacs such as Park Close, West Way, Dynes Place, The Warrens, Barrance Way and The Crescent.

The Grade I listed Georgian Moggerhanger House lies within the southern parcel of the parish and helps to create a sense of rurality in this area due to the prominent parkland character and existence of veteran trees and woodland which provide a sense of urban containment along Park Road.

The adopted Local Plan has defined a settlement envelope along the built-up edge of Moggerhanger as a means of providing a distinction between the settlement and the

open countryside. The settlement envelope helps to define the overall settlement pattern by retaining the existing green gaps which separate Moggerhanger village and the Chalton hamlet from both each other, and the other neighbouring settlements of, Blunham, Willington and Sandy.



**Figure 08:** Short terrace on Blunham Road.



**Figure 09:** View down West Way, short cul-de-sac off Blunham Road.

## 2.4 Movement network

The NA has a varied network of routes enabling multi-modal movement through and beyond the village.

There is a clear hierarchy of routes within the village. Each vary in their role and contribute to Moggerhanger's overall character. Examples include A-roads, local connecting routes, and public cycle and footpaths.

**A Roads:** Moggerhanger is severed along an east-west axis by the A603 (Bedford Road), which links Moggerhanger to Willington and Bedford to the west and Sandy to the east.

The A1, which provides onward links to London and the north east of England, lies approximately 1km east of the built-up area of Moggerhanger. The A421, which provides regional onward links to Cambridge, Milton Keynes and Oxford lies to the west of the parish and is accessible via the A603.

**Local roads:** A number of local roads such as St John's Road, Blunham Road and Park Road make up the primary network in

Moggerhanger and provide onward access to surrounding villages.

There are also a number of cul-de-sac developments within the main built-up area of Moggerhanger with access roads including: The Crescent, West Way, The Warrens, Dynes Place and Barrance Way.

**Public Rights of Way:** The parish hosts a network of Public Rights of Way which are primarily concentrated along the River Ivel in the east of the parish. Some of these routes connect onwards to Sandy and Blunham.

There are also a number of Public Rights of Way which cut across arable fields in the north west of the parish, linking Bedford Road to Chalton and beyond the parish boundary towards Blunham and Great Barford.

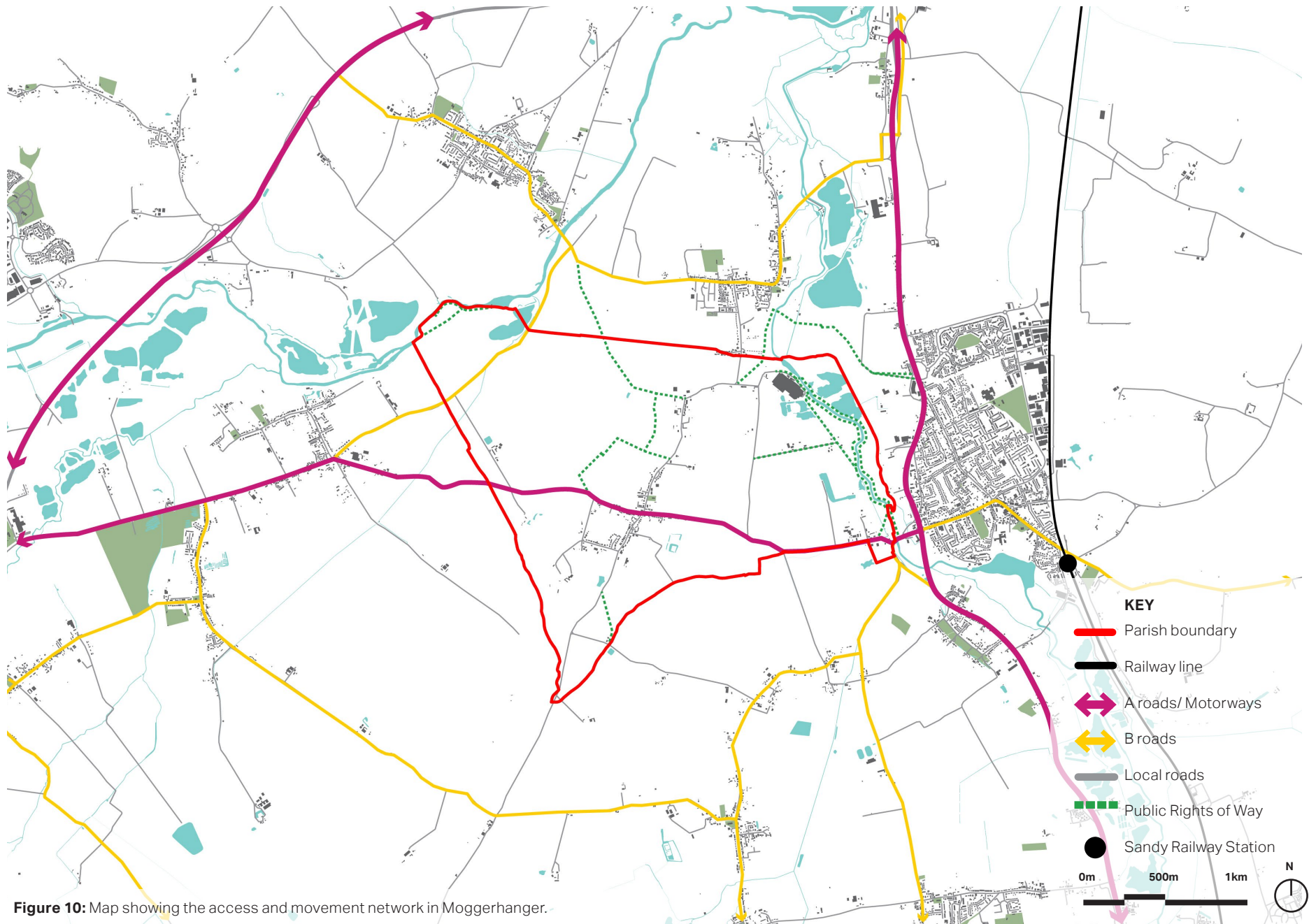
A Public Right of Way dissects an arable field in the southernmost area of the parish, providing a direct link between Budna Road and St John's Road.

**Cycle routes:** The National Cycle Route 12 runs east-west through Moggerhanger parish from Bedford to Sandy.

Moggerhanger is also a key stopping point along the Thatcher's Way route , a 24-mile circular cycle ride east of Bedford, which covers a number of neighbouring villages such as Old Warden, Southill and Cardington.

**Railway and bus services:** There are no railway lines which pass through the parish, however Sandy Station lies just 2.5 miles east of the built-up area of Moggerhanger. This station provides Thameslink services north to Peterborough and south to Horsham. Other nearby stations include Bedford, Biggleswade and St Neots.

The 72, 73, 188 and 189 buses pass through the village providing services to Sandy, Potton, and Biggleswade.



**Figure 10:** Map showing the access and movement network in Moggerhanger.

## 2.5 Landscape and open space network

**Landscape type:** The Central Bedfordshire Landscape Character Assessment outlines that the NA is divided into three distinct landscape classifications.

The northeast of the parish falls within the Great Ouse Clay Valley, which is characterised by its shallow and fairly wide valley and large scale open water bodies. The area is predominantly arable, with large and medium scale geometric fields bounded by hedgerows. This area has an urban fringe character due to the audible and visual presence of the A1 corridor, which lies to the east of the parish boundary.

The central part of the parish falls within the East Marton Clay Vale, which is defined as having a flat and open vale landscape comprising intensive arable cropping. This area has far-reaching views towards the wooded ridge to the south, which help create a rural backdrop to the character area.

Land south of the A603 is classified as Mid Greensand Ridge, which is characterised by a gently undulating ridge top and varied land uses such as arable cultivation, pasture land, deciduous woodland, pig farming and historic parks and gardens, including the Grade II listed Park and Garden, Moggerhanger Park. As an important heritage asset, the landscape setting and approach to the park is highly significant to local landscape character.

In the south of the parish, Bottom Wood is classified as ancient deciduous woodland and is in close proximity to an area of lowland meadows, which straddle the driveway to Moggerhanger Park.

The River Ivel, which falls just within the parish boundary is a chalk river which supports a diverse array of flora and fauna. There are also a number of deciduous woodland fragments scattered across the parish.

Moggerhanger parish lies adjacent to the Marston Vale Community Forest and The Riddy Local Nature Reserve.

**Open spaces:** Open spaces within the parish provide a range of recreational and ecological benefits. Notable open spaces include:

- The Crescent open space
- Cemetery of St John the Evangelist
- The Common at the Park Road/St John's Road intersection
- Woodland to the south of Moggerhanger Park
- Moggerhanger Playing Fields

### **Planting, hedges and landscaping:**

There are a mix of boundary treatments

throughout the parish, ranging from hedgerows, shrubs, fences and brick walls. Hedgerows are varied and include a mix of evergreen and deciduous species. Generally speaking, deciduous species enhance the rural character of the parish due to their unstructured and informal appearance.

The south of the parish is more densely wooded, with greater tree cover and thick hedgerows, particularly along sections of Park Road.

Modern cul-de-sac developments generally lack planting and defined tree lines, resulting in a hard transition between the development and its wider surroundings.

The Central Bedfordshire Design Guide SPD<sup>1</sup> emphasises the importance of hedgerow and tree boundary treatments and states that there is a presumption that they should be retained and reinforced by new planting and a maintenance and management plan.

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<sup>1</sup> See the Design Guide [here](#).

## 2.6 Topography and flood risk

**Topography:** Moggerhanger parish is set on a relatively flat landscape, ranging from 20-56m AOD<sup>1</sup> approximately. To the southwest of the parish border, the landscape rises gently.

**Flood Risk:** There are a number of areas with high fluvial flood risk along the course of the River Ivel in the east of the parish. The east of the parish is also susceptible to reservoir flooding, due to the presence of standing water in close proximity to the banks of the River Ivel.

Surface water flood risk is more widespread across the parish, with areas of high surface water risk concentrated in the east of the parish and along the smaller tributary stream which runs southwards from the A603 to Budna Road. Other notable areas of surface water flood risk include sections of Blunham Road, arable land west of The Ridgeway and Park Road and east of the St John's Road intersection along the A603.

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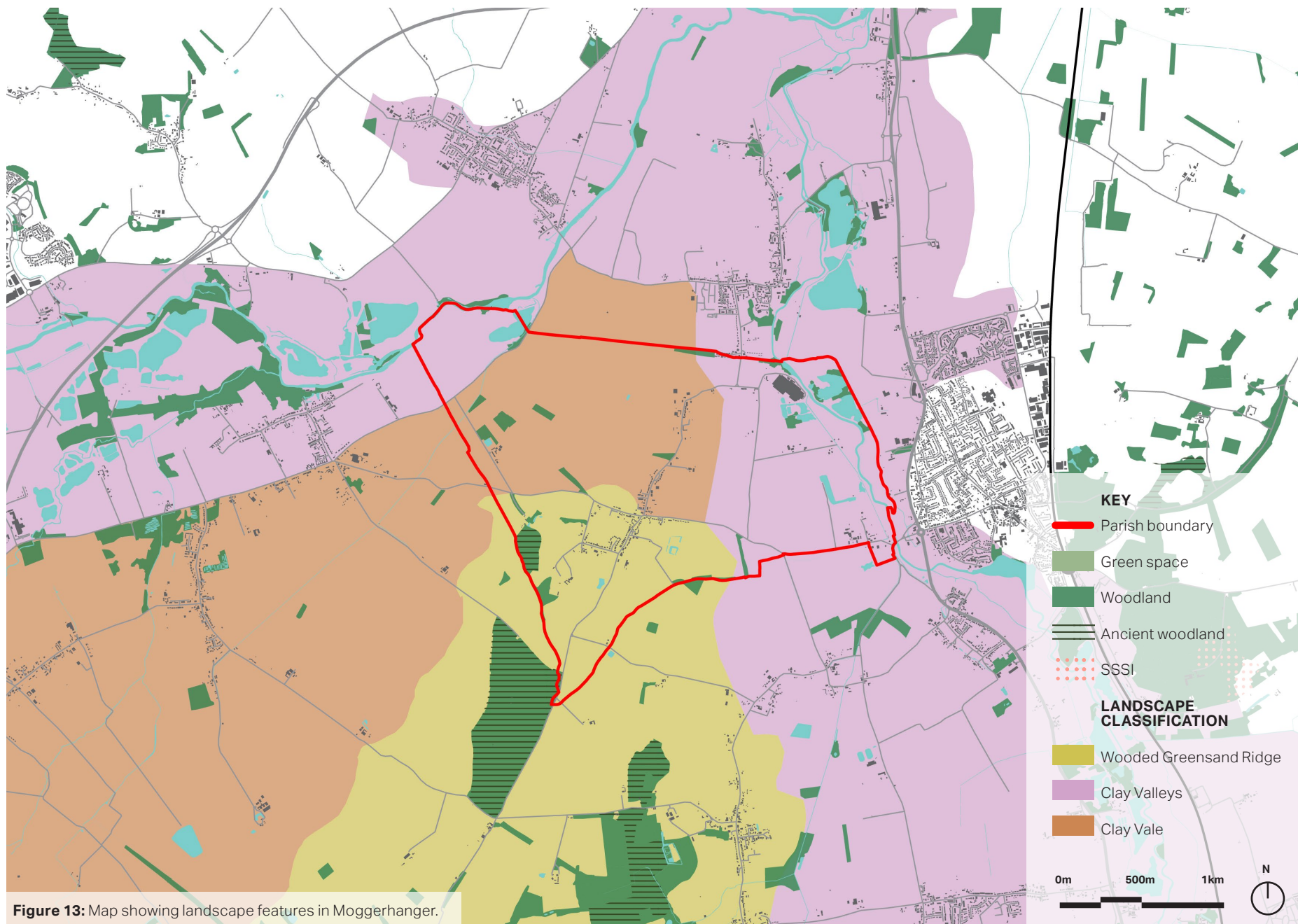
<sup>1</sup> \*Above Ordnance Datum



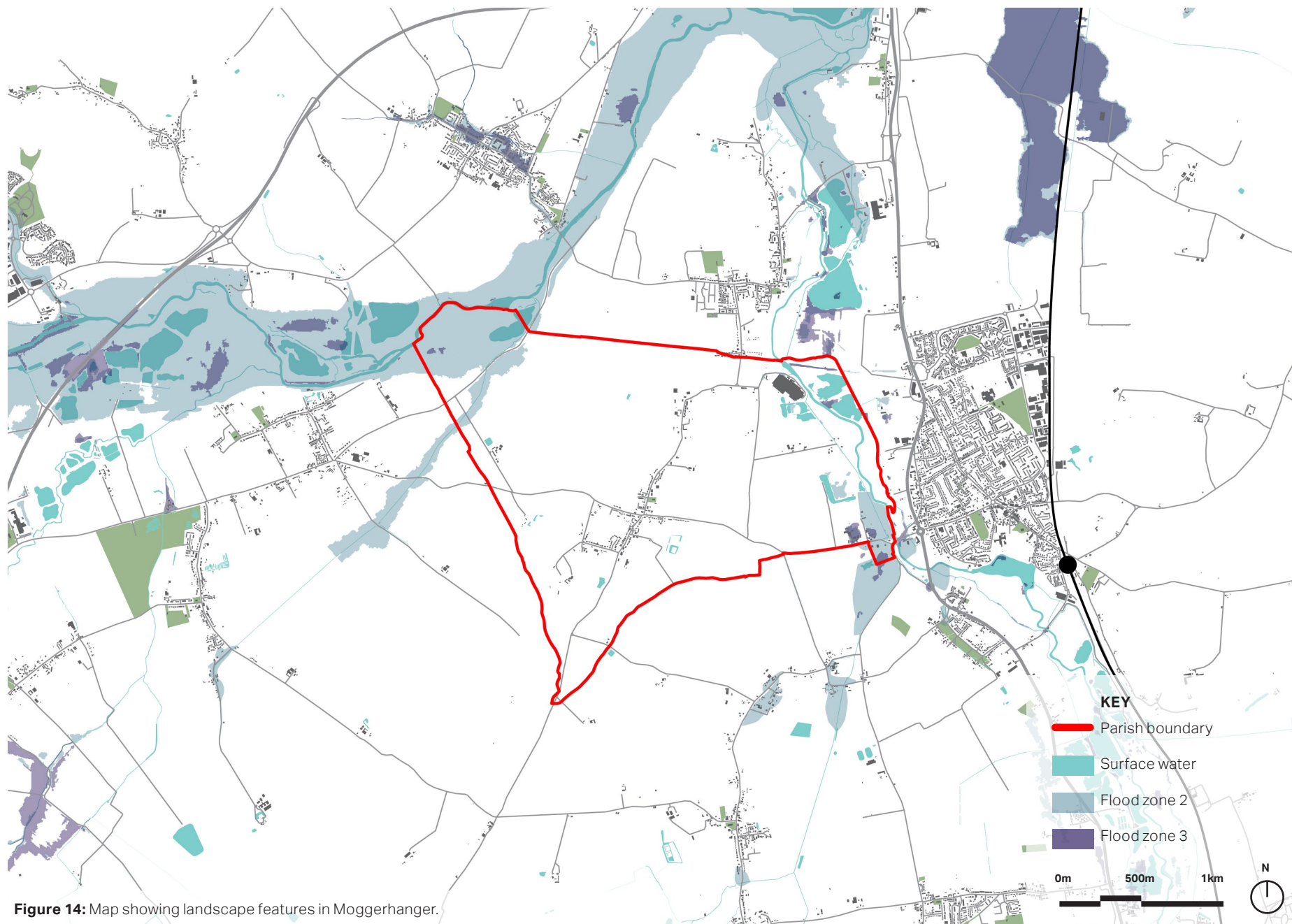
**Figure 11:** Mixed shrubbery boundary treatment.



**Figure 12:** Uniform hedge boundary treatment.



**Figure 13:** Map showing landscape features in Moggerhanger.



**Figure 14:** Map showing landscape features in Moggerhanger.



**Figure 15:** Outward views from within Moggerhanger village, displaying the gently undulating nature of the surrounding landscape which is dominated by arable farmland, mature hedgerows, copses and grasslands.



**Design Guidance and Codes**

03

# 3. Design Guidance and Codes

**This section sets out the design guidance and codes which will influence the design of any new development and retrofit of existing properties in the Neighbourhood Area. The design guidance and codes support the Neighbourhood Plan and should be read in conjunction with relevant local policies.**

## 3.1 Introduction

Design codes will be applied to ensure development is place specific, and responds adequately to the local context. New proposals will be expected to apply the codes to reflect the vernacular style of the NA.

The guidance has been developed based on site visit observations, desktop research, and liaison with the Neighbourhood Plan Steering Group.

The following codes should be applied to oversee the design of new development proposals in the NA:

### **Built Form**

- BF.01 Layout
- BF.02 Height and scale
- BF.03 Materials and details
- BF.04 Building and plot layouts
- BF.05 Extensions, modifications and outbuildings

### **Streets and Parking**

- SP.01 Connectivity
- SP.02 Parking

### **Protecting the Rural Setting**

- RU.01 Boundary treatments
- RU.02 Views and heritage assets
- RU.03 Rural development

### **Sustainability**

- SU.01 Sustainable features
- SU.02 Flood mitigation and water quality

## 3.1.1 What is guidance and what is a code?

Codes are specific instructions which give clear directions for the development of design proposals. Additional suggestive information including diagrams should be understood as best-practice guidance only.

***Codes will be contained within the green text boxes.***

## 3.2 Design Codes

### 3.2.1 Built Form

#### BF.01 Layout

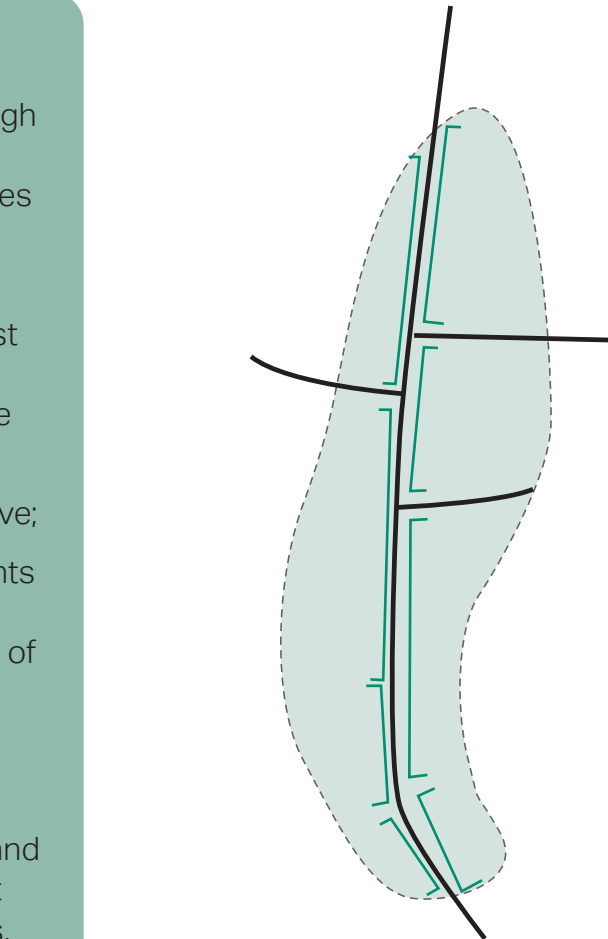
Moggerhanger is largely made up of linear development along its major routes. This pattern of development should be reflected and reinforced by new developments. The consistent building line across much of the village accounts for a strong sense of enclosure and a defined street space.

Setbacks vary across the neighbourhood area; on Blunham Road, Bedford Road, and St John's Road dwellings tend to have generous setbacks, allowing for deep gardens which increase the presence of nature within Moggerhanger. Dwellings on Park Road and The Warrens have shorter setbacks but still some level of garden provision.

Unbuilt gaps<sup>1</sup> between individual dwellings create a sense of openness across the village, encouraging engagement with the surrounding undulating landscape.

The following codes should be adhered to by new development proposals:

- i. The existing pattern of linear development is preferred in certain parts of the village, though the principle of small scale development of groups of houses in some parts of the village is deemed acceptable;
- ii. Infill or ribbon development must respect the existing building line, particularly in regards to the building frontage;
- iii. Setbacks should remain cohesive;
- iv. Dwellings may have slight variants in position and orientation to reinforce the informal character of the village;
- v. Backland development is to be avoided; and
- vi. Dwellings may have both front and back gardens, following the plot ratio of neighbouring properties.



**Figure 16:** An indicative diagram displaying continuous unbroken street frontages, creating a sense of enclosure.

<sup>1</sup> \*Open space in-between solid structures.

## BF.02 Height and scale

Moggerhanger is predominantly made up of two storey buildings. There are also several instances of bungalows including dormer bungalows, two storey dwellings with attic accommodation, and some three storey dwellings.

Dwellings tend to have a relatively low plot coverage ratio which accounts for a high proportion of green space and gardens. Buildings range from small to modest to large in scale, varying slightly across the village.

In response to this, the following codes should be adhered to by new development proposals:

- i. When adjoining properties have a standard height and scale, this should be reflected by proposals for infill proposals in surrounding areas;
- ii. Generally, new dwellings should remain 1-2 storeys tall to reflect the predominant building height in Moggerhanger;
- iii. Contemporary development in Moggerhanger tends to retain a low plot coverage<sup>1</sup> of around 0.5 or below, meaning only half of the site area is developed. This should be reflected in future development proposals, dwellings of 3+ bedrooms should have at least 60sqm of garden space; and
- iv. Moggerhanger consists of predominantly modest scaled dwellings, new development proposals should attempt to reflect the scale and mass of adjoining properties.

<sup>1</sup> \*The portion of the site area occupied by buildings.



**Figure 17:** Two storey dwellings, typical of Moggerhanger.



**Figure 18:** Illustrative diagram outlining plot coverage on Park Close, showing under 0.5 coverage on average.

### BF.03 Materials and architectural details

Moggerhanger hosts a wide range of architectural styles, features and materials. However, there are several features and materials which are particularly characteristic of the village and help to relay an architectural identity.

The following codes should be reflected in development proposals:

- i. Triangular roof gables, gabled porches, eyebrow dormers, inset dormers and thatched roofs are characteristic of Moggerhanger village (see figure 21). New development should seek to reference this in design proposals;
- ii. In multi-unit developments, proposals should include minor design variations to reinforce diversity of place and architectural variety in the village;
- iii. New development should seek to complement or reflect the design of neighbouring properties;
- iv. New development should consider using traditional features and should use high quality materials; and
- v. New development proposals should make use of the existing material palette within the village, which is shown overleaf.



**Figure 19:** Acute triangular gable rooflines.



**Figure 20:** Triangular gable with decorative fascia board.

# Materials and roof types



Thatched roof



Clay peg tiles



Concrete pantiles



Dormer windows



Hipped roof

# Wall & window types



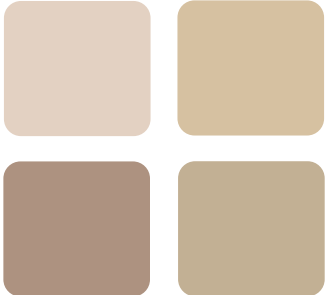
Red/brown brick



Stewartby brown brick



Brown brick with red brick details



Low rise picket boundary



Ornamental barge board



Coursed limestone rubble with ashlar dressings



Solid porch



Permeable fence boundary



Casement window



Bay window



Coloured lime render



Colour Palette



Low brick wall boundary

### BF.03 Extensions, modifications and outbuildings

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

[The Planning Portal](#) 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 codes should be reflected in all proposals 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;
- ii. 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 (when permitted) 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;
- iv. It is preferable for side extensions to be set back from the front of the main buildings and to retain the proportions of the original building. This is in order to reduce any visual impact of the join between existing and new, though this code is accepting of the specific needs to individuals;
- 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 and styles adds interest to the village roofscape, this is acceptable provided the extension remains subordinate the main building;

- 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;
- vii. When services such as gutters, satellites, or security systems are added to dwellings, they should be unobtrusive and not detract from the street scene;

**Outbuildings/ garages should:**

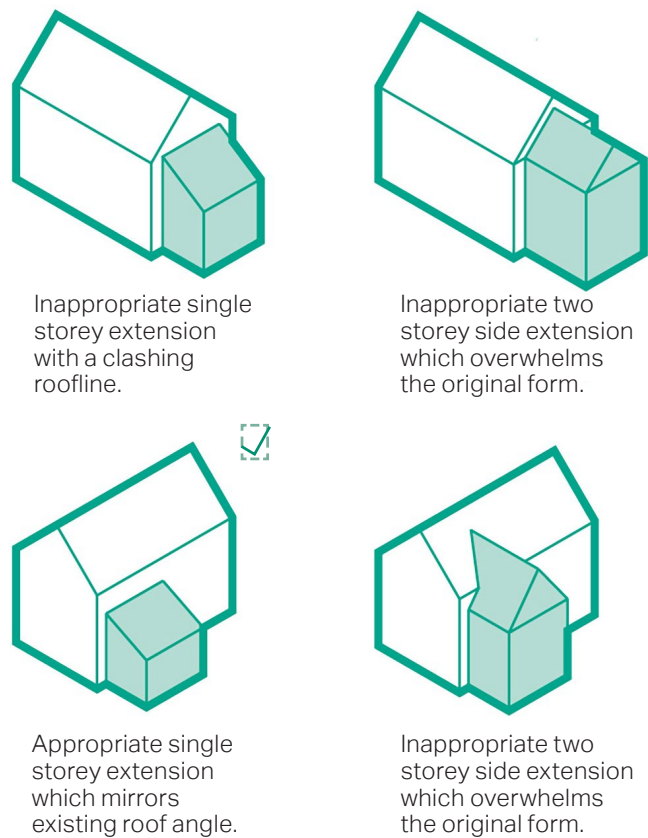
- viii. Be finished in high quality materials, avoiding the use of uPVC panels;

- ix. Maintain a minimum separation distance of 2-3 metres from their adjoining dwelling;
- x. Be unobtrusive in scale and should not overwhelm their adjoining dwelling;
- xi. Be positioned to the side of the property, further back on the plot where possible;
- xii. Not visually impose on neighbouring properties or detract from the street scene;
- xiii. Be designed in a style reflective of their adjoining dwelling; and
- xiv. Be incorporated into the wider garden design.

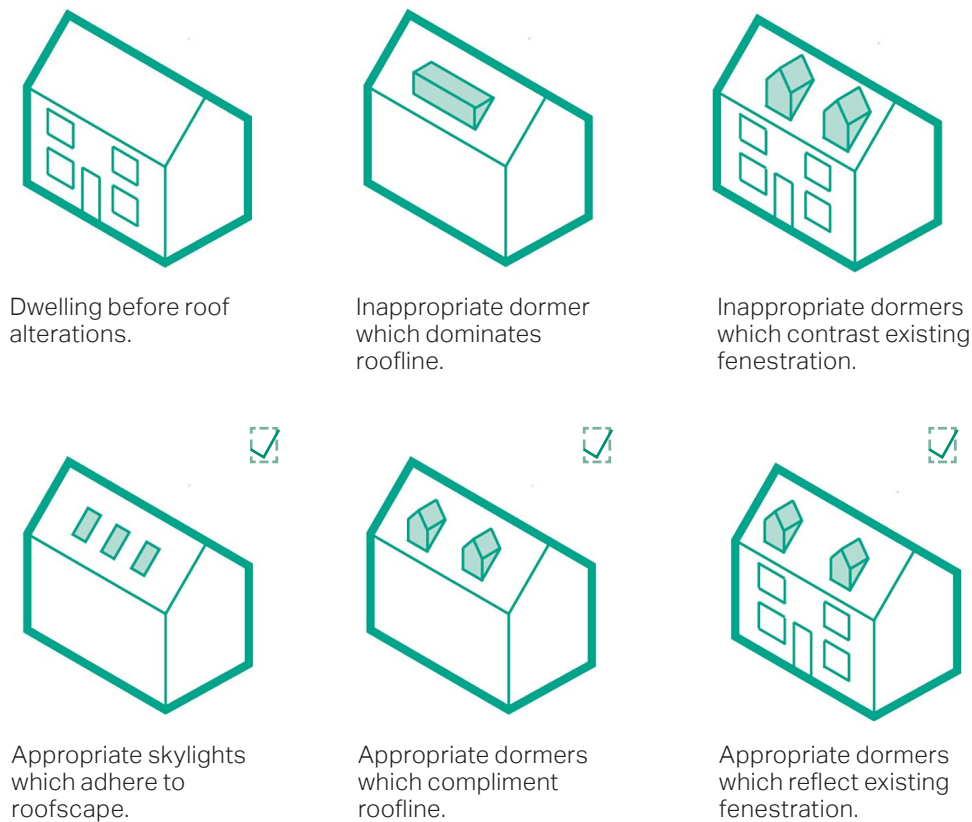


**Figure 22:** Example of garage outbuilding in Moggerhanger which is appropriate in scale and position, remaining unobtrusive without dominating the plot.

**Figure 23:** Design treatment in case of extension:.



**Figure 24:** Design treatment in loft conversion:



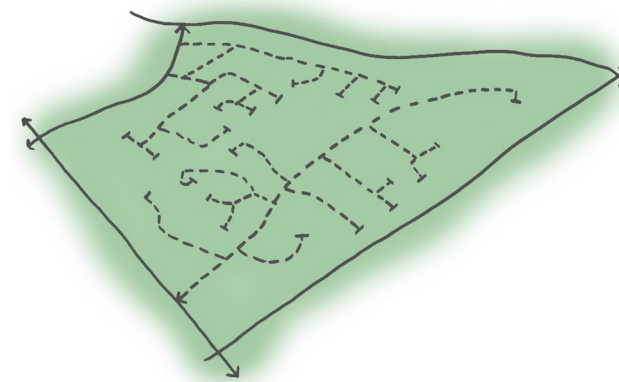
## 3.2.2 Streets and Parking

### SP.01 Connectivity

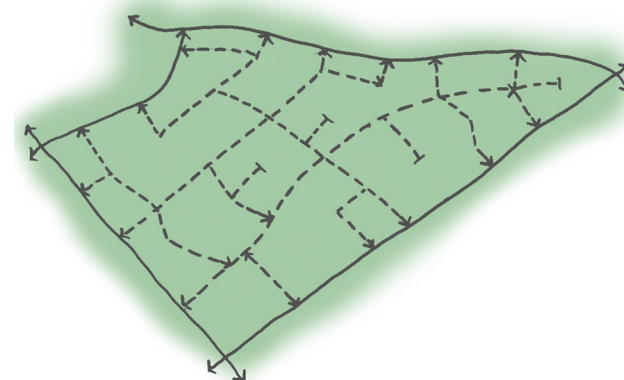
Moggerhanger generally has a well connected layout. Good practice, as set out in the Manual for Streets and the National Design Guide favours a generally connected street layout which makes it easier to travel by foot, bicycle, and public transport.

Outward connections to the surrounding countryside enable residents to interact with nature. The following codes apply:

- |                                                                                                                                                                       |                                                                                                                                                                         |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| i. Proposed routes should be laid out in a permeable pattern, allowing for multiple connections and a choice of routes, particularly on foot;                         | generate the least amount of car movements and are within comfortable walking or cycling distances to local services.                                                   |
| ii. Permeability and porosity of spaces should be considered early on in the design stage;                                                                            | v. Developments should prioritise the pedestrian experience by considering desire lines between the development to/from services;                                       |
| iii. Development should ensure that pedestrian and cycle routes are incorporated into layouts, ensuring that the option to travel on foot or by bike is incentivised; | vi. Outward connections to the surrounding landscape should be facilitated in new developments and Public Rights of Way should be expanded and enhanced where possible; |
| iv. When possible, new developments should be located where they                                                                                                      |                                                                                                                                                                         |



**Figure 25:** Example of a poorly connected layout with dominance of cul-de-sac development.



**Figure 26:** Example of a well connected street layout.

- vii. Where possible, new vehicular routes should directly connect to the A603 to reduce traffic through smaller village streets;
- viii. New routes should be designed in accordance with the latest best practice national guidance<sup>1</sup>; and
- ix. To avoid the creation of 'rat runs' on through routes, traffic calming measures and slow traffic should be implemented such as chicanes, road humps, and junction plateau and tables in discussion with the relevant highways authority<sup>2</sup>. Solutions should be provided in accordance with DfT Local Transport Note 01/07 Traffic Calming guidance and Manual for Streets<sup>3</sup>.

1 See Manual for Streets [here](#).

2 See Central Bedfordshire High Construction Standards & Specifications Guidance [here](#).

3 Found [here](#).



**Figure 27:** Illustrative diagram outlining the layout of vehicular routes in Moggerhanger

## SP.02 Parking

Cars are the dominant means of transport 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 NA, new development should also provide for electric vehicle charging. Examples of car parking typologies are shown overleaf.

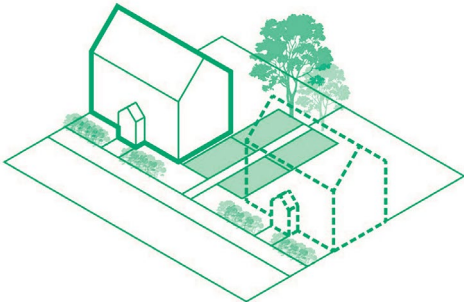
The following principles are recommended for car parking of new development:

- 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;
- ii. Internal garage widths must be of a sufficient size (6.2m wide x 6m deep) to be considered suitable as one parking space, this allows ample room for the driver's door to open with sufficient clearance on the passenger side, as well as 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 manoeuvring areas for car parking does not dominate the street frontage, allowing for a generous front garden typical of Moggerhanger;
- v. Driveways should be constructed from porous materials to minimise surface water run-off, such as cobble, gravel or other permeable finishes; and
- vi. Electric vehicle charging facilities should be incorporated into new development as they are likely to substantially increase in mode share.

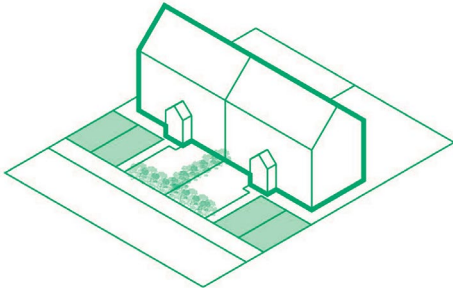
**Figure 28:** Design treatment of car parking provision.



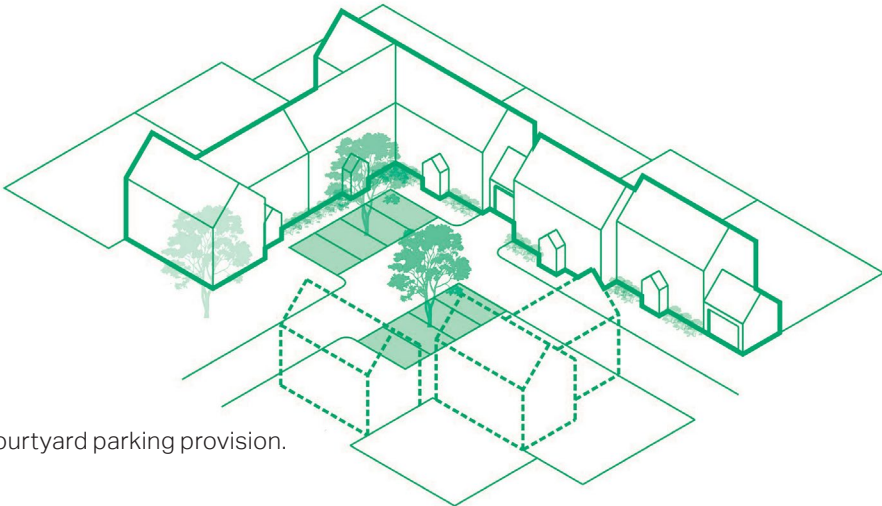
Acceptable on-plot garage parking provision.



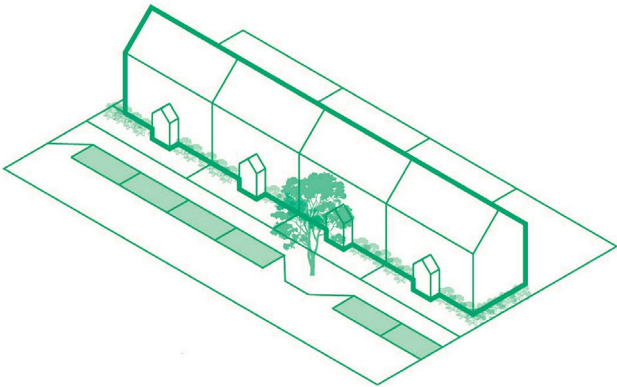
Acceptable on-plot parking provided to the side of dwellings.



Acceptable on-plot parking provided to the front of dwellings.



Courtyard parking provision.



On-street parking provision.

### 3.2.3 Protecting the Rural Setting

#### RU.01 Boundary treatments

Boundary treatments serve to divide public space and private space and can be useful to create a sense of enclosure, as well as creating visual interest and green features.

Moggerhanger is defined by its green and natural setting and boundary treatments should reflect and reinforce this quality while protecting visual amenity of the streetscape.

The following codes should be adhered to by new development proposals. Note, these relate specifically to the frontage of a dwelling:

- i. Where possible, boundary treatments should be low in height to retain sightlines across the street;
- ii. Natural boundary treatments will generally be preferred and may consist of shrubs, hedges, and trees;
- iii. Mature trees and hedgerows should be retained and incorporated within landscape plans and boundary treatments where possible;
- iv. New development proposals should include provision of gardens; and
- v. Urbanising elements such as solid walls and tall steel fences should be avoided; solid boundary treatments will be acceptable only when they are low in height.



**Figure 29:** Example of an appropriate boundary treatment which is low in height, retaining sightlines from the street and protecting the sense of openness in the village.

## RU.02 Views and heritage assets

Views and sightlines are essential for placemaking, local distinctiveness, and wayfinding.

Moggerhanger falls within between the Wooded Greensand Ridge and Clay Valleys landscape types. These landscapes afford broad long distance views of the countryside due to the rolling nature, relatively low level of woodland cover and sparse development.

Sightlines and views afford a visual connection to the surrounding landscape and can therefore improve the local “sense of place”.

Internal views to landmarks within the village will also serve to improve the overall local distinctiveness while relating to the wider Central Bedfordshire context.

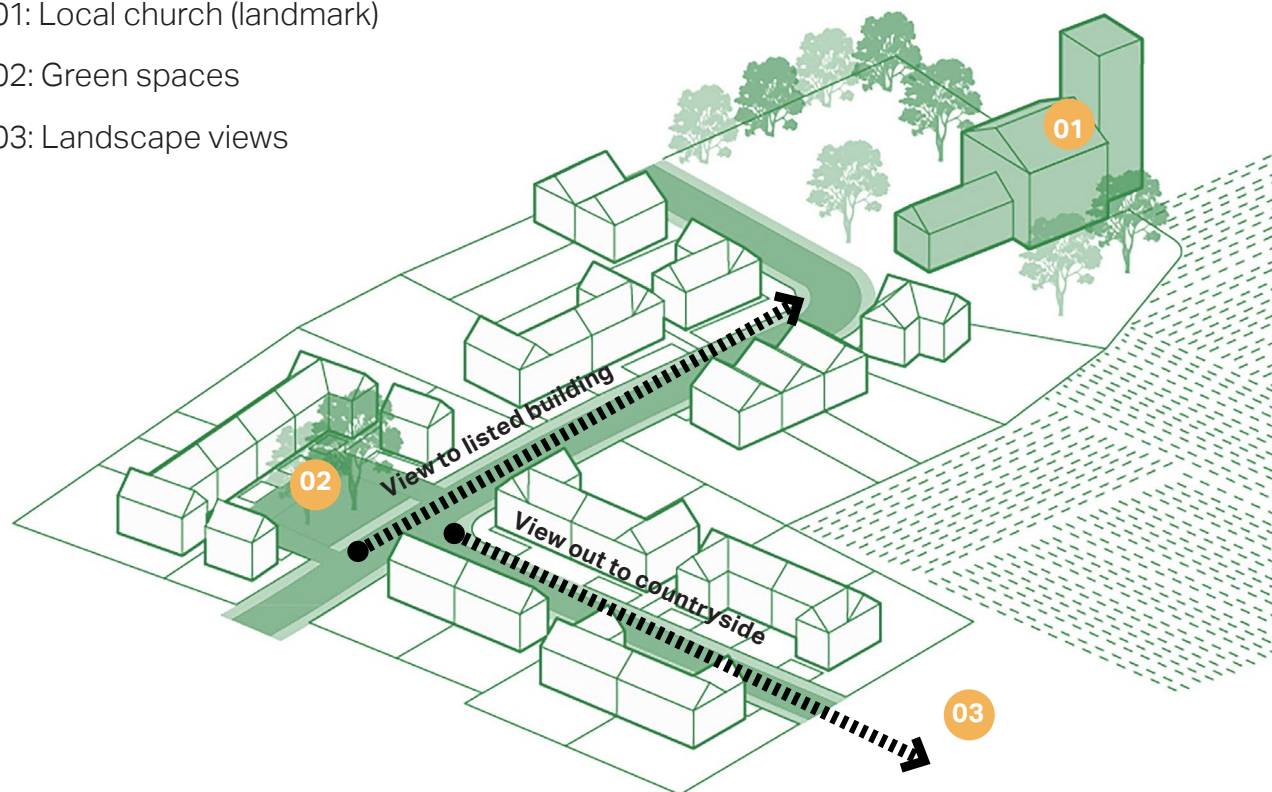
Important village views include the Church of St John the Evangelist, Moggerhanger Park, and the hills to the east of Blunham Road.

With this in mind, the following codes should be considered by development proposals:

01: Local church (landmark)

02: Green spaces

03: Landscape views



**Figure 30:** An illustrative diagram highlighting the design principles respecting views and vistas.

- i. The scale and design of development, including landscape screening, should not be intrusive to internal or external views;
- ii. Existing visual connections to the surrounding countryside and long views out of the settlement towards the surrounding ridges and valleys must be protected; and
- iii. Short-distance views of buildings, trees or landmarks such as the local church or Moggerhanger Park will help create memorable routes and places, and easily intelligible links between places should be generated where possible. This should include orientating buildings to maximise the opportunities for memorable views and visual connectivity.

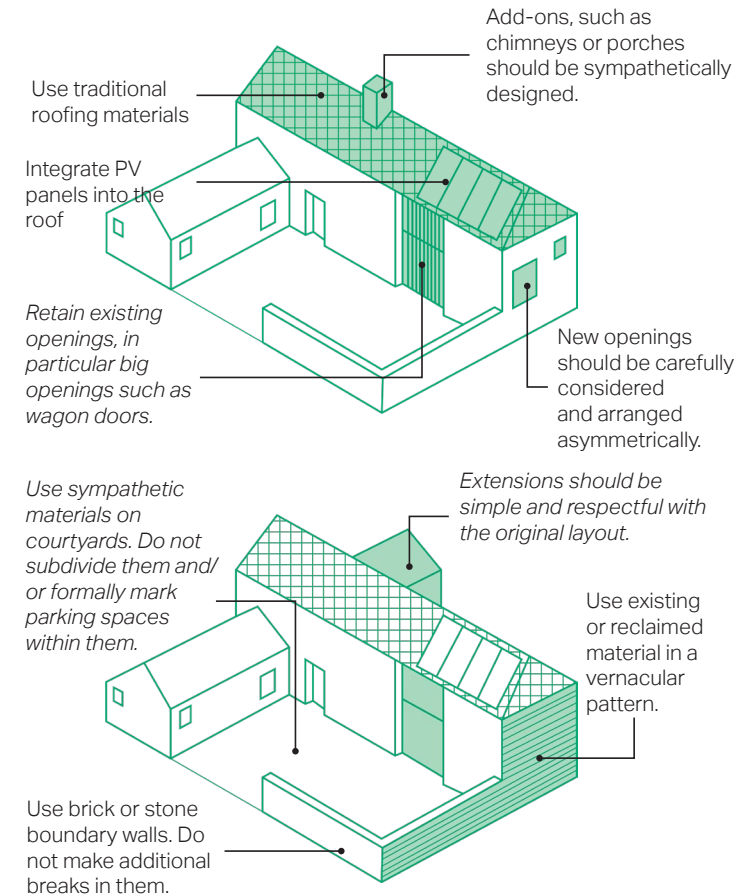
## RU.03 Agricultural conversions

Moggerhanger is complemented by the vestiges of its agricultural heritage. Some of these structures may change in use to residential. This may be accompanied by extensions or alterations of the building's envelope.

Extensions must be designed to an appropriate scale and be secondary to the original building. The pitch and form of a building's roof forms part of its character; therefore, extensions should respond by enhancing the existing character. The design integrity of original structures must be retained in the event of conversion or extension. The previous agricultural use of the building must also remain evident in its form and composition.

The following codes should be adhered to by new development proposals:

- i. External additions should be subordinate in scale to the original or primary form of the building;
- ii. Extensions should be designed to match or compliment the existing facade material of the structure;
- iii. Modifications must retain evidence of a structure's previous use where possible;
- iv. Modifications must respect or enhance the appearance of the original building and the wider scene;
- v. Street facing facades should be free of domestic add-ons such as satellite dishes, external lighting, and hanging baskets; and
- vi. Extensions should have a minimal impact on the surrounding landscape by using natural screening where possible and an unobtrusive material palette which blends with surrounding land uses.



**Figure 31:** Illustrative diagrams displaying some principles of barn conversions.

## RU.04 Industrial buildings

As a small rural parish, Moggerhanger has few employment or industrial spaces baring agricultural buildings. New small scale industrial or light industrial units would be supported in the parish when they are carefully designed to protect the rural nature of the village and to limit impact on the surrounding dwellings and the landscape.

The following codes should be adhered to by new development proposals for light industrial or commercial space:

- i. Where visible from the street or passing routes, units should be clad in high quality materials which improve their visual impact and decrease their visual presence such as wooden weatherboards;
- ii. Industrial and commercial buildings should be low in height, of 1-2 storeys maximum to minimise impact on the surrounding landscape;

- iii. Buildings lines in light industrial areas should still address internal streets and should have a rational layout, building should be of a suitable scale, similar to local agricultural buildings;
- iv. Developments should incorporate planted screening from main roads using natural features such as trees and hedges, and a landscape strategy which seamlessly blends with the surrounding countryside;
- v. Sufficient car parking should be provided for businesses and their employees. Parking should not be allowed on verges / green spaces or roads, and should be to the side or rear of buildings. Cycle routes and cycle parks should be included to support cycling to work; and
- vi. Due to their high proportion of roof space, industrial or commercial units should make use of solar panels where possible.



**Figure 32:** Aspirational example of rural style commercial units in Cardington, Bedfordshire.

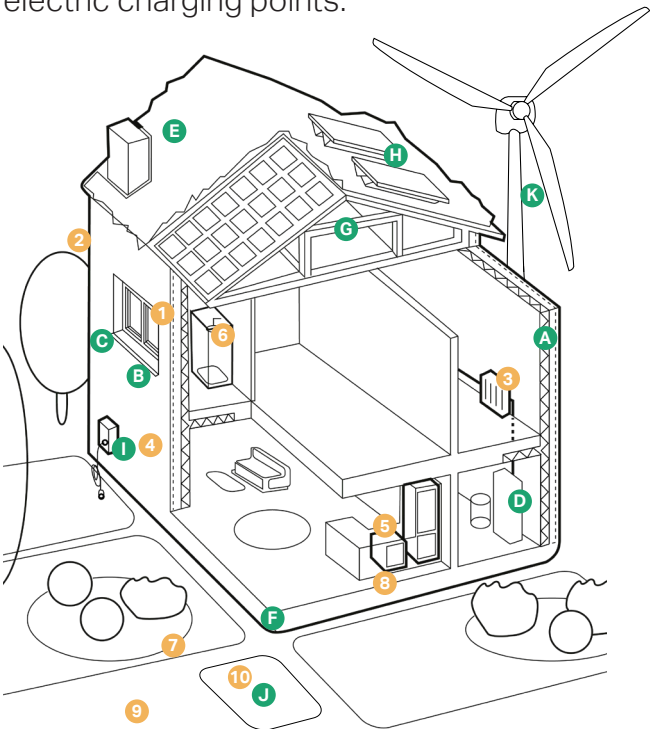


**Figure 33:** External positive example of light industrial units.

# 3.2.4 Sustainability

## SU.01 Sustainable features

Energy efficient or eco-design combines all round 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:** Diagram outlining the location of sustainable features within dwellings.

- i. All new development proposals must consider the following guidance to adhere to Moggerhanger’s sustainable agenda:

### 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, windows and doors
- 5  **Highly energy-efficient appliances** (e.g. A++ and A+++ rating)
- 6  **Highly water-efficient devices** with low-flow showers and taps, insulated tanks and hot water thermostats
- 7  **Permeable green space (e.g. gardens and trees)** to help reduce the risks and impacts of flooding and overheating
- 8  **Flood resilience and resistance** with removable air back covers, relocated appliances (e.g. installing washing machines upstairs), treated wooden floors
- 9  **Permeable hardstanding** on driveways and surface parking
- 10  **Rainwater harvesting** collected from roofs and other above ground surfaces via a system of above ground pipes and tanks.

### New build homes

- A  **High levels of airtightness** ideally to Passivehaus standards
- B  **Triple glazed windows and external shading** especially on south and west faces
- C  **Low-carbon heating** and no new homes on the gas grid by 2025 at the latest
- D  **More fresh air** with mechanical ventilation and heat recovery, and passive cooling
- E  **Water management and cooling** more ambitious water efficiency standards, green roofs and reflective walls
- F  **Flood resilience and resistance** e.g. raised electrics, concrete floors and greening your garden, permeable ground surfaces
- G  **Construction and site planning** timber frames, sustainable transport options (such as cycling)
- H  **Solar panels**
- I  **Electric car charging point**
- J  **Rainwater harvesting** collected from roofs and other above ground surfaces via a system of above ground pipes and tanks.
- K  **Wind turbines** Domestic scale wind turbines subject to height control

- ii. Development should seek to include features which improve local habitat networks and increase levels of biodiversity in the NA. This can be achieved using the following guidance;
- iii. Development will be supported where it provides a net increase biodiversity;
- iv. Development may incorporate and enhance existing and new biodiversity features within their design;
- v. Development may maximise opportunities to enhance and create links between ecological networks and habitats of principal importance. Links should be created both on-site and, where possible, with nearby features;
- vi. Development should consider the surrounding landscape and ecological connectivity of the area. Proposals should incorporate features to protect and enhance ecological corridors (or similar);
- vii. Development must actively protect mature and veteran trees, wide green verges, and hedgerows as they are essential for biodiversity. Hedgerows are a particularly good habitat for fauna and also prevent soil erosion; and
- viii. Development should incorporate nature friendly ideas such as bird boxes, bee bricks, bug-houses, swift bricks and ponds. To illustrate, swift populations are in decline in the UK as more development moves towards air-tight buildings, resulting in a loss of habitat. To encourage swifts to live and breed in the area, swift bricks should be considered as they are easily installed, fitting within multiple standard UK brick sizes.



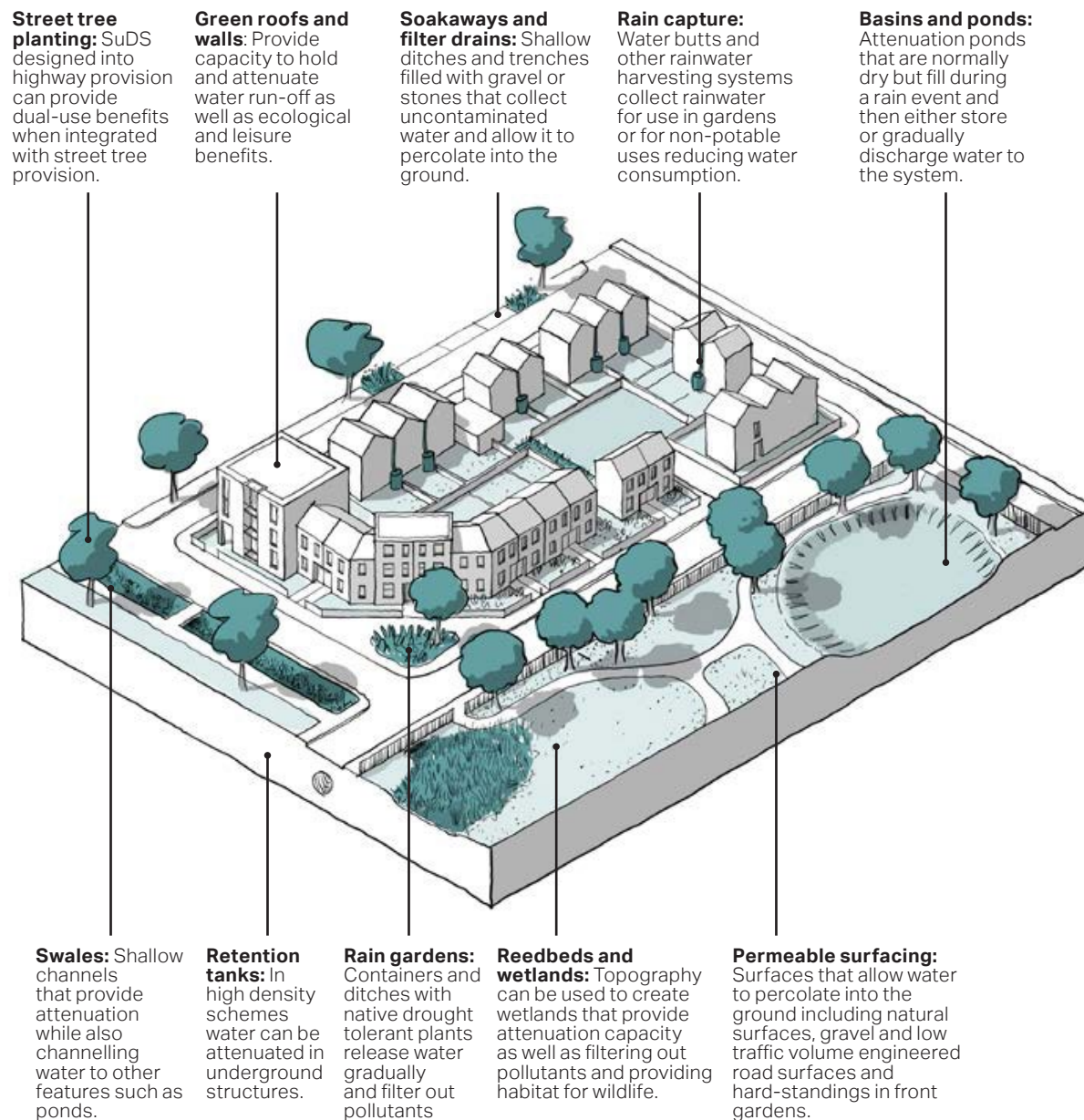
**Figure 35:** Example of a Swift brick under an eave.



**Figure 36:** Example of a hedgehog corridor within in a garden fence.

All new development should work to moderate extremes of temperature, wind, humidity, local flooding and pollution within the NA:

- i. Eco-systems cannot adapt as fast as the climate is changing leading to loss of biodiversity. Protecting and enhancing woodlands, watercourses and green infrastructure can combat this. Aim to increase ecology through biodiversity net-gain on major development sites. Use street trees and planting to moderate and improve micro-climate for streets and spaces; and
- ii. The following climate resilience systems outlined in figure 37 should be applied at the street scale:



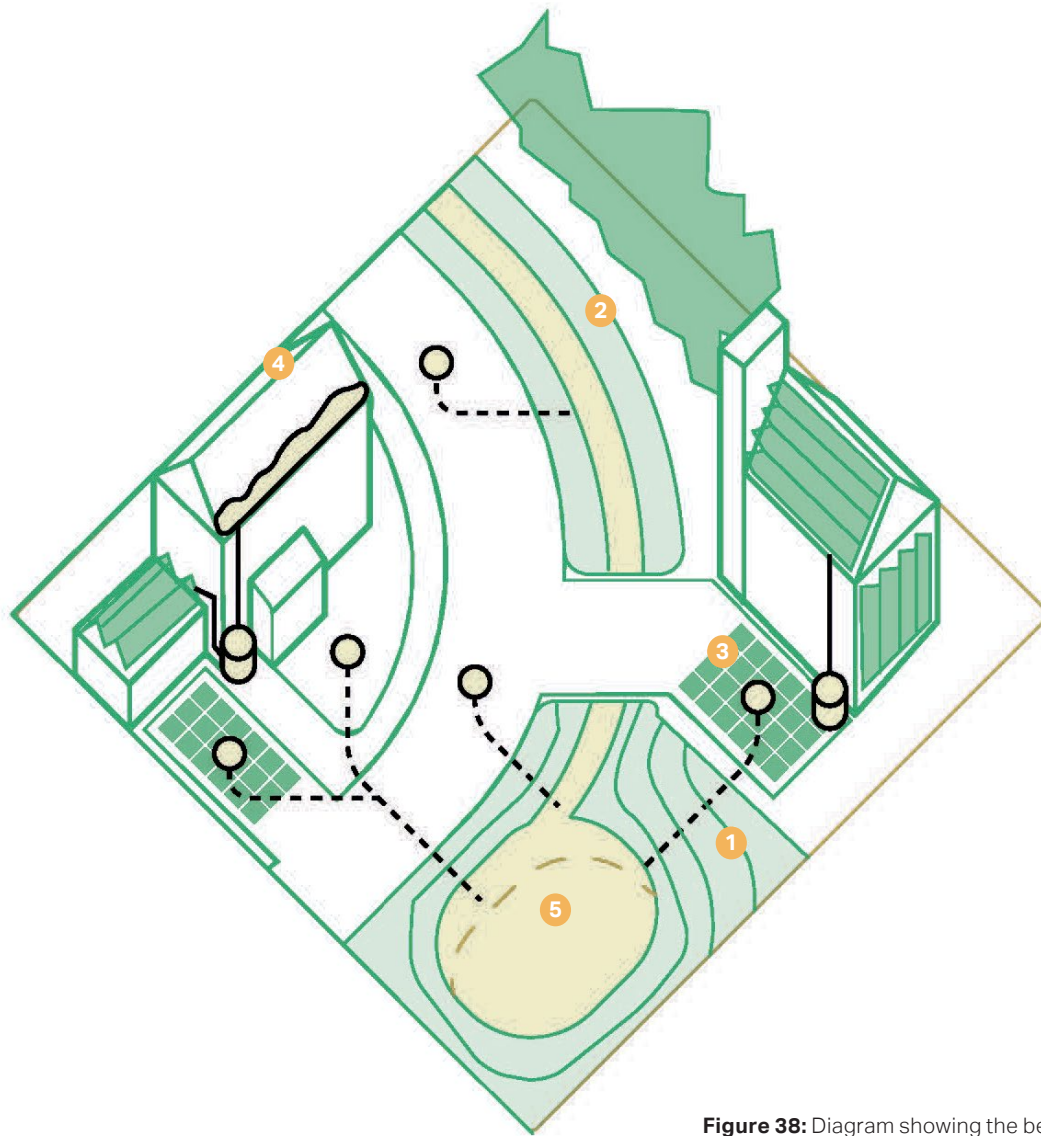
**Figure 37:** Sustainable drainage systems as set out in the National Model Design Code.

## SU.02 Flood mitigation and water quality

National and local planning policy requires development to respond to climate change and flooding, including through the use of sustainable 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 NA, 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 (on-plot) as possible.
- ii. 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. For example these could consist of trees and vegetation, green roofs (roofs with plants growing on to help reduce runoff), swales (shallow, broad vegetated channels used to collect and move water to reduce peak flows in rivers), and ponds and wetlands;
- 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; and
- vii. Attenuation and controlled release - holds back the water and slowly releases it into the infrastructure network.



- 1 Rain garden
- 2 Swale
- 3 Permeable paving
- 4 Green roof
- 5 Attenuation basin

**Figure 38:** Diagram showing the best use of harvesting water systems including rain gardens, swales, permeable paving, green roofs

**Checklist for new development**

**04**

## 4. Checklist

This section provides a number of questions based on established good practice against which design proposals in Moggerhanger should be evaluated. The aim is to assess all proposals by objectively answering the questions below. Not all the questions 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 in part 1, there are a number of ideas or principles that may be present in most proposals for new development.

There may be some elements which are not relevant to minor householder applications such as modifications and extensions. 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.

# 1 (continued overleaf)

### 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 landscape or historical features into the development;
- Respect surrounding buildings in terms of scale, height, form and massing;
- Adopt contextually appropriate materials and details;
- Provide adequate open green 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;
- Positively integrate energy efficient technologies with regard for impact on neighbouring properties; and
- Create soft landscape edges in places where development borders open countryside at the periphery of the settlement.

# 1 (continued)

## General design guidelines for new development:

- 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;
- 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 secondly by incorporate renewable energy sources.

# 2

## Local green spaces, views & character:

- Have opportunities for enhancing existing amenity spaces been explored?
- Will any communal amenity space be created? If so, how this will be used by the new owners and how will it be managed over the long term?
- Have opportunities to increase the local area's biodiversity been fully explored.
- Has the proposal been considered within its wider physical context?
- Has the impact on the landscape quality of the area been taken into account?
- How does the proposal impact on existing views which are important to the area and how are these views incorporated in the design?
- Do all properties have acceptable levels of natural light in habitable rooms?

# 3

## Building line, access and boundary treatment:

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

# 4

## Street grid and layout:

- Does it favour accessibility and connectivity (especially on foot or bike)? 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?

# 5

## Building heights and roofline:

- What are the characteristics of the roofline?
- Have the proposals paid careful attention to height, form, massing and scale in relation to surrounding context?
- If a higher than average building(s) is proposed, what would be the reason for making the development higher and how would its impact on neighbouring buildings be controlled?
- 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?

# 6

## 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 been addressed in the context of the overall design?
- Do 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?

## 6 (continued)

### Building materials & surface treatment:

- Can the proposed materials be locally and/or responsibly sourced? E.g. FSC timber, or certified under BES 6001, ISO 14001 Environmental Management Systems?
- 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.
- Is all hardstanding to the front, sides and rear of the properties permeable?
- Can SuDS be incorporated into the landscape design in a considered manner?

## 7

### Buildings layout and grouping:

- 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?
- 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 and on-street parking?
- 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?

# 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 relate to or complement 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? If so, are they sympathetic to the original building scale and the existing rhythm of fenestration?
- 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?
- Does the extension incorporate all relevant sustainable features?
- Does the extension reduce existing off-street parking space? If so, how is this mitigated?
- Are any new outdoor hardstanding spaces permeable?

# 9

## Car parking:

- What parking solutions have been considered for car/bicycle/scooter?
- Are the 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 parking space compromise the amenity of adjoining properties?
- Can electric vehicle charging points be provided and integrated within the design?
- Can secure cycle storage be provided at individual building level or through a central facility where appropriate?
- If covered car ports or cycle storage is included, can it incorporate roof mounted photovoltaic panels, a biodiverse roof, and or rainwater harvesting, in its design?

## About AECOM

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