

Witcham

DESIGN GUIDANCE
AND CODES

FINAL REPORT |
March 2024



Quality information

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Introduction

01



1. Introduction

Through the Department for Levelling Up, Housing and Communities Neighbourhood Planning Programme led by Locality, AECOM was commissioned to provide design support to Witcham Parish Council. The support is intended to provide design guidance and codes based on the character and local qualities of the area to help influence residential developments.

1.1 Purpose of this document

The Neighbourhood Plan Working Party has sought to develop a set of design codes guiding any future development in the parish.

The National Planning Policy Framework (NPPF; 2023, paragraph 130) states that “Neighbourhood planning groups can play an important role in identifying the special qualities of each area and explaining how this should be reflected in development, both through their own plans and by engaging in the production of design policy, guidance and codes by local planning authorities and developers.”

The stages of production for this document are outlined here:

STEP 1

Meeting with the group and site visit.

STEP 2

Urban design and local character analysis.

STEP 3

Preparation of the design principles, guidelines and codes to be used to inform the design of the Parish and future developments.

STEP 4

Draft report with design guidelines.

STEP 5

Submission of a final report.

1.2 Area of study

Witcham is a small village and civil parish located in East Cambridgeshire. The closest large settlement is Ely which is approximately 5 miles to the east and Cambridge is about 15 miles to the south. The village is set on a hill and surrounded by low lying fenland which is typical of settlements in the area. This means that Witcham has both panoramic views towards the countryside as well as views towards significant buildings in other settlements such as Ely Cathedral.

The primary road in the area is the A142 which borders the southern edge of the parish. It provides connectivity towards both Chatteris and Ely as well as leading towards other strategic roads such as the A10. The nearest railway station is in Ely which has routes going to London, Cambridge, Norwich, Peterborough, Ipswich, King's Lynn and Birmingham.

Witcham is an area that is rich in heritage, with several listed buildings within the village. The oldest building in the parish is the 13th century Church of St Martin. The history of the area will be visited in more detail in sections 2.3 and 3.

It has a pub called the White Horse which has won various awards over the years. As well as this Witcham has a central recreation ground which is used for cricket, football and general recreational activities. The village hosts the World Pea Shooting Championships on the second Saturday in July every year and has staged the competition annually since 1971.



Figure 01: View from the edge of Witcham towards the Ouse washes.



Figure 02: Church of St Martin located on the High Street.

KEY

- Witcham Neighbourhood Area
- Water way

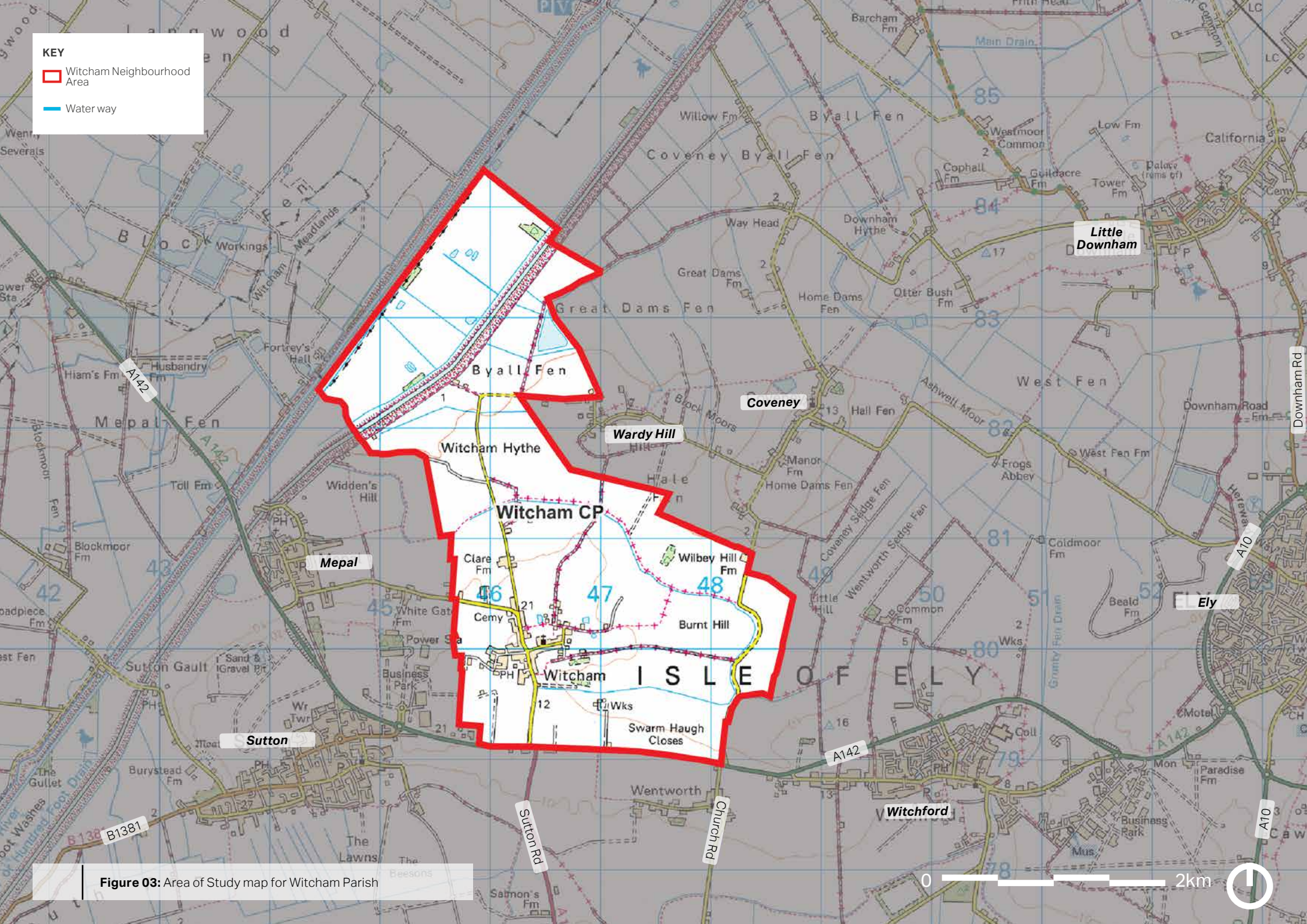
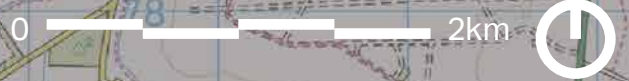


Figure 03: Area of Study map for Witcham Parish



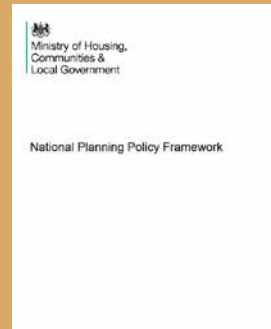
1.3 Design guidance and best practice

This section summarises the relevant design policy, guidance and evidence base produced at national, county and district levels which have informed this design code. Any new development applications should be familiar with these documents.

It is also important to make sure that all design guidance and supplementary planning documents at both national level and local level that are used are fully up to date.

National Design Guidance

2023



National Planning Policy Framework - Department for Levelling Up, Housing and Communities

Relevant national planning policy is contained within the National Planning Policy Framework (NPPF, July 2023). The NPPF was updated in July 2023 to include reference to the National Design Guide and National Model Design Code and the use of area, neighbourhood and site-specific design guides. Paragraph 129 states that: “the creation of high quality buildings and places is fundamental to what the planning and development process should achieve and outlines that good design is a key aspect of sustainable development, creates better places in which to live and work and helps make development acceptable to communities.”

2021



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

The National Design Guide sets out the government’s ten priorities for well designed places and illustrates how well-designed places can be achieved in practice. The ten characteristics identified include: context, identity, built form, movement, nature, public spaces, uses, homes and buildings, resources and lifespan. The Guide also reinforces the National Planning Policy Framework’s objective in creating high quality buildings and places. The document forms part of the government planning practice guidance.

2021



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

The draft National Model Design Code provides guidance on the production of design codes, guides and policies to promote well-designed places. It sets out the key design parameters that need to be considered when producing design guides and recommends methodology for capturing and reflecting views of the local community.

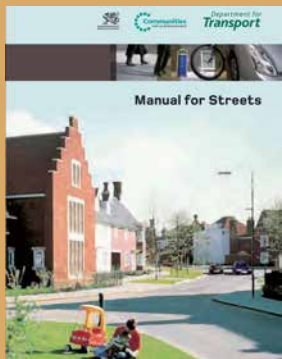
2020



Building for a Healthy Life - Homes England

Building for a Healthy Life updates Homes England’s key measure of design quality as the national housing accelerating body. The document sets out 12 considerations for creating integrated neighbourhoods distinctive places and streets for all. While it is not part of the national policy, it is recognised as best practice guidance and design tool in assessing the design quality of developments.

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.

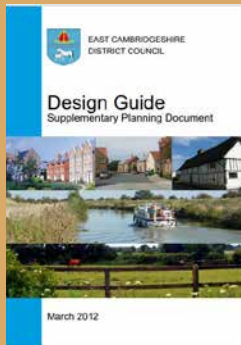
2015 (as amended 2023)



East Cambridgeshire Local Plan- East Cambridgeshire District Council

This Local Plan sets out a blueprint for the future growth of East Cambridgeshire. It looks at how much, where and when development should take place and sets out a site specific vision for Witcham. It seeks to ensure that development in the district is 'sustainable' and meets the needs of the local area. The Local Plan covers the period up to 2031. Under section 17 of the Planning and Compulsory Purchase Act 2004 the Local Plan has undergone a 1st review in 2015 and 2nd review in 2020. The outcome of this Second Review is that East Cambridge Local Plan 2015 does require to be revised, but only partially and only in respect of its strategic housing policies.

2012



Design Guide Supplementary Planning Document- East Cambridgeshire District Council

The overall purpose of this guide can be understood by considering the primary objectives for development within East Cambridgeshire- Innovation, Imagination and Creativity. The guide sets out the requirements and aspirations for development within East Cambridgeshire and hopes to encourage sound building principles, combined with innovation and excellence in design.

2021



Climate Change Supplementary Planning Document- East Cambridgeshire District Council

This SPD builds upon the 'Environment and Climate Change' section of the Local Plan (April 2015) as well as responds to National Planning Policy and guidance.

**Neighbourhood Area
Context Analysis**

02



2. Neighbourhood Area Context Analysis

This section outlines the broad physical, historic and contextual characteristics of the Neighbourhood Area.

2.1 Village structure

Witcham is built around a crossroad in the centre of the village with each of the four roads lined each side with housing. From the crossroads the north-bound street is called "Martins Lane", the east-bound street is "High Street", south-bound is "The Slade", and west-bound is "Silver Street". It is clear that over time the village has developed in a linear manner outwards from the church and the central recreation ground.

The village is predominantly residential and the pattern of the development within the village is varied with many properties setback facing onto the main roads. In addition to linear development, the Silver street area also has cul de sacs and small developments behind the main street residencies. The majority of properties have space between them of varying widths, allowing views through to rear gardens and beyond towards the surrounding fenland and arable farmland that encircles the village.



Figure 04: Witcham recreation ground.



Figure 05: View down the High Street.

- KEY**
-  A142
 -  Buildings
 -  Water body
 -  Public footpath
 -  Village approaches
 -  Public open spaces

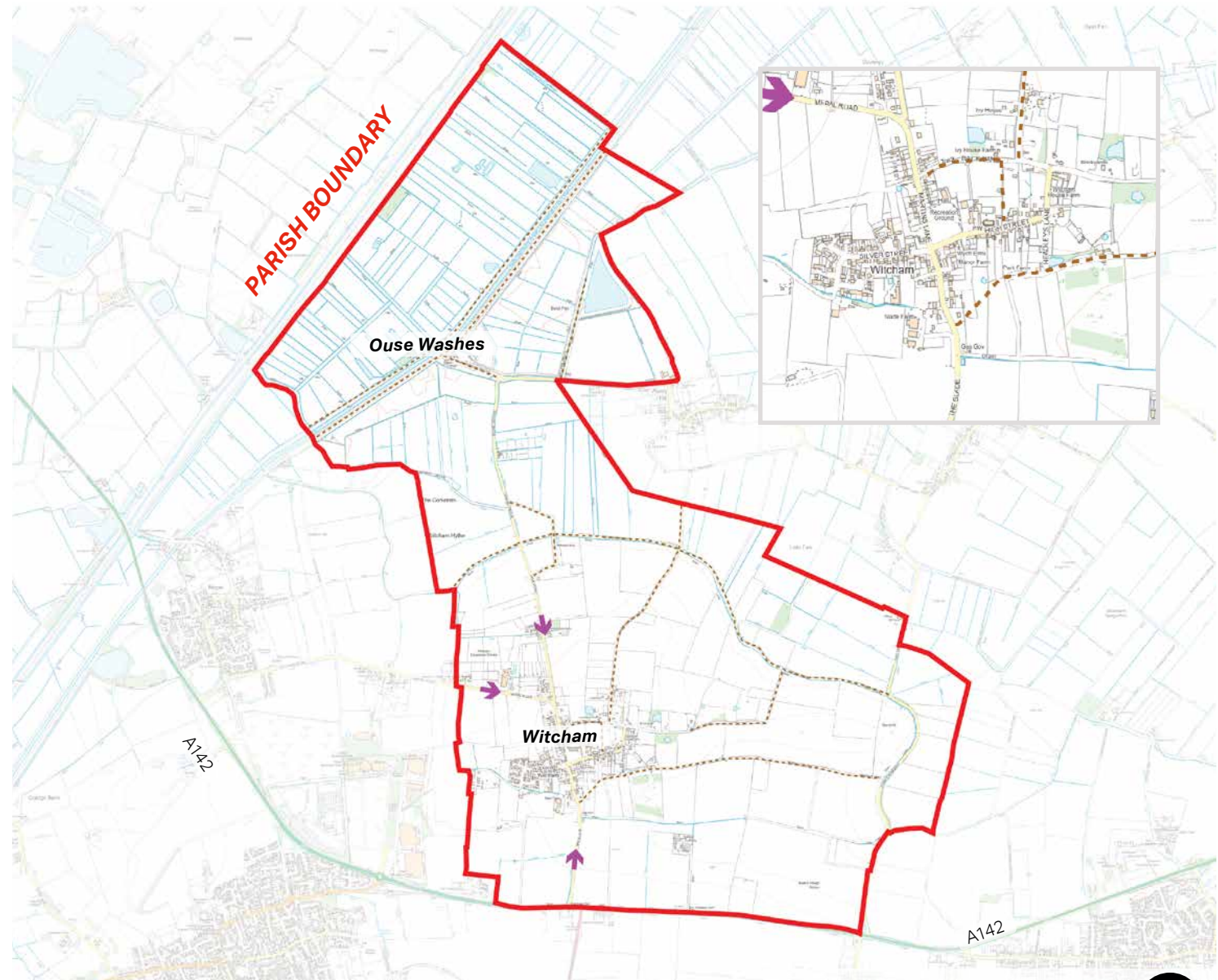


Figure 06: Map showing the surrounding context of Witcham parish with a zoomed in version showing the village.

0  1km



2.2 Movement networks

Witcham is centred around a crossroads that sits at the south west corner of the recreation ground. The main route running north west through the village is The Slade which becomes Martins Lane and then at the north side of the village turns west, becoming Mepal Road with a junction off onto a minor road, Hive Road, that leads down to Witcham Gravel, Wardy Hill and Coveney. Both ends of the main route connect with the A142 which is the primary route in the area connecting to Chatteris, Ely and the A10.

A network of Public footpaths and byways runs throughout the parish and is one of its greatest assets. The footpaths and cut throughs within the village provide good connectivity within and around the village, encouraging people to actively move around the village and parish. As well as this there are several rights of way that deliver fantastic accessibility towards the surrounding countryside. In the summer months, when the weather is dryer people can even walk or cycle as far as Ely by

using local cross-country footpaths. There is one bus stop in the village located at the crossroads which provides routes towards both Ely and the surrounding villages.

There is direct access at Witcham Toll to a public footpath/cycle way that runs alongside the A142 that links Sutton through Witchford to Ely.



Figure 07: One of the local public footpaths within the village.



Figure 08: Mepal Road leading down from Witcham towards Mepal.



Figure 09: The High Street which has a linear feel to it.

- KEY**
-  A142 (Busy)
 -  Secondary roads
 -  Buildings
 -  Water body
 -  Public footpath/
byway
 -  Dangerous junction
 -  Public open spaces
 -  Bus stop
 -  Footpaths within the
village (see insert)

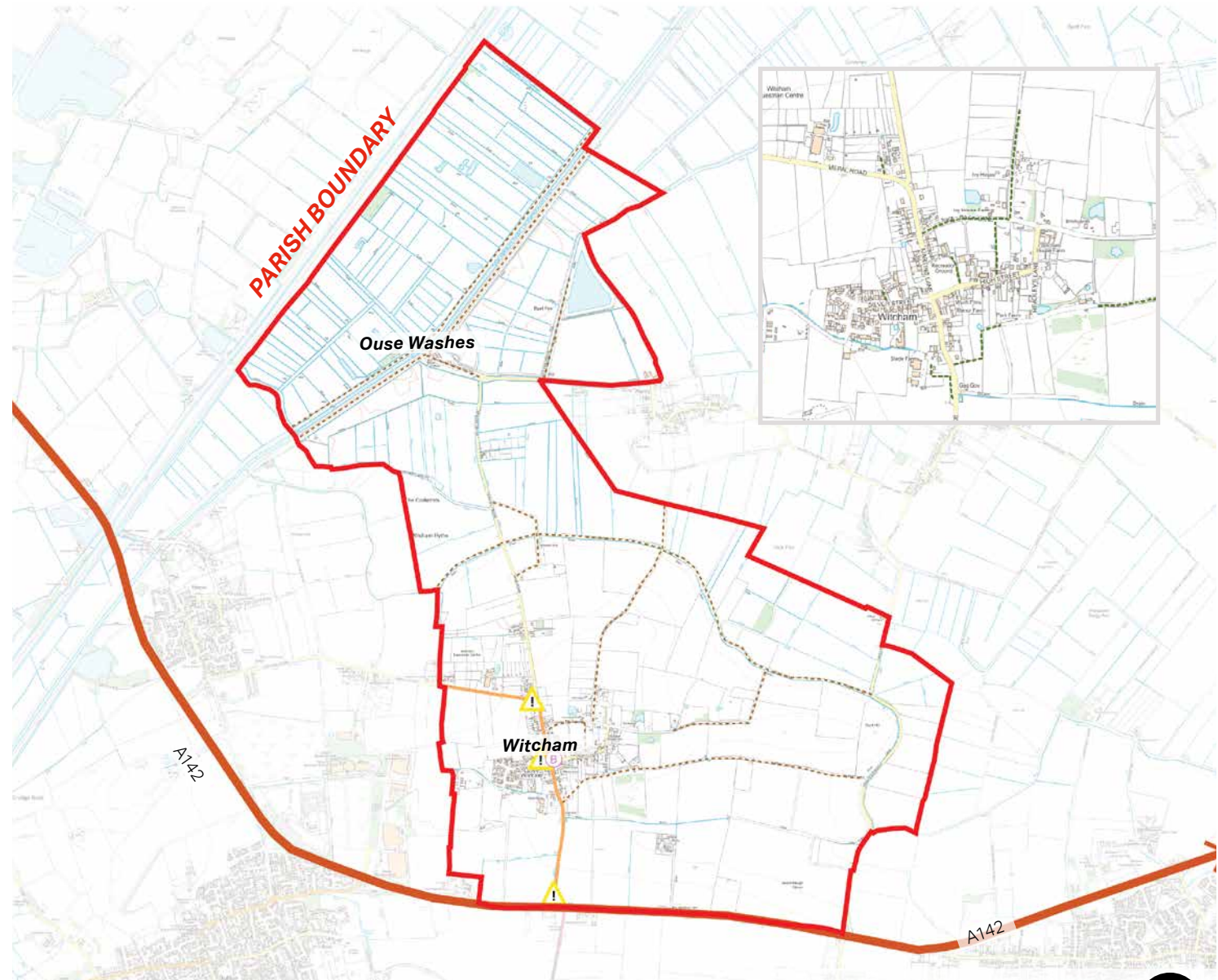


Figure 10: Map showing key road networks and the Public Rights of Networks connected to the countryside.

0  1km



2.3 Heritage and views

Historically, Witcham Parish had several detached portions in the outlying Fens. Witcham and Witcham Gravel were placed into separate parts of the Ely district in 1896 until 1933 when Witcham Gravel was merged back into Witcham.

The name of the village derives from “Wycham”, meaning “place of the wych elms”, after the trees that used to grow there in significant numbers. A Roman cavalry helmet dating from the first century AD, known as the Witcham Gravel helmet, was found in the village gravel pit, and now resides in the British Museum with a replica in Ely Museum. The historic character of the area is supported by the Conservation Area and 10 listed buildings that are shown in Figure 15. In addition there are 4 buildings of local interest identified by ECDC including the White Horse Inn, Witcham House, Grange Farm and the barn to the rear of 21 High Street.

The views towards the village, within the village and outwards towards the countryside and other settlements are a key part of the character of the parish. The fact that the settlement is on a hill means that there are both panoramic views of the countryside (particularly to the north over the Ouse Washes from the top of Martins Lane) and views towards buildings such as Sutton Church tower and Ely Cathedral. Views towards the village from the A142 are dominated by the mature trees, with the view of the Church providing a focus to the village. The approach from Mepal and Wardy Hill provide limited views of any built form.










Figure 12: View from the east of the village towards Ely Cathedral in the distance.



Figure 11: Witcham House.



Figure 13: Church of St Martin.

- KEY**
-  Water body
 -  Conservation Area
 -  Important views
 -  Listed buildings
 -  Buildings of local interest
 -  Public open spaces
 -  Buildings

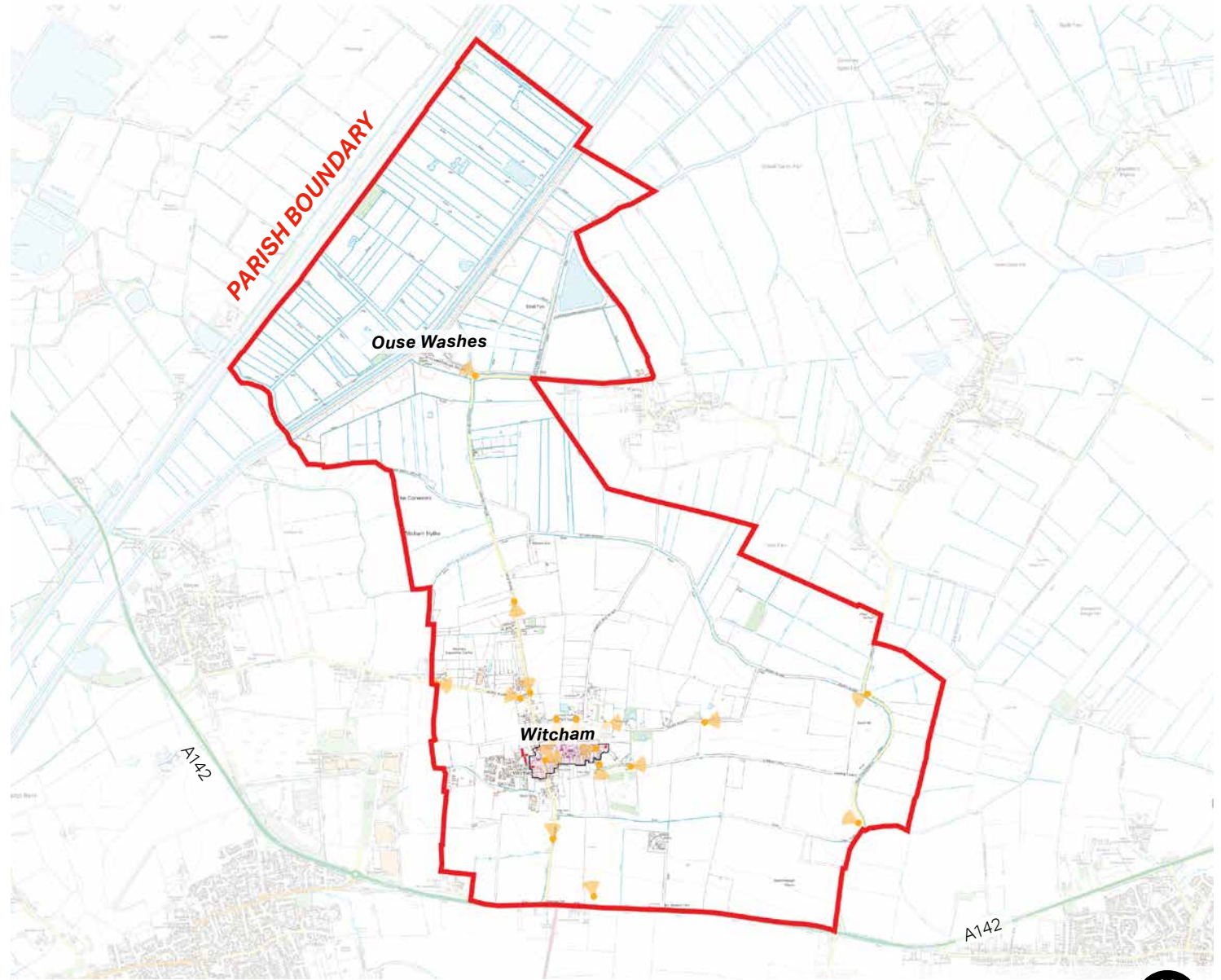


Figure 14: Map showing the Conservation Area, listed buildings and important views in and around Witcham.

0  1km



- KEY**
- Conservation Area
 - Important views
 - Listed buildings
 - Buildings of local interest
 - Public open spaces
 - Buildings

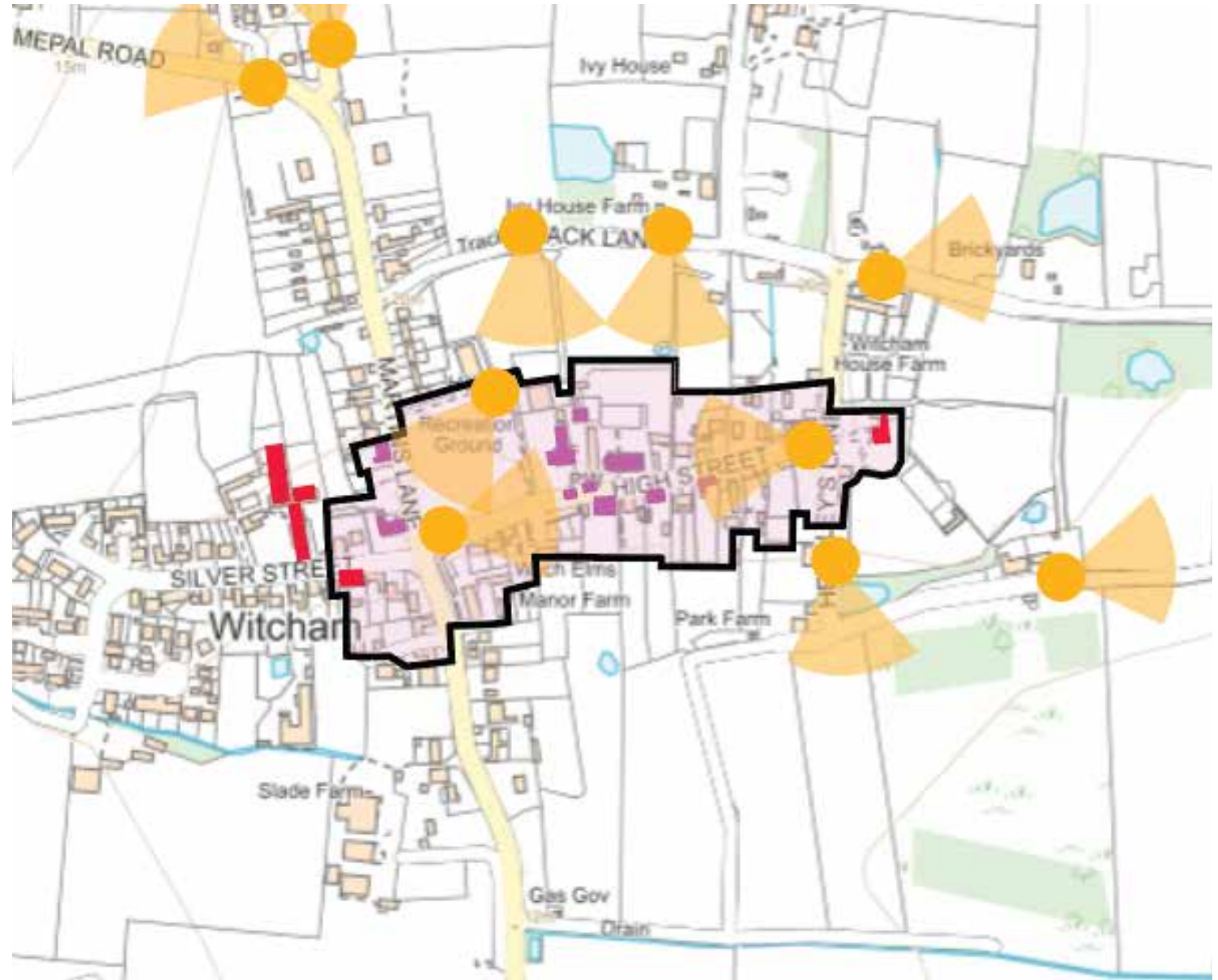


Figure 15: Zoom in plan of the village and Conservation Area.

2.4 Green infrastructure

One of the main assets of Witcham is the rural setting that it is located in. Immediately surrounding the village there are various arable farming fields that have been farmed for many years. The flat fenland topography makes for an accommodating terrain for farming. As well as this there are large areas of mature hedgerows and tree belts that surround the settlement. This hides the built-up part of Witcham from the outside when approaching the village with the tree belt in the foreground giving glimpses through to the church, thus emphasising the importance of the church. It is a key characteristic that the local community treasure.

In the north of the parish there is a strip of the Ouse Washes SSSI (Site of Special Scientific Interest as designated by Natural England) which is an area considered to best represent our natural heritage in terms of its wildlife and geology stretching from near St Ives in Cambridgeshire to Downham Market in Norfolk. The Ouse



Figure 16: View from the top of Martins Lane towards the Ouse Washes.

Washes are an internationally important site and therefore are also designated as a Special Protection Area, Special Area of Conservation and RAMSAR site. RAMSAR sites are wetlands of international importance designated under the RAMSAR Convention. The RAMSAR Convention is the intergovernmental treaty that “provides the framework for the conservation and wise use of wetlands and their resources”

which came into force in 1975. The Ouse Washes are clearly visible from the northern parts of the parish on roads such as Martins Lane.

Also in the north of the parish, overlapping The Ouse Washes SSSI is a bird protection zone. The water and grassland in that area encourages bird wildlife thus supporting the biodiversity and natural value that this part of the parish holds.

- KEY**
-  Buildings
 -  Water body
 -  Bird protection zone
 -  Ramsar site
 -  Public open spaces
 -  Tree Preservation Order
 -  Tree belt that surrounds the village
 -  Nature reserve

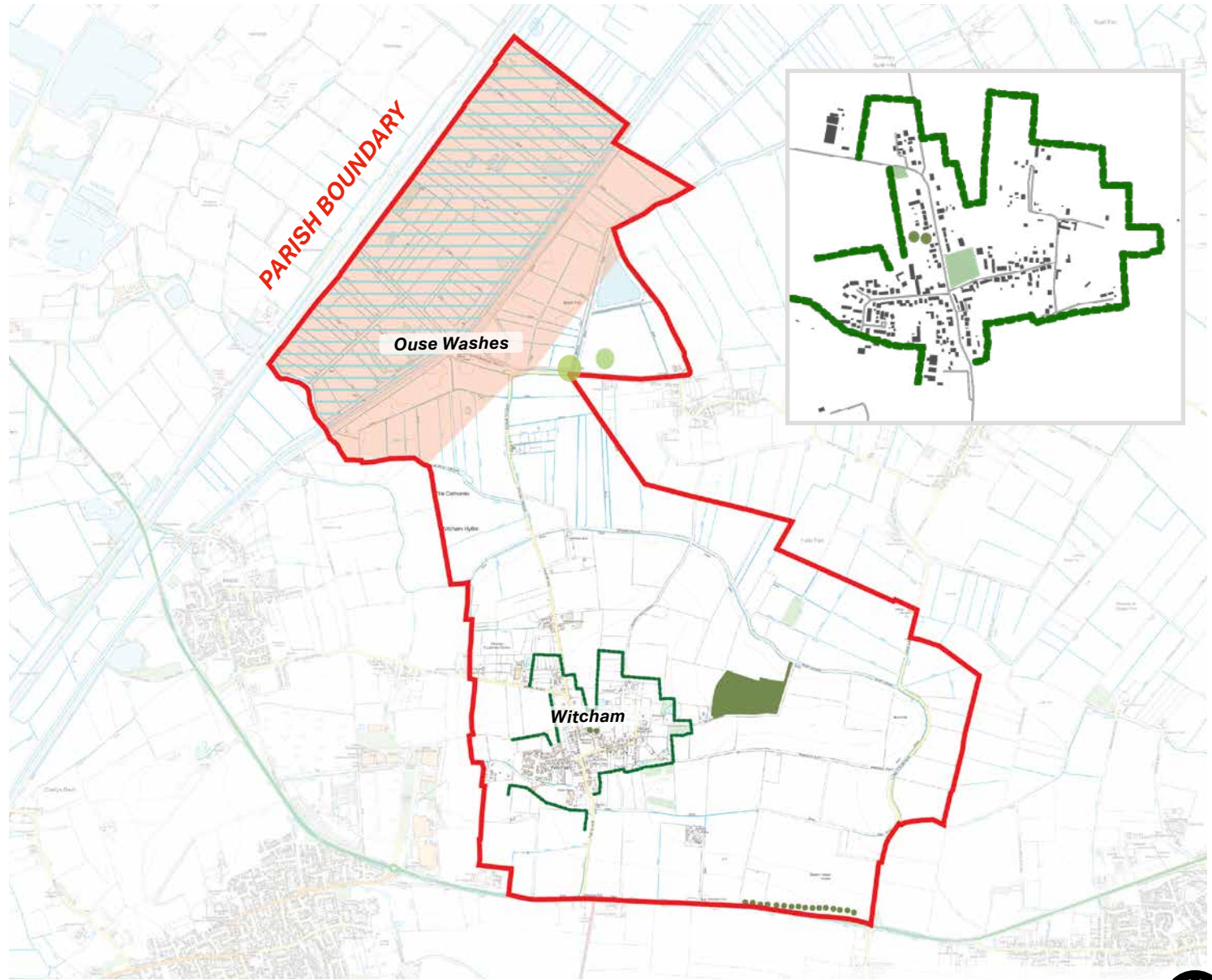


Figure 17: Green infrastructure map for Witcham Parish.



**Parish Character
Assessment**

03



3. Parish Character Assessment

3.1 Defining the Character Areas

Following on from the analysis set out above, this part of the report focuses on the different built character areas within the parish. The different areas are characterised by variations in topography, movement, views and landmarks, green space and landscape cover, public realm and streetscape, built form and architectural details.

The parish of Witcham as it stands today has four character areas (See Figure 18), which have been defined with the Neighbourhood Plan Working Party, and are as follows:

- CA1- Conservation Area
- CA2- Village approaches
- CA3- Silver Street area
- CA4- Countryside area





CA1- Conservation Area

CA2- Village approaches

CA3- Silver Street area

CA4 - Countryside area

KEY

-  CA1: Conservation Area
-  CA2: Village approaches
-  CA3: Silver Street area
-  CA4: Countryside area

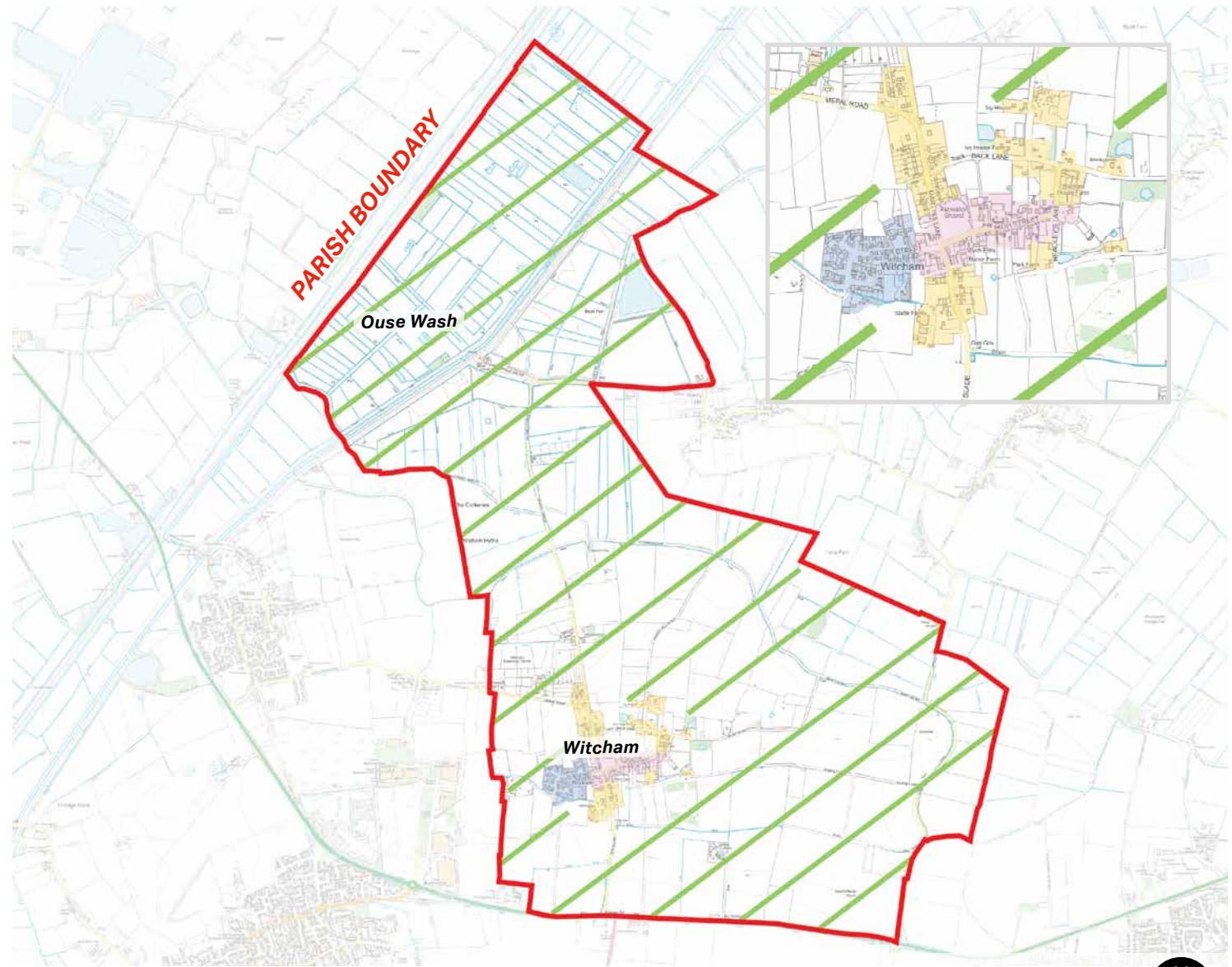


Figure 18: Map showing the character areas within the parish.

CA1- The Conservation Area



03

Witcham Conservation Area is centred around the High Street running from the edge of Silver Street all the way to Headleys Lane. It goes without saying that this is the oldest part of the village with many listed and historically significant buildings such as the Church of St Martin and Witcham House. See Figure 15 for the listed buildings and buildings of interest.

<p>Land Use</p>	<p>As with the rest of the village the predominant land use is residential, however there is the Church of St Martin and the White Horse Inn. As well as this, there is the village recreation ground which is overlooked by the village hall and hosts a cricket pitch, children’s play areas and the annual pea shooting championship.</p>
<p>Pattern Of Development</p>	<p>The Conservation Area stretches from Witcham House, down the High Street towards Silver Street. The way that the area has developed over time has created a strong linear feel to the streetscape with active edges flowing down either side of the street throughout. The oldest building in the area is the church which is of the 13th century and since then various infill developments have taken place. Development is of low density with the majority of properties detached or semi-detached and of a non uniform design. This type of development leads to gaps between properties and is a key characteristic of the area with views through to rear gardens and the landscape beyond. This along with the variety in building line gives an openness and an attachment to landscaping.</p>
<p>Building Line/Plot Arrangement</p>	<p>Buildings typically have a short setback with some buildings fronting directly onto the pavement and others having small front gardens which creates a sense of variety in the streetscape with a balance between built form and landscape. A few of the properties have side or rear of building parking, however there is a considerable amount of on-street car parking along the High Street.</p>
<p>Boundary Treatment</p>	<p>Typically the street boundary is defined by a combination of varying heights of brick walls (typically local gault or mellow red brick), timber fences and vegetation such as hedges and other small plants and shrubs.</p>
<p>Heights & Roofline</p>	<p>Buildings in the Conservation Area are typically 2 storeys in height with predominantly pitched roofs and extensions of either pitched or flat roofs. There are variations in the roofline due to the varying setbacks of buildings and varying roof pitches with the prominent style pitched.</p>
<p>Materials</p>	<p>Within this character area there is a wide range of materials that are used. Walls of gault/old Cambridge stock bricks, soft mellow red brick, painted smooth render. Roofs of slate, clay pantiles, clay plain tiles and modern concrete tiles.</p>
<p>Public Realm</p>	<p>The most notable public realm feature is the recreation ground which is the centre point of the village. The streetscape along the High Street has a linear open feel with many of the buildings having short setbacks. The Church, Manor House, Witcham House and Yew Tree House provide important focal points within the area. On-street car parking is also an issue within the Conservation Area.</p>

Conservation Area images

03



Figure 19: Listed property within the Conservation Area with no setback from the road.



Figure 20: 13th Century Church of St Martins.



Figure 21: Listed thatched barn within the Conservation Area.



Figure 22: The White Horse Inn pub.



Figure 23: Listed property, Yew Tree House, located on the crossroads.

CA2- Village approaches



03

A key part of Witcham’s character is the fact that the buildings are hidden behind trees and tree belts and hedgerows despite the settlement being on a hill. One of the contributors of this is the lower density housing on the edge of the settlement in comparison to the rest of the village. The view from the A142 approach is of trees with glimpses of a small number of roofs, dominated by the view of St Martins Church. The rear of properties in Silver Street are generally obstructed by trees. The overall character is of a small scale rural village.

Land Use	Most of the buildings in this area are of a residential land use, however there are several farm buildings, the village cemetery, a camping and mobile caravan site and The Humble Pig which is a licensed bar associated with the site which is also used by the community and visitors to the area.
Pattern Of Development	There is a linear style to the development on the edges of Witcham. The buildings have generous spaces between them which allows for viewing gaps towards the countryside. This adds to the rural feel of the character area.
Building Line/Plot Arrangement	Buildings are typically well set back from the road with generous front gardens and on-plot car parking. The building line is consistent in the area however in some cases heavy vegetation blocks the view of the property from the road.
Boundary Treatment	The most common form of boundary treatment in the area are low brick walls and vegetation in the form of hedges. As well as this it is not uncommon for there to be trees in the front gardens overhanging the pavements and into the road in the village approaches.
Heights & Roofline	Buildings are typically 2 storeys in height in the area. This is important as it allows for the trees to dominate the skyline and thus the character of a hidden settlement from the outside is retained.
Materials	Yellow brick is the most common building material in the area. As well as this there are a few examples of semi-detached houses with white render on Martins Lane.
Public Realm	Much of the public realm is dominated by The Slade and Martins Lane which are wide roads with pavements generally on either side. As well as this the road is lined with grass verges and overhanging trees which contributes to the rural character of the village approaches.

Village approaches images

03



Figure 24: Mepal Road entering the village, looking towards Mepal.



Figure 25: Typical semi-detached housing on Martins Lane.



Figure 26: View from the A142 towards the village.



Figure 27: View towards the Ouse Washes.



Figure 28: View from the edge of the village towards Wardy Hill.



Figure 29: Local farm with campsite and The Humble Pig.

CA3- Silver Street area



03

In the western part of the village there is the Silver Street area which is the most recently developed part of the village. The majority of development has occurred over time since the 1960s which is why there are differing styles throughout the character area. Compared to the rest of Witcham it has more of a mixed/diverse housing stock.

Land Use	The predominant land use in the Silver Street area is residential however the one outlier to this is Greens of Mepal which is a local garden buildings manufacturer.
Pattern Of Development	The area has a more mixed/diverse housing stock, with the main thoroughfare Silver Street turning and branching out at its end servicing cul-de-sacs.
Building Line/Plot Arrangement	Buildings typically have a generous setback from the road with front gardens as well as on-plot car parking. There are some properties that are built up to the pavement line, adding variety to the street scene. Despite this there are still issues of on-street car parking and clutter. The building line is relatively consistent but the turns in the roads create an interesting streetscape.
Boundary Treatment	Grass verges, hedges, timber fences and low walls are the common boundary treatments in the character area.
Heights & Roofline	There is a mix of 2 storey houses and bungalows in the Silver Street area.
Materials	Within this character area there is a wide range of materials that are used. These include: yellow brick, red brick and painted render as walling. The roofing materials in the area include modern tiles, slates and red tiles.
Public Realm	Most of the public realm is dominated by Silver Street which has pavements on either side of it. As well as this there are a couple of small green spaces just off Westway Place in the south west of the character area.

Silver Street area images

03



Figure 30: Semi-detached property with white render for walling and a generous front garden.



Figure 31: Bungalow typology example in the area.



Figure 32: 1970s property with generous front garden.

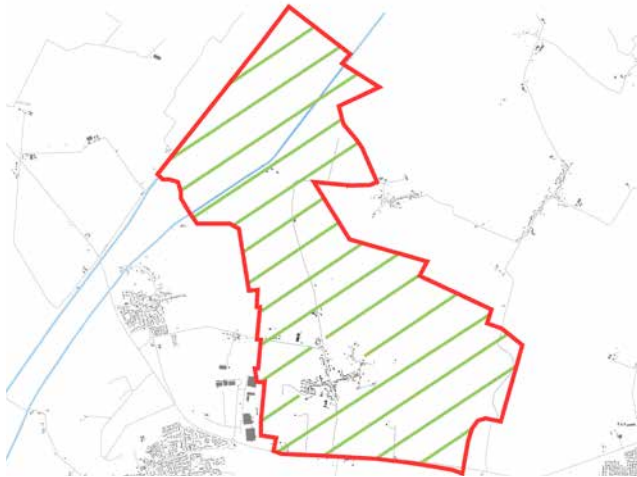


Figure 33: Parking courts located in the character area.



Figure 34: View from the back gardens of the properties on Westway Place towards Sutton.

CA4 - Countryside area



03

Witcham is surrounded by rural countryside which is predominantly made up of arable farmland. This is populated with a scattering of farmsteads which serve the extensive farming fields. As well as this there is the Ouse Washes SSSI in the north of the parish which is nationally protected for its ecological value. The same area is also under RAMSAR protection and is a fundamental part of the area's character.

Land Use	Most of the land surrounding Witcham is open countryside and arable farmland, with a scattering of farmsteads. This creates both a rural feel to the character area and the parish as a whole.
Pattern Of Development	Development in the countryside surrounding the village comes in the form of small farmsteads and therefore has no real uniformity.
Building Line/Plot Arrangement	The farmsteads that are typically found in this area are made up of a farmhouse surrounded by barn buildings and don't take up a large footprint of the countryside that they are located in. They are well set back from the road, maintaining a rural feel to the streetscape.
Boundary Treatment	Heavy vegetation such as hedgerows and trees dominate the boundary of any settlement in the countryside area. This is in keeping with the character of Witcham village which itself is hidden by a tree belt.
Heights & Roofline	Buildings in this area are no taller than 2 storeys, allowing the trees to dominate the skyline and frame views towards the surrounding countryside features such as the Ouse Washes.
Materials	Steel, timber, and brick are all common materials within the built environment.
Public Realm	There are numerous public footpaths and byways scattered across the surrounding countryside, allowing local people and visitors to enjoy the rural setting of Witcham. Whilst there is no pavement for pedestrians to walk on, grass verges provide relief for pedestrians in the case of oncoming traffic.

Countryside images



Figure 35: View looking across the countryside to the east of the village.



Figure 36: View across the countryside to the north of Witcham.



Figure 37: Farmstead to the north of the village.

03

**Design Guidance
and Codes**

04



4. Design Guidance and Codes

This section sets out the principles that will influence the design of potential new development and inform the retrofit and extensions of existing properties in the Witcham Neighbourhood Plan Area. Where possible, local images are used to exemplify the design guidelines and codes. Where these images are not available, best practice examples from elsewhere are used.

4.1 Design guidance and codes

The following section describes a set of design codes that have been put together based on the existing context of Witcham.

These codes will aim to guide any changes or development within the village to ensure the local character is respected whilst still allowing space for innovation within the built environment.

The design codes have been split into two categories. The first section is relevant to the whole Neighbourhood Plan Area while the second section introduces design codes for each of the identified character areas and therefore codes may not be applicable to the whole of the parish. More detail about this structure is provided in **section 4.1.3**. Both national and regional guidance, outlined in chapter 1, should be read in conjunction with these codes. These codes act as a support to these documents and should not be considered in isolation.

4.1.1 The importance of good design

As the NPPF (paragraph 126) notes, “good design is a key aspect of sustainable development, creates better places in which to live and work and helps make development acceptable to communities”.

Research, such as for the Government’s Commission for Architecture and the Built Environment (now part of the Design Council) has shown that good design of buildings and places can:

- Improve health and well-being;
- Increase civic pride and cultural activity;
- Reduce crime and anti-social behaviour; and
- Reduce pollution.

This document seeks to harness an understanding of how good design can inform future development to make a positive contribution to the built environment as the best of what has gone before.

4.1.2 Placemaking and Design Codes

These design codes are underpinned by a set of placemaking principles that should influence the design of future development areas, public realms, homes, green spaces, and the interfaces between them.

What designers and planners call 'placemaking' is about creating the physical conditions that residents and users find attractive and safe, with good levels of social interaction and layouts that are easily understood.

The placemaking principles set out in the following pages should be used to assess the design quality of future development or regeneration proposals. These key principles should be considered in all cases of future development as they reflect positive placemaking.

The guidelines developed in this part focus on residential environments. However, new housing development should not be viewed in isolation, but considerations of design and layout must be informed by the wider context.

The local pattern of footpaths, byways, lanes, roads and spaces, building traditions, materials and the natural environment should all help to determine the character and identity of a development.

It is important with any proposal that full account is taken of the local context and that the new design embodies the 'sense of place'.

Reference to context means using what is around, shown in the first three chapters, as inspiration and influence and it could be a contemporary solution that is in harmony with the surroundings.

4.1.3 Structure of the design codes

Based on the understanding gained in the previous chapters, this section will identify design codes for future development to adhere to. As identified in the diagnostic report and following the meeting with the group, the following design codes have been created to apply to the whole Neighbourhood Plan area. After introducing

the design guidelines and codes for the whole village, **Section 4.2** shows how to apply the codes into the character areas analysed in chapter 3.

SL. Settlement Layout

SP. Streets and Parking

B. Built Form

EE. Environmental and Energy Efficiency

SL. Settlement layout

SL 01- PATTERN OF DEVELOPMENT

Witcham has a linear development with recent development evolving around the main core. Any new development should respect the following principles:

- Proposals should maintain the continuity of built form along the main routes. One of the characteristics of Witcham is that development has been carried out as individual buildings or small groups of buildings (5 or less). This has resulted in there being a variety of built forms and styles. Any new development should therefore continue the non repetitive approach, providing a variety of building types, materials and design with coherent scale, massing and detailing;
- Treatment of main road frontages should include semi-mature trees, hedgerows and the boundary walls, typical of the character area to increase the sense of enclosure, individuality and linear form;
- Buildings typically orientate inwards towards the main road with main entrances at the front and turning their back towards the landscape to the rear. Building frontages should reinforce the linearity of the street, for instance with the main roof facing the street and gable/hips oriented to the side; and
- Boundary treatments should respect and follow those within the character areas, from varying height walls in the conservation area to soft landscaped edges on the edge of Witcham. Residential development with a hard edge which imposes an abrupt transition from the settlement to the surrounding countryside should be avoided.

SL 02- LAYOUT OF BUILDING

The Parish owes much of its character to the historic pattern and layout of its buildings within the village and small residences/farmsteads/small holdings in the countryside. New developments should respect the particular building patterns of each of the character areas in order to provide a positive contribution. In particular:

- Development should adopt the enclosure characteristics demonstrated in the village. New development should strive to knit in with the existing settlement morphology by adopting similar characteristics;
- Development should be considered strategically at the settlement level and should not be considered in isolation;
- New development should be planned to be well connected, within its own

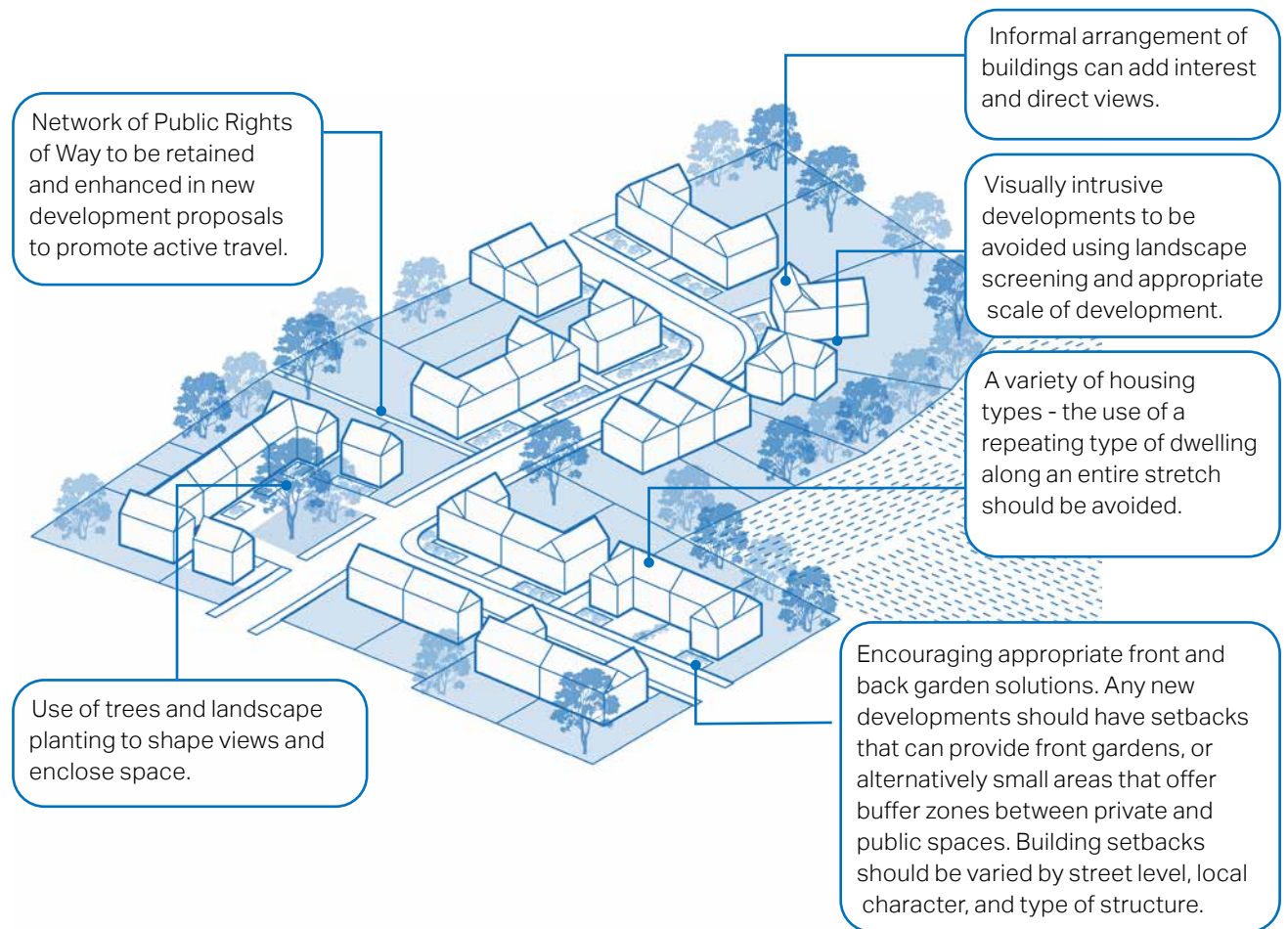


Figure 38: Diagram showing layout of building elements such as enhancing PRow networks, respecting views and front and back garden solution which could positively contribute to local character.

development site and to the wider footpaths/byways within the parish promoting active travel at all times, providing plentiful non-vehicular connections;

- Layout, clustering and massing should take precedent from the best examples of development within the surrounding context. This page illustrates some precedent examples from the existing Neighbourhood Plan Area; and
- New development should respond to site specific micro-climates and sun paths and use these as key design drivers to increase the environmental comfort for building users, both internally and externally.



Figure 39: Linear style layout of individual plots with significant gaps between buildings within the village.



Figure 40: A cul-de-sac development in the Silver Street area of Witcham.



Figure 41: Linear style development with short or no setbacks in the Conservation Area.



Figure 42: Photo showing the varying set backs within the Conservation Area.

SP. Streets and parking

The following pages set out policies to consider when developing both existing and new development within Witcham. They are generic design codes that apply to all areas of the parish and are not specific to one character area.

The following street typologies are general guidance for new development and should be read alongside appropriate county and national guidance along with referring to more specific street codes set out in the character area codes later in the report.

The two street typologies are the general street and the edge lane.

SP 01- GENERAL STREET

The general street type is the prevalent street across the new development. The desired design features for this street type are:

- Where applicable and practical, speed limits should be 20mph with low traffic volumes and low speed and include design elements for traffic calming e.g. minimising the corner kerb radius, horizontal deflection, and the like;
- Carriageways should accommodate two-way traffic. The character of the village is such that parking bays on the street would not be considered appropriate. Existing street parking already creates issues;
- Front gardens should be well planted to create an attractive environment;
- Preferably, locate parking to the side or rear of the property to mitigate the visual impact of cars on the streetscape;
- If cars are parked at the front the parking should be behind landscape and at least 50% of the frontage should be landscaped and with a property boundary treatment in line with the character of the area;
- As part of Witcham's defining character, street trees are important and also help to mitigate climate change. If this is not possible, front gardens should be deep enough to plant trees; and
- Avoid using cul-de-sac solutions as they limit pedestrian flow; instead use street furniture (e.g. bollards) to stop vehicle circulation whilst allowing other movement types.



Figure 43: General street (High Street) within the Conservation Area with buildings on either side of the road.



Figure 44: General street (Martins Lane) with grass verges and hedgerows present on the boundary.

SP 02- EDGE LANE

This street type is used at the edges of development, where the village meets the countryside or woodland areas and a positive transition is required. This code is particularly relevant in the village approaches area. The desired design features for this street type are:

- Speeds must be 20mph or less, to create a quieter environment;
- These lanes can gently meander, softening the presence of the street, providing interest and evolving views whilst helping with orientation;
- Circulation is usually in the form of a shared lane between 6 and 8m hosting all modes of transport (i.e. pedestrian, cycling and motor vehicles) sometimes with no footways. This is seen in the Edge Development and some part of Modern Estate Character Areas;
- Providing a planting buffer and

landscaping between the edge of the carriageway and the countryside in order to: protect countryside areas, provide transition and control pedestrian accessibility where required. The use of hedgerows where edge lanes face onto agricultural land is particularly encouraged;

- Connect the edge lane to paths, other public rights of way and the general movement network;
- The lane width can vary to discourage speeding and introduce a more informal and intimate character. Variations in paving materials and textures are used instead of kerbs or road markings; and
- Swales and rain gardens could also be added into the landscaping to address any flood issues.



Figure 45: Diagram of a suitable edge lane used at the edge of the village to act as a transition into the countryside.

SP 03- ACTIVE TRAVEL

Increasing the number of residents walking and cycling around the village is an important part of improving health and the quality of their experience.

- New development in Witcham should generate minimal car movement. This will help to promote active travel, an important feature in 'liveable' neighbourhoods;
- New development should ensure that pedestrian and cycle routes are incorporated into new designs ensuring that the option to travel on foot or by bike is incentivised;
- These routes should link to key services in Ely with the parish and other existing routes to form a network of walkable areas;
- Users of public and private space are varied and include disabled users, parents/carers with buggies and young

children. It is important for these users to be catered for when designing new development;

- Walking routes along a roadway should provide safety from vehicles on the road. This requires a footway, grass verge or pavement that is wide enough to ensure pedestrians do not conflict with vehicles;
- Walking routes should not pass through hazardous areas such as fields with large animals, dykes, ditches or areas of flooding; and
- On street car parking should be discouraged and other traffic control measures should be put in place in areas that are frequently used by horse riders, of which there are many in the parish.



Figure 46: One of the public byways within the village that create good interconnectivity through active transport.

SP 04 - CAR PARKING

With the limited public transport, parking spaces are a necessity of modern development in the parish. However, they do not need to be unsightly or dominate views towards the house. Parking provision should be undertaken as an exercise of placemaking.

- Any car parking integrated with new developments should be in line with the parking standards set out in the East Cambridgeshire Local Plan;
- When placing parking at the front of a property, the area should be designed to minimise visual impact and to blend with the existing streetscape and materials. The aim is to keep a sense of enclosure and to break the potential of a continuous area of car parking in front of the dwellings. This can be achieved by solid or semi solid boundary treatment such as walls, hedging, planting, with permeable surface areas broken up into a series of smaller areas;
- When needed, residential car parking can be translated into a mix of on-plot side, front, garage, and courtyard parking;
- For family homes, cars should be placed at the side (preferably) or front of the property. For small pockets of housing, a rear courtyard is acceptable;
- Car parking design should be combined with landscaping to minimise the presence of vehicles; and
- Parking areas and driveways should be designed to minimise impervious surfaces, for example, through the use of permeable paving to prevent water run off and ideally look to water storage systems. There should be on average 2 on-plot car parking spaces per dwelling in any new development.



Figure 47: On- street parking on the High Street in Witcham.



Figure 48: Passive house with on-plot car parking in Witcham.

ON STREET PARKING

Many residential properties in Witcham were built prior to the onset of ownership of the motor car being prevalent and therefore there is no allowance for parking within the property. This along with the change in working patterns, demographics, closure of local schools, reduction in public transport has led to an increase in the number of cars in a household.

On-street parking is the only parking option for some buildings particularly within the Conservation Area and within the village there are no public parking areas. In order to reduce the visual impact of parked cars on the street, on-street parking as the only means of parking should be avoided in future development wherever possible.

- On-street parking must be designed to avoid impeding the flow of pedestrians, cyclists, horse riders and anyone else using the street, and can serve a useful

informal traffic calming function. Too much on street parking will impede flow of pedestrians, cyclists and vehicles; and

- The nature of the village and parish is that there is no requirement or space for public parking. The village hall already has parking associated with it. Although the church would benefit from parking, the reduced number of services and events would not warrant this.

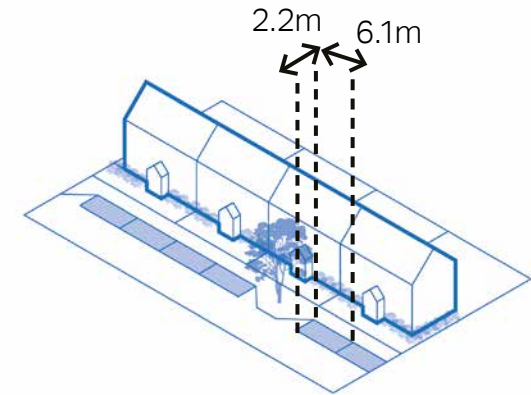


Figure 49: Illustrative diagram showing an indicative layout of on-street parking (metres).



Figure 50: Example of informal on street car parking in Witcham.

ON- PLOT SIDE OR FRONT PARKING

- Parking provided on driveways directly in front of dwellings should be restricted due to the visual impact that cars have on the street. Front gardens should be a minimum depth of 6m to allow movement around parked vehicles and also be well screened with hedgerows or boundary walls rather than fencing when providing parking space to the front of a dwelling. Any parking at the front should be planned to incorporate soft landscaping and not to form the majority of the space to the front. Part of the village character is that there is a variety in the set back of the building lines and therefore a uniform setback would not be acceptable; and
- Parking being provided on a driveway to the side of a dwelling would be the preferred option and should be of sufficient length (5m minimum) so that a car can park behind the frontage line of the dwelling. This will reduce the visual impact that cars will have on the street scene. When parking is provided to the side of a dwelling a minimum front garden depth of 3m should be provided.

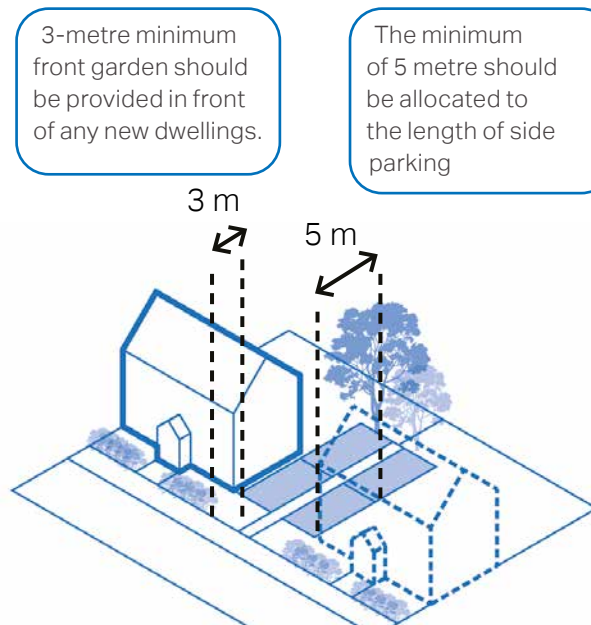


Figure 51: Illustrative diagram showing an indicative layout of on-plot side parking.

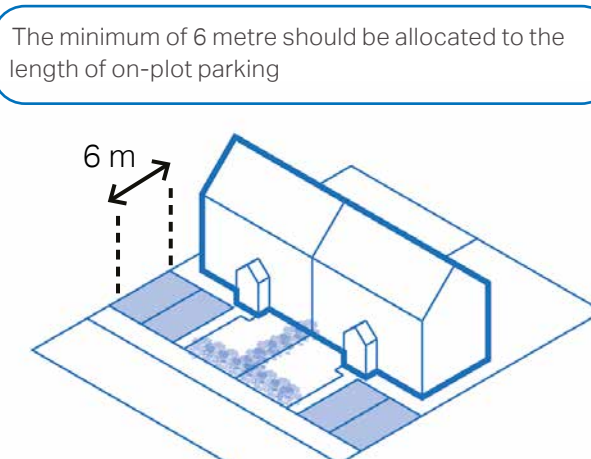


Figure 52: Illustrative diagram showing an indicative layout of on-plot front parking.



Figure 53: On-plot parking on the High Street.



Figure 54: Side of plot parking on Silver Street.

GARAGE PARKING

Parking being provided in a garage to the side of a dwelling should be in line with, or slightly set back from the frontage line of the existing dwelling, which is in keeping with the character of the existing village and will reduce the visual impact of cars on the street. Garages should also provide sufficient room for cars to park inside them as well as providing some room for storage.



Figure 55: Illustrative diagram showing an indicative layout of on-plot garage parking.



Figure 56: Front of house double garage within the village.

PARKING COURTYARD

- This parking arrangement can be appropriate for a wide range of land uses. It is especially suitable for terraces fronting busier roads where it is impossible to provide direct access to individual parking spaces;
- Ideally all parking courtyards should benefit from natural surveillance;
- Parking courtyards should complement the public realm; hence it is important that high-quality design and materials, both for hard and soft landscaping elements, are used;
- Parking bays must be arranged into clusters with groups of 4 spaces as a maximum. Parking clusters should be interspersed with trees and soft landscaping to provide shade, visual interest and to reduce both heat island effects and impervious surface areas;
- The opportunity should be taken to provide electric vehicle charging points.

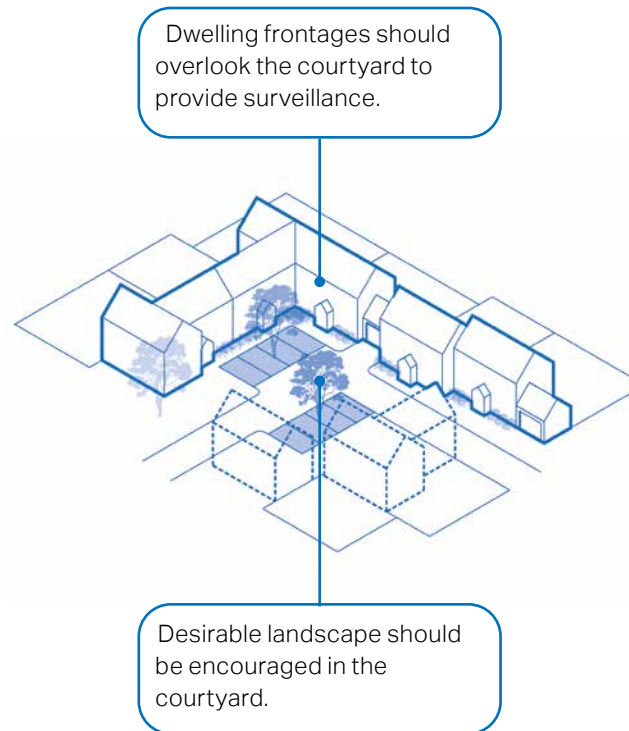


Figure 57: Illustrative diagram showing an indicative layout of parking courtyards.



Figure 58: Parking court in the Silver Street character area.

SP 05- CYCLE PARKING

Houses without garages

- For residential units, where there is no on-plot garage, covered and secured cycle parking should be provided within the domestic curtilage;
- Cycle storage must be provided at a convenient location with an easy access;
- When provided within the footprint of the dwelling or as a free standing shed, cycle parking should be accessed by means of a door at least 900mm and the structure should be at least 2m deep;
- and
- The use of planting and smaller trees alongside cycle parking can be used.

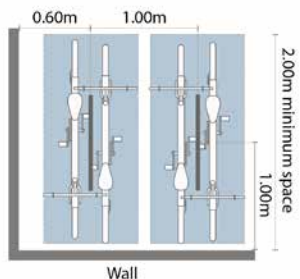


Figure 60: Sheffield cycle stands for visitors and cycle parking illustration.

Houses with garages

- The minimum garage size should be 7m x 3m to allow space for cycle storage;
- Where possible, cycle parking should be accessed from the front of the building either in a specially constructed enclosure or easily accessible garage;
- The design of any enclosure should integrate well with the surroundings; and
- The bicycle must be removed easily without having to move the vehicle.



Figure 61: Example of cycle parking for houses without garages, Cambridge.

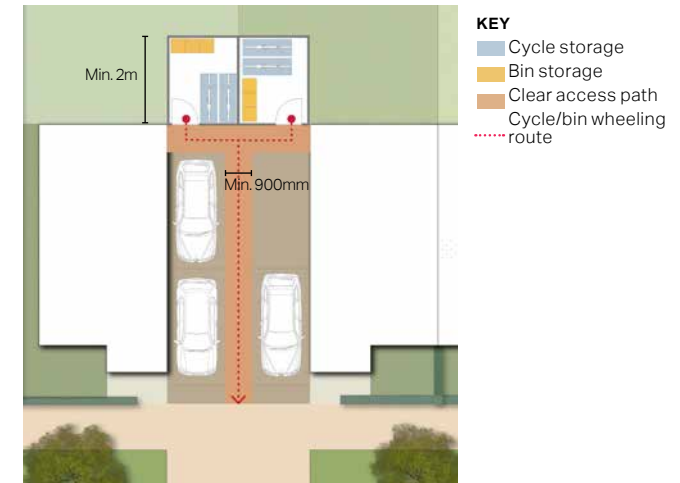


Figure 59: Indicative layout of a bicycle and bin storage area at the back of semi-detached properties.



Figure 62: Examples of successful storage design solutions for accommodating bicycles at the front of buildings.

SP 07- TREES AND LANDSCAPING

The abundance of trees is one of the Parish's greatest assets. They provide shading and cooling, absorb carbon dioxide, act as habitats and green links for species, reduce air pollution and assist water attenuation and humidity regulation. For people, they help alleviate stress and anxiety, help with recovery from ill-health and create a sense of positive mental health and well-being. In addition, they add life to the landscape and help create a green buffer so that the village is hidden

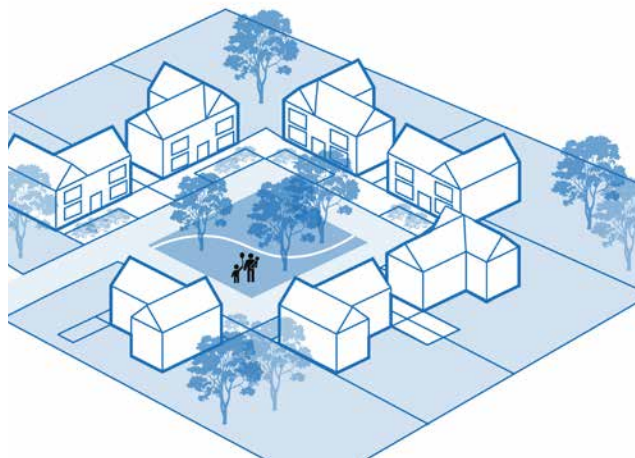


Figure 63: An indicative diagram showing green spaces and landscape planting.

from the outside.

There are different green spaces which need to be protected such as the recreation ground and the fields to the south of the village which are used for walking.

The following guidelines focus on the design aspects and appearance of planting and trees in private gardens as well as public open spaces and streets.

Planting standard

- Aim to preserve existing mature trees, incorporating them into the new landscape design and using them as accents and landmarks, where appropriate;
- Retain and enhance the existing green spaces (listed above) which are essential landscape features throughout the parish;
- Consider canopy size when locating

trees; reducing the overall number of trees but increasing the size of trees is likely to have the greatest positive long-term impact;

- Size of tree pits should allow sufficient soil around the tree. Ensure tree stems are in the centre of the verge to provide a 1m clearance of the footway or carriageway;
- Tree root zones should be protected to ensure that trees can grow to their mature size. Root barriers must be installed where there is a risk of damaging foundations, walls and underground utilities;
- New trees should be added to strengthen vistas, focal points and movement corridors, while retaining clear visibility into and out of amenity spaces. They should, however, not block key view corridors and vehicular circulation sight lines;
- New trees should be integrated into

the design of new developments from the outset rather than left as an afterthought to avoid conflicts with above- and below-ground utilities;

- To ensure resilience and increase visual interest, a variety of tree species is preferred over a single one. Tree species should be chosen to reflect the prevailing character of the landscape, soil conditions and the associated mix of native species, but should also have regard to climate change, environmental/habitat benefits, size at maturity and ornamental qualities;
- Regulations, standards, and guidelines relevant to the planting and maintenance of trees are listed below:
- Trees in Hard Landscapes: A Guide for Delivery;¹
- Trees in the Townscape: A Guide for Decision Makers;²

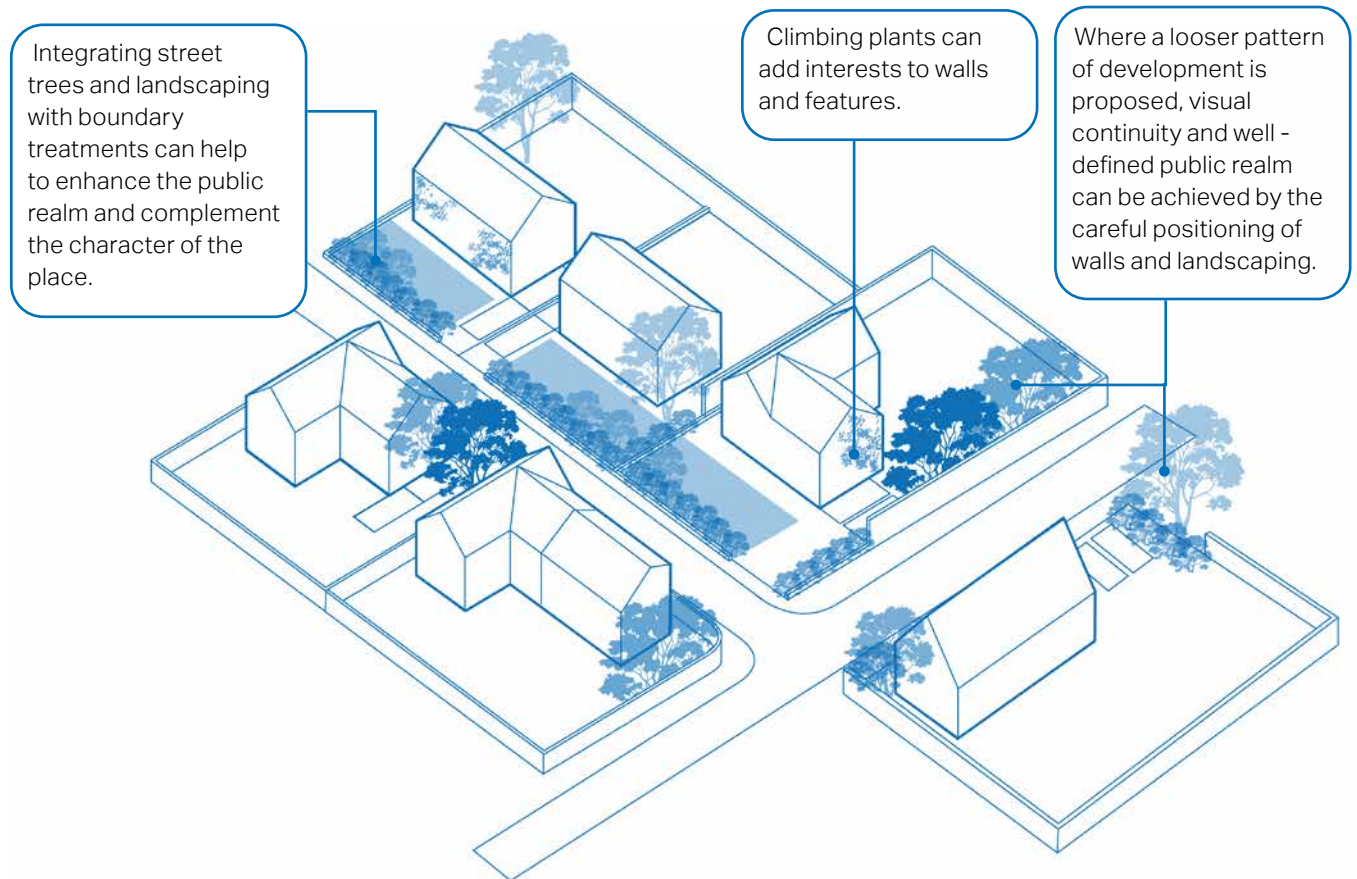


Figure 64: Diagram showing trees and landscaping that complement the public realm and create a sense of enclosure.

¹ Trees & Design Action Group (2012). *Trees in Hard Landscapes: A Guide for Delivery*. Available at: http://www.tdag.org.uk/uploads/4/2/8/0/4280686/tdag_trees-in-hard-landscapes_september_2014_colour.pdf

² Trees & Design Action Group (2012). *Trees in the Townscape: A Guide for Decision Makers*. Available at: http://www.tdag.org.uk/uploads/4/2/8/0/4280686/tdag_treesinthetownscape.pdf

- Tree Species Selection for Green Infrastructure;³ and
- BS 8545:2014 Trees: from nursery to independence in the landscape - Recommendations.⁴

Give spatial enclosure, provide screening and privacy

The use of hedges, hedgerows trees and walls contribute to the strong character of the area and a sense of enclosure. To respect the existing context, both the building and the boundary feature should be consistent with the prevailing character, although there should be some allowance for some variation to provide added visual interest.

- Existing hedges, hedgerow trees and walls should be retained particularly in the approach roads and the Conservation Area to contribute to

this sense of enclosure. Additional or replacement semi mature hedges and trees should be planted to maintain the continuity of existing hedges and tree cover, these should be monitored and replaced if required over a 5 year establishment period; and

- Where appropriate and feasible, any new developments should have setbacks that allow for front gardens or else a small area to provide a planted buffer zone between the private space and public space.

Complement public realm and enhance built environment and local identity

Planting can make an appreciable difference to the appearance of an area, as well as adding to the local identity.

- New development should use boundary features which are complementary to the street and enhance the character of the village. The use of trees, hedges and planting in publicly visible areas,

including edges and interfaces, should be encouraged; and

- Climbing plants are good at screening features such as garages, blank walls and fences.

Form focal points and frame views

In addition to the intrinsic value of trees, they can also have a practical value. For example, in a small-scale open space, trees provide a focal point of interest or could frame views.

³ Trees & Design Action Group (2019). *Tree Species Selection for Green Infrastructure*. Available at: http://www.tdag.org.uk/uploads/4/2/8/0/4280686/tdag_treespeciesguidev1.3.pdf

⁴ British Standards Institution (2014). *BS 8545:2014 Trees: from nursery to independence in the landscape - Recommendations*. Available at: <https://shop.bsigroup.com/ProductDetail/?pid=000000000030219672>



Figure 65: View from public byway across paddocks back towards the Conservation Area.



Figure 66: Witcham recreation ground looking towards the cross roads.



Figure 67: Historic property on the cross roads.

04
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SP 08- STREET LIGHTING AND DARK SKIES

The 'dark skies' character of the countryside should be protected. Dark skies benefit both people and wildlife.

Any new development should minimise impact on the existing 'dark skies' within the settlement and reduce light pollution that disrupts the natural habitat and human health.

The following guidelines aim to ensure there is enough consideration given at the design stage:

- Street lighting should be avoided within areas of public realm, in line with the existing settlement character;
- Ensure that lighting schemes such as LED streetlights will not cause unacceptable levels of light pollution, particularly in intrinsically dark areas. These can be areas very close to the countryside or where dark skies are enjoyed;

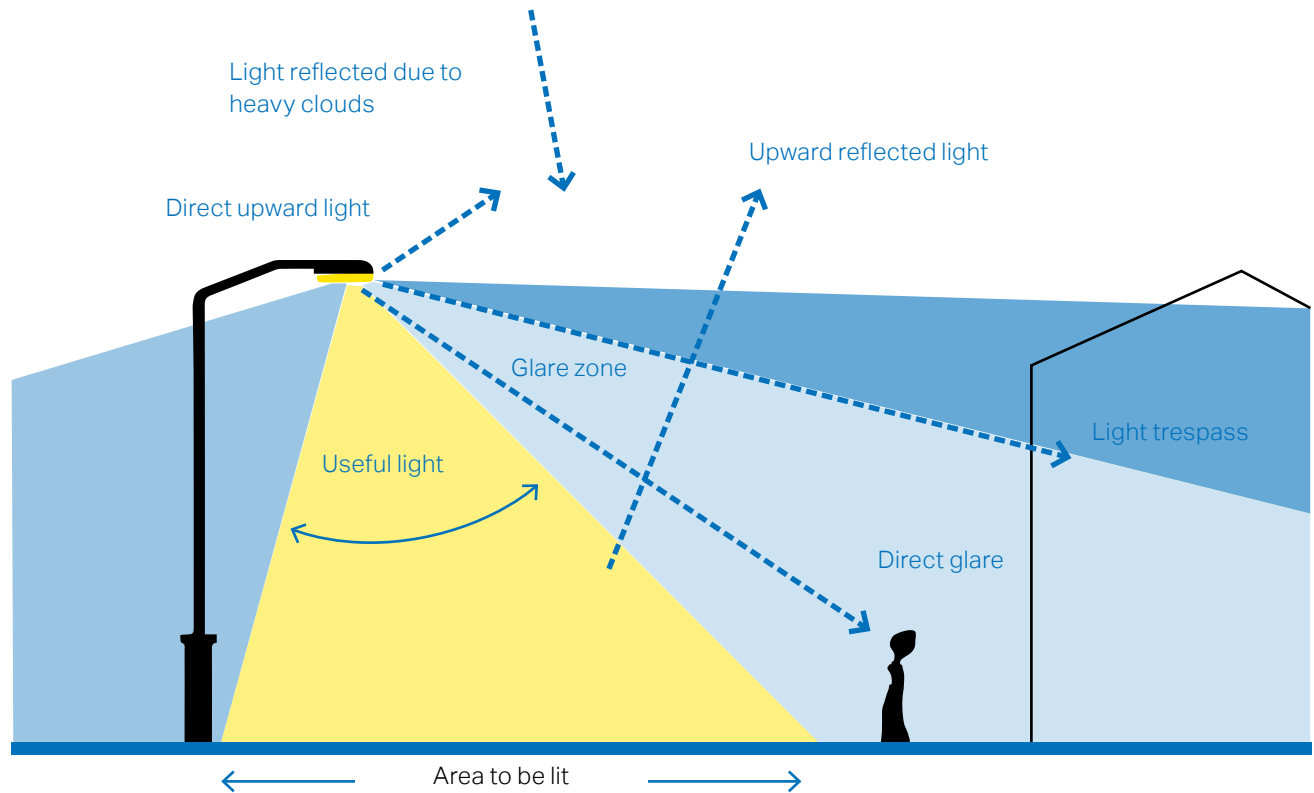


Figure 68: Indicative diagram to illustrate the different components of light pollution and what 'good' lighting means.

- Residential lighting i.e. on or around the property; is to be sympathetic with the location and be of low light levels so as to avoid excessive light pollution;
- Upward lighting should be avoided;
- Consider lighting schemes that could be turned off when not needed ('part-night lighting') to reduce any potential adverse effects; i.e. when a business is closed or, in outdoor areas, switching off at quiet times between midnight and 5am or 6am. Planning conditions could potentially be used to enforce this. External lighting schemes should be PIR controlled and unnecessary lighting avoided;
- Impact on sensitive wildlife receptors throughout the year, or at particular times (e.g. on migration routes), may be mitigated by the design of the lighting
 - or by turning it off or down at sensitive times;
- Glare should be avoided, particularly for safety reasons. This is the uncomfortable brightness of a light source due to the excessive contrast between bright and dark areas in the field of view. Consequently, the perceived glare depends on the brightness of the foreground or background against which it is viewed. Glare is affected by the quantity and directional attributes of the source. Where appropriate, lighting schemes could include 'dimming' to lower the level of lighting (e.g. during periods of reduced use of an area, when higher lighting levels are not needed);
- The needs of particular individuals or groups should be considered, where appropriate (e.g. the safety of pedestrians and cyclists); and
- Any new developments and house extensions designs should encourage the use of natural light sources.

B. Built form

The following section outlines policies that should be considered by developers when creating new development within Witcham. Some of the following guidance is directed at development on existing plots, such as extensions, though many can be applied to both new and existing development.

In general, the Witcham conservation area is formed of large plots and dwellings. While this is appropriate when development or redevelopment occurs in those areas, other, newer, areas should be developed in a coherent form with modern best practice. That is, there should be a proportional relationship between size of plot, dwelling and spaces between the dwellings. In general, Witcham exhibits a low to medium density with heights averaging 1.5 to 2 storeys, plus some that have subsequently developed into the roof space, and reasonable space between dwellings. The following illustrative diagrams show this intention and new proposals would need to demonstrate that this has been observed.

The structure of the following codes

generally starts with policies on a larger scale and subsequently moves to codes related to specific built form details.

BF 01- OVERLOOK PUBLIC SPACE

In order to provide a sense of security and natural surveillance, the windowed front elevation of a dwelling should face the street where this is in keeping with local character. The rear boundaries facing the street should be avoided as this has a negative impact on the character of a street and reduces levels of security and natural surveillance. Rear boundaries should back on to other rear boundaries or provide a soft transition into the natural environment such as at the settlement edge.

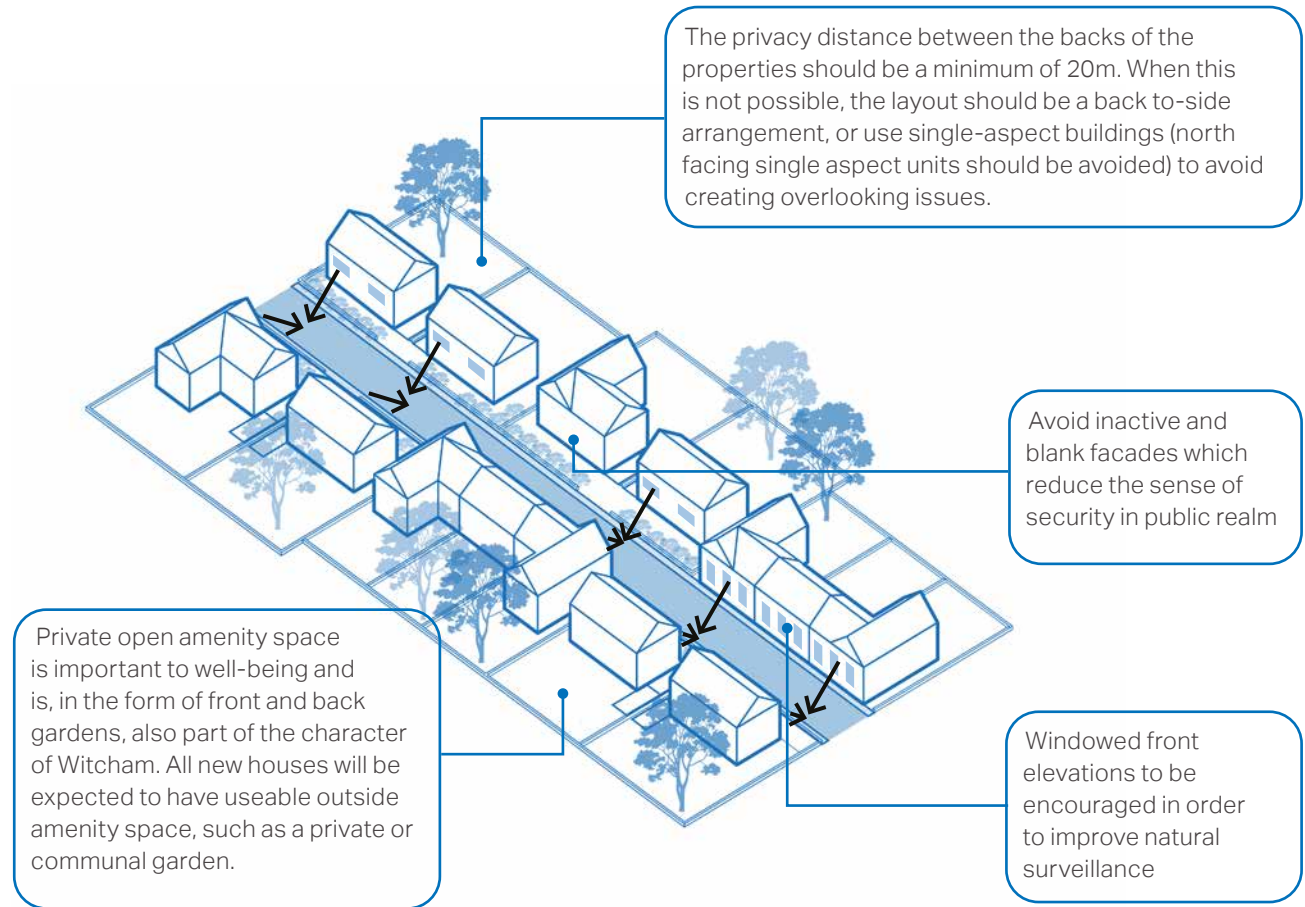


Figure 69: Diagram to highlight the importance of natural surveillance to improve the security.

BF 02- DEFINE FRONT AND BACK GARDENS

The ratio of garden space to built form within the overall plot is exceptionally important to ensure that the sense of openness and green space within the village is maintained.

Edge developments have more generous gardens with an average width of 16-25m for front and back gardens, respectively.

Back gardens should be a minimum depth of 10m and provide a minimum area of 50m² of useable amenity space¹.

North facing back gardens should exceed 10m in length to ensure sunlight is maximised.

1. The spaces used as amenity such as gardens, shared open space, communal gardens and so on which are able or fit to be used by people

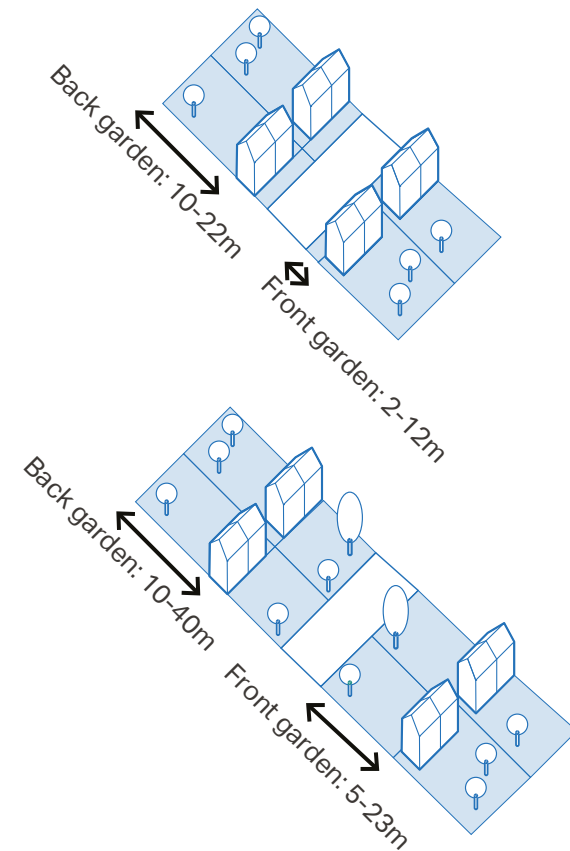
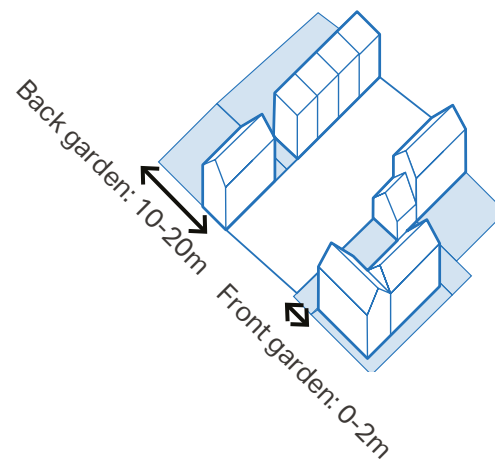


Figure 70: Different proportion of green space varied.

BF 03- BUILDING LINE

Within the village character areas there are no continuous building lines and this leads to the blurring of the line between public and private spaces. Where buildings are more generously set back from the carriageway, the threshold spaces should be well landscaped.

- To ensure sufficient street enclosure, private front thresholds should have a modest depth and accommodate a small garden or area for plantation;
- Low to medium densities in residential areas can vary setbacks in order to respond to the landscape context and the more open character of the area; and
- Front gardens can be much deeper where the topography requires so or to respond to the existing character area. It also helps to create a softer transition between countryside, green spaces and built environment.



Figure 71: Subtle changes in the building line on the High Street in Witcham as displayed on a selection of buildings above.



Figure 72: Inconsistent building line within The Orchards cul-de-sac as displayed on a selection of buildings above.

BF 04- DESIRED HEIGHT PROFILE

- Development building heights should accord with the settlement character of two storey dwellings;
- Roofs in the village tend to be generally traditionally pitched, with some hipped examples. New roof type and pitch should reflect this. There is no dominant roofing material, there being a variety from slate, clay plain tiles, clay pantiles and concrete profiled tiles. The colour and tone of the roofing materials is generally muted.
- Innovation which explores the integration of green roof should be encouraged;
- The scale of the roof should always be in proportion to the dimensions of the building itself. Flat roofs for buildings, extensions, garages and dormer windows will only be considered where they provide a positive contribution and are of a high design standard; and
- Chimney type and height should be congruent with the typical Neighbourhood Area chimney precedent examples.



Figure 73: 2 storey property within the Conservation Area.



Figure 74: Bungalow in the Silver Street area.

BF 05- ESTABLISH A CONSISTENT PROPERTY BOUNDARY

- Buildings should ordinarily front onto streets. The building line can have subtle variations in the form of recesses and protrusions, but will generally follow a consistent line;
- Buildings should be designed to ensure that streets and/or public spaces have good levels of natural surveillance from adjacent buildings. This can be achieved by placing ground floor habitable rooms and upper floor windows facing the street;
- Natural boundary treatments should reinforce the sense of continuity of the building line and help define the street, appropriate to the character of the area. They should be mainly continuous hedges and low walls, as appropriate, made of traditional materials found elsewhere in the village;

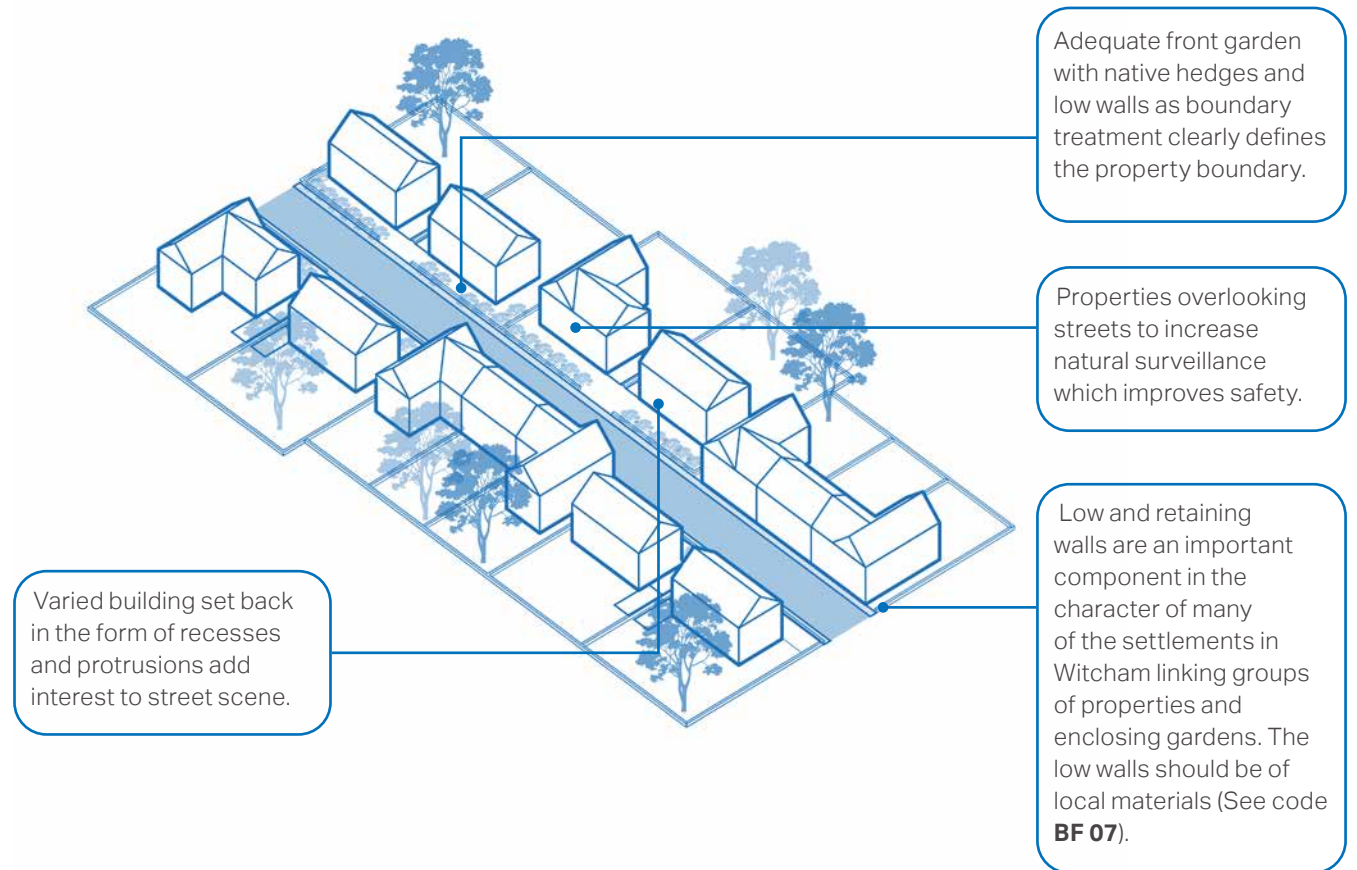


Figure 75: Illustrative diagram showing boundary treatments.

- Front gardens/soft planted shallow setbacks should be provided in most instances, although it is recognised that there are some parts of Witcham where the prevailing character and form is one where buildings sit on the back of the footway/ highway;
- If placed on the property boundary, waste storage should be integrated as part of the overall design of the property. Landscaping could also be used to minimise the visual impact of bins and recycling containers; and
- Locally distinctive landscape features and planting, such as low wall boundary and hedges of native species should be used in new development to define boundaries. Any material that is not in keeping with the local character should be avoided.



Figure 76: Example of low scale vegetation being used as a boundary treatment.



Figure 77: Low wall being used to define the boundary along the High Street which retains an active edge while creating an element of privacy.



Figure 78: Heavy vegetation defines the boundary of this historic building located on the cross roads.

BF 06- EXTENSION AND CONVERSION

There are a number of principles that residential extensions and conversions should follow to maintain character:

- The original building should remain the dominant element of the property regardless of the scale or number of extensions. The newly built extension should not overwhelm the building from any given viewpoint;
- Extensions should not result in a significant loss to the private amenity area of the dwelling;
- Designs that wrap around the existing building and involve overly complicated roof forms should be avoided unless they enhance the existing building and are supported by a reasoned and well argued supporting design statement;

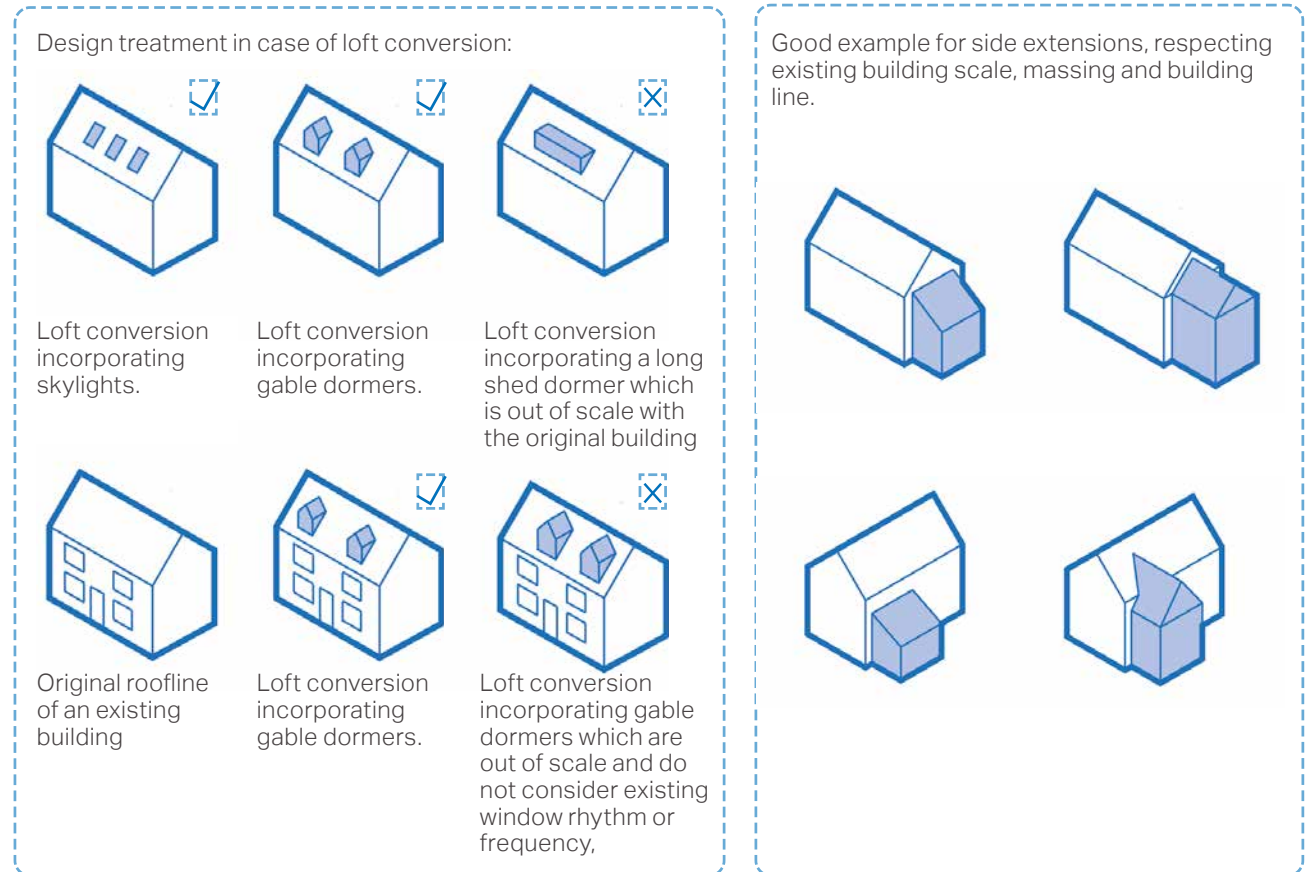


Figure 79: Some examples for different type of building extensions.

- The pitch and form of the roof used on the building adds to its character and extensions should respond to this where appropriate.
- 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;
- In the case of side extensions, the new part should be set back from the front of the main building and retain the proportions of the original building. This is in order to reduce any visual impact of the join between existing and new;
- In the case of rear extensions, the new part should not have a harmful effect on neighbouring properties in terms of overshadowing, overlooking or privacy issues;
- Many household extensions are covered by permitted development rights, and so do not need planning permission. These rights do not apply in certain locations such as Conservation Areas;
- Any housing conversions should respect and preserve the building's original form and character;
- Where possible, reuse as much of the original materials as possible, or alternatively, use like-for-like materials. Any new materials should be sustainable and be used on less prominent building parts; and
- Innovation and good design should always be aimed for.

BF 07- ARCHITECTURE DETAILS, MATERIALS AND COLOUR PALETTE

There are diverse architectural styles in the Parish ranging from the 13th century such as Church of St Martin to 21st century houses like the passive house that has been developed on Back Lane. Witcham village has a very linear feel to it with development over the years spreading along the High Street from the Conservation Area whereas the Silver Street area has cul-de-sacs and court developments in addition. This leads to a range of different styles and materials.

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

New developments should strive for good quality design that meets climatic targets for CO2 emissions and that can

AECOM



Figure 80: Listed building within the Conservation Area.



Figure 81: White render building with red hung tiles.



Figure 82: Two storey building with pitched roof on the edge of the village.

be constructed sustainably, maximising opportunities for recycling.

The special character of buildings in Witcham Conservation Area arises from the mixture of local stock yellow brick, red brick, gault brick (probably from the old small scale brick works along Back Lane), slates, clay plain tiles and red pantiles.

Informed by the local vernacular, the following pages illustrate acceptable materials and detailing for future housing developments in Witcham. The use of traditional construction finishes should be specified for all new development and repair work. Material specification, quality for repair, replacement and modern developments should be maintained. The requirement for additional housing in the village should not trump architectural quality and character of the area.

Future developments should carefully apply this code to avoid creating a pastiche of the existing local vernacular. Detailing can be interpreted using contemporary methods to avoid this.



Figure 83: View down the High Street with properties using local stock brick.



Figure 84: Modern passivhaus in the north of Witcham.

In the case of a conversion of an existing historic building into a residential use, this should look to preserve and enhance any existing heritage features, to maintain the integrity of the original building. Any new fenestration should be positioned carefully to maintain the character and balance of the building and reflect the existing design through use of complementary materials and finishes. These buildings create the opportunity to provide large single dwellings or can be split into a series of smaller dwellings.

Wall materials

There are different wall materials in the village such as red brick, yellow brick, stone, timber, weatherboarding and light colours of render.

Fenestration materials

There are various materials used for windows and doors in Witcham such as sash, casement, bay windows, pedimented doorcase, portico entrances, pithed porches, and square-headed door.

Roof materials

Of those roof materials in the village, clay plain tiles, clay pantiles and slate are predominant. The majority of buildings have pitched roofs, but hipped roofs can be found in the village too.

Ground surface materials

Generally hard landscaping, gravel and pebble are used in majority of ground surface in the village.

Boundary treatment materials

There are a wide variety of boundary treatments in the village such as hedgerows, low walls with red brick and mature planting.

BF 08- CONVERSION OF AGRICULTURAL BUILDINGS

The redevelopment of farm buildings would be considered where the existing layout and scale is respected and utilised to inform the design of any new development.

- Avoid domestic add-ons such as chimneys, porches, satellite dishes, domestic external lighting and hanging baskets;
- Retain characteristic features of historic working buildings such as the openings, which should not be filled in, ventilation slots (often patterned) and any use-specific historic additions;
- New openings should generally be avoided, and kept to a minimum when necessary. They should never be planned in a regular or symmetrical pattern, as this is overly domestic;
- Avoid features such as dormer windows. If rooflights are used, they should be sited discreetly so as to not become a feature in the landscape;

- Where included, solar PV panels should integrate with the overall pitch, materials and feel of the roof;
- Existing materials should be reused or reclaimed. Consideration should be given to the material source and matching the colour, texture, size and bond of the existing brickwork and weatherboarding;
- Courtyards should be surfaced in a material that reflects its rural setting. Farmyards should remain open and not be divided by fences or walls. Parking spaces should not be formally marked out; and
- Boundary brick walls should be left intact, and not chopped through or reduced for access or to create visual splays.

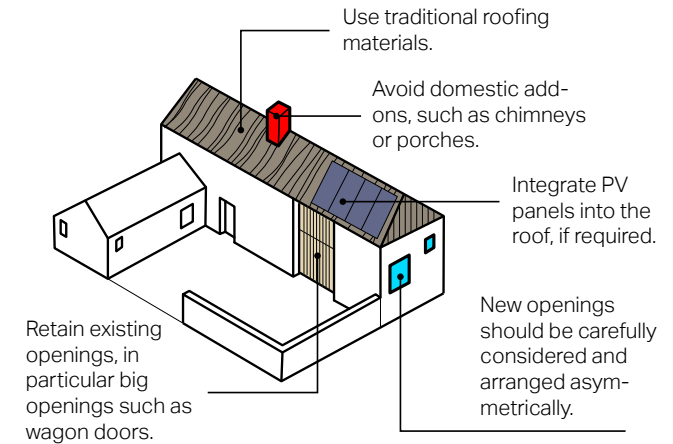


Figure 85: Diagram to illustrate some design principles for the design of agricultural buildings.

EE. Environmental and energy efficiency

Design codes in the following section apply to the whole of Witcham Neighbourhood Area. They contain important approaches that will help to reduce our collective impact on the planet while allowing the natural environment in and around Witcham to flourish.

They include general guidance that apply to both new and existing development as some of the policies can be used to modify existing dwellings to become more environmentally sustainable.

Owing to Witcham's rich green space character, it is hoped that more of these policies are adopted in the future to help preserve and sustain this distinct character.

EE 01- FEATURES IN DWELLINGS

The following section elaborates on energy efficient technologies that could be incorporated in buildings and at broader Parish 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 86 shows a portfolio of possible measures for both existing and new homes. Please note that some of them, such as double/triple glazing, draught proofing and solar panels, can sometimes be problematic in Conservation Areas, older buildings and those used as second homes or holiday lets.

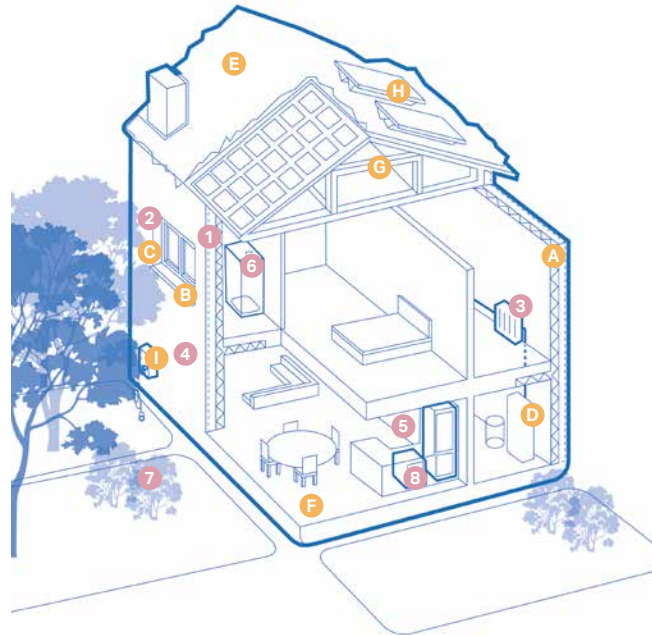










Figure 86: Diagram showing low-carbon homes in both existing and new build conditions.

Existing homes

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

Existing and new build homes

- A  **High levels of airtightness**
- B  **Triple glazed windows and external shading**
especially on south and west faces
- C  **Low-carbon heating**
- 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 electrical, concrete floors and greening your garden
- G  **Construction and site planning**
timber frames, sustainable transport options (such as cycling)
- H  **Solar panels**
- I  **Electric car charging point**

EE 02- BUILDING FABRIC

Passivhaus design standards for new development and enerphit standards for retrofit are strongly encouraged. This allows for more wiggle room compared to the traditional standard to accomodate retrofitting challenges, while still achieving the superior comfort and performance that passivhaus buildngs are known for.

THERMAL MASS

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

are cooler. This can be beneficial both during the summer and the winter.

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.

INSULATION

Thermal insulation can be provided for any wall or roof of a building to prevent heat loss. Particular attention should be paid to heat bridges around corners and openings at the design stage.

Provide acoustic insulation to prevent the transmission of sound between active (i.e. living room) and passive spaces (i.e. bedroom). Provide insulation and electrical insulation to prevent the passage of fire

between spaces or components and to contain and separate electrical conductors.

AIRTIGHTNESS

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.

An airtight layer should be formed in the floor, walls and roof. Doors, windows and roof lights to the adjacent walls or roof should be sealed. Interfaces between walls and floor and between walls and roof, including around the perimeter of any intermediate floor should be linked. Water pipes and soil pipes, ventilation ducts,

incoming water, gas, oil, electricity, data and district heating, chimneys and flues, including air supplies to wood burning stoves, connections to external services, such as entry phones, outside lights, external taps and sockets, security cameras and satellite dishes should be designed to maintain the airtight layer.

Figure 87 illustrates some of these key considerations.

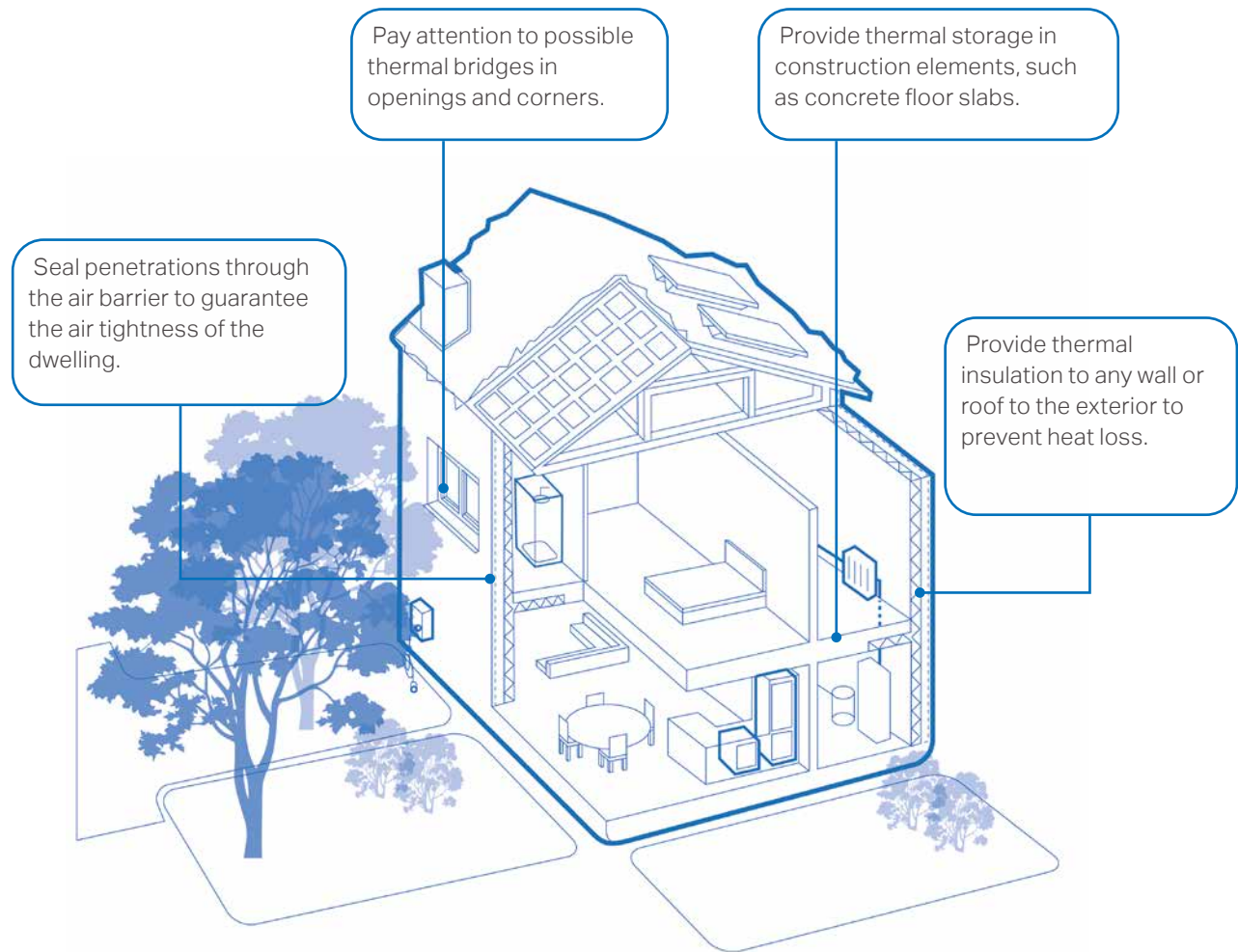


Figure 87: Diagram illustrating aspects of the building fabric to be considered.

EE 03- FLOOD MITIGATION

There are various ways to mitigate flood risk such as Sustainable urban Drainage System (SuDS), rainwater harvesting, and permeable pavements which are elaborated on the following pages.

SUSTAINABLE DRAINAGE SYSTEM (SUDS)

The term SuDS stands for Sustainable Drainage Systems. It covers a range of approaches to managing surface water in a more sustainable way to reduce flood risk and improve water quality whilst improving amenity benefits.

SuDS work by reducing the amount and rate at which surface water reaches a waterway or combined sewer system. Usually, the most sustainable option is collecting this water for reuse, for example in a water butt or rainwater harvesting system, as this has the added benefit of reducing pressure on important water

sources.

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

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

The most effective type or design of SuDS would depend on site-specific conditions

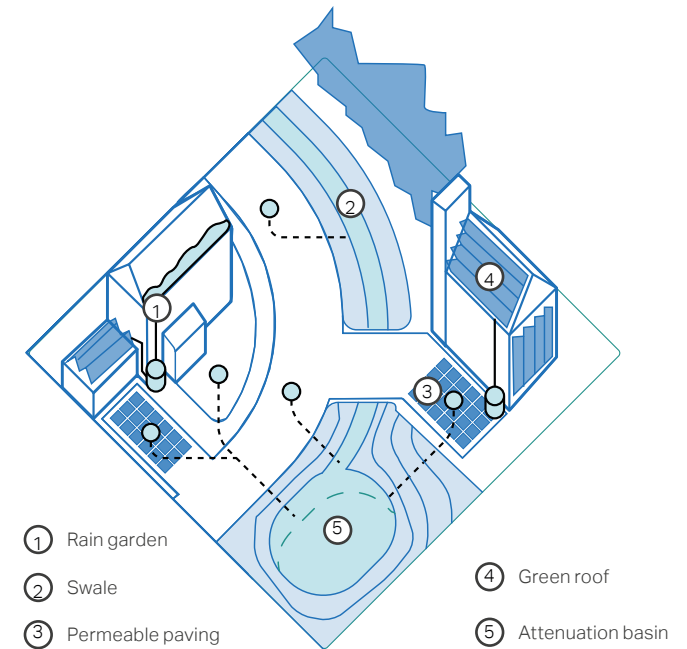


Figure 88: Diagram showing the best use of harvesting water systems rain garden, swales, permeable paving, green roofs.

such as underlying ground conditions, infiltration rate, slope, or presence of ground contamination. A number of overarching principles can however be applied:

- Reduce runoff rates by facilitating infiltration into the ground or by providing attenuation that stores water to help slow its flow down so that it does not overwhelm water courses or the sewer network;
- Integrate into development and improve amenity through early consideration in the development process and good design practices;
- SuDS are often as important in areas that are not directly in an area of flood risk themselves, as they can help reduce downstream flood risk by storing water upstream;
- 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;

- Best practice SuDS schemes link the water cycle to make the most efficient use of water resources by reusing surface water; and
- SuDS must be designed sensitively to augment the landscape and provide biodiversity and amenity benefits.



Figure 89: Examples of SuDS designed as a public amenity and fully integrated into the design of the public realm, Sweden. This is a 'rain garden' which is an intervention that can be used to enhance the capacity of the surface water piped drainage network by capturing and storing rainfall, allowing it to soak into the ground or release it slowly back into the piped network.

RAINWATER HARVESTING

Rainwater harvesting is a system for capturing and storing rainwater as well as enabling the reuse of in-situ grey water. Some design considerations include:

- Concealing tanks with complementary cladding;
- Use attractive materials or finishing for pipes, unsightly pipes should be avoided;
- Combine landscape or planters with water capture systems; and
- Use underground tanks.



Figure 90: Example of a rainwater harvesting tank in the shape of a bee hive.



Figure 91: Example of a modular water tank.

PERMEABLE PAVEMENTS

Most built-up areas, including roads and driveways, increase impervious surfaces and reduce the capacity of the ground to absorb runoff water. This in turn increases the risks of surface water flooding.

Permeable pavements offer a solution to maintain soil permeability while performing the function of conventional paving. The choice of permeable paving units must be made depending on the local context; the units may take the form of unbound gravel, clay pavers, or stone setts.

Permeable paving can be used where appropriate on footpaths, public squares, private access roads, driveways, and private areas within the individual development boundaries.

It is recommended that the majority of the unbuilt areas in the plot (i.e. gardens) are permeable by means of landscape such as grass or earth as well as permeable and

filtrating pavements. As a rule of thumb the % of permeable area should be between 25% to 75% of the unbuilt part of a plot.

In addition, permeable pavement must also comply with:

- Flood and Water Management Act 2010, Schedule 3;¹
- The Building Regulations Part H – Drainage and Waste Disposal;²
- Town and Country Planning (General Permitted Development) (England) Order 2015;³

Regulations, standards, and guidelines relevant to permeable paving and sustainable drainage are listed below:

¹ Great Britain (2010). Flood and Water Management Act, Schedule 3. Available at: <http://www.legislation.gov.uk/ukpga/2010/29/schedule/3>

² Great Britain (2010). *The Building Regulations Part H – Drainage and Waste Disposal*. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/442889/BR_PDF_AD_H_2015.pdf

³ Great Britain (2015). *Town and Country Planning (General Permitted Development) (England) Order 2015*. Available at: http://www.legislation.gov.uk/uksi/2015/596/pdfs/ukxi_20150596_en.pdf

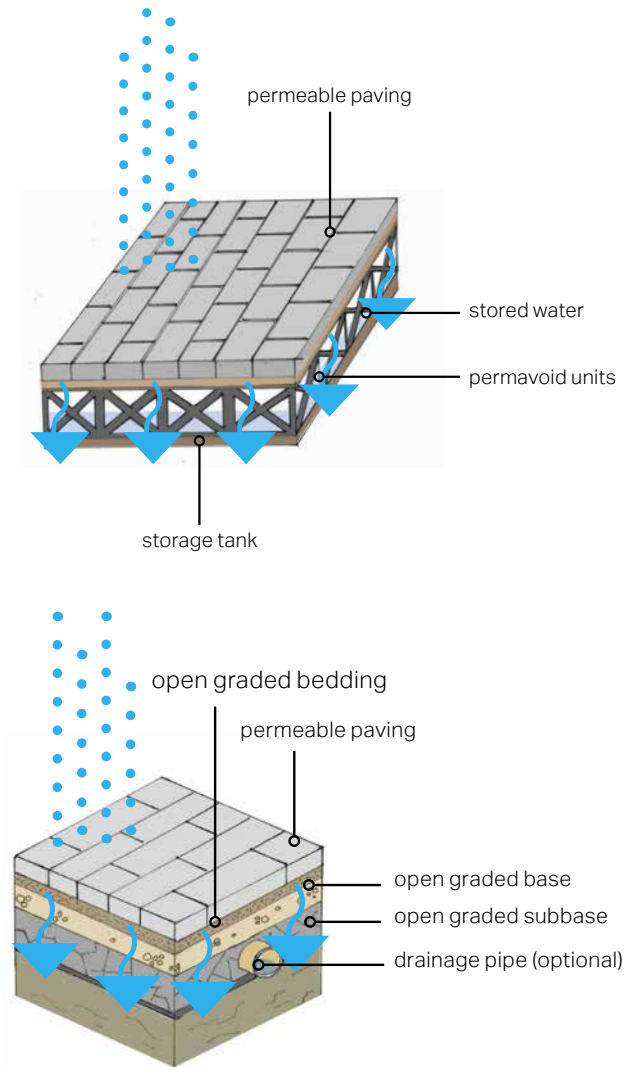


Figure 92: Diagrams illustrating the functioning of a soak away.

- Sustainable Drainage Systems - non-statutory technical standards for sustainable drainage systems;⁴
- The SuDS Manual (C753);⁵
- BS 8582:2013 Code of practice for surface water management for development sites;⁶
- BS 7533-13:2009 Pavements constructed with clay, natural stone or concrete pavers;⁷ and
- Guidance on the Permeable Surfacing of Front Gardens.⁸

⁴ Great Britain. Department for Environment, Food and Rural Affairs (2015). *Sustainable drainage systems – non-statutory technical standards for sustainable drainage systems*. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/415773/sustainable-drainage-technical-standards.pdf

⁵ CIRIA (2015). *The SuDS Manual (C753)*.

⁶ British Standards Institution (2013). *BS 8582:2013 Code of practice for surface water management for development sites*. Available at: <https://shop.bsigroup.com/ProductDetail/?pid=000000000030253266>

⁷ British Standards Institution (2009). *BS 7533-13:2009 Pavements constructed with clay, natural stone or concrete pavers*. Available at: <https://shop.bsigroup.com/ProductDetail/?pid=000000000030159352>

⁸ Great Britain. Ministry of Housing, Communities & Local Government (2008). *Guidance on the Permeable Surfacing of Front Gardens*. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/7728/pavingfrontgardens.pdf



Figure 93: A good example of permeable paver (Source: <https://www.paverconnection.com/testimonial/hedwig-village-permeable-driveway-and-patio-upgrade/>).



Figure 94: A good example of clay paver (Source: <https://www.londonstone.co.uk/brick-pavers/paving-bricks/>).

EE 04- WASTE STORAGE AND SERVICING

With modern requirements for waste separation and recycling, the number and size of household bins has increased. This poses a problem with the aesthetics of the property.

- Servicing arrangements should have a specific and attractive enclosure of sufficient size for all the necessary bins, this avoids the blocking of pavements with bins and makes the public realm more attractive. The storage solutions should be kept to the minimum dimensions in order to prevent the footprint being converted into an annexe at a later date;
- Create a specific enclosure of sufficient size for all the necessary bins;
- Bins should be placed as close to the dwelling's boundary and the public highway, such as against wall, fence or hedge;
- Refer to the materials palette to analyse what would be a complementary material;
- Create an environmentally sustainable enclosure to contain all bins;
- The illustrations in Figure 95 show some successful design solutions for accommodating bins within the plot. Within a town environment the ideas can be used for inspiration in new development to the side of properties; and
- Bins should preferably be stored to the side of the property to minimise their visual impact on the street scene.



Figure 95: Examples of successful storage design solutions for accommodating bins at the front of buildings.

EE 05- WILDLIFE FRIENDLY FEATURES

Biodiversity, green spaces and tree belts must be protected and enhanced where possible.

- Roadside verges, hedges, and trees must act as natural buffers and should be protected when planning new developments;
- Abrupt edges to development with little vegetation or landscape on the edge of the settlement should be avoided and, instead, comprehensive landscape buffering should be encouraged;
- New developments and building extensions should aim to strengthen biodiversity and the natural environment; and
- Ensure habitats are buffered. Widths of buffer zones should be wide enough and based on specific ecological function.

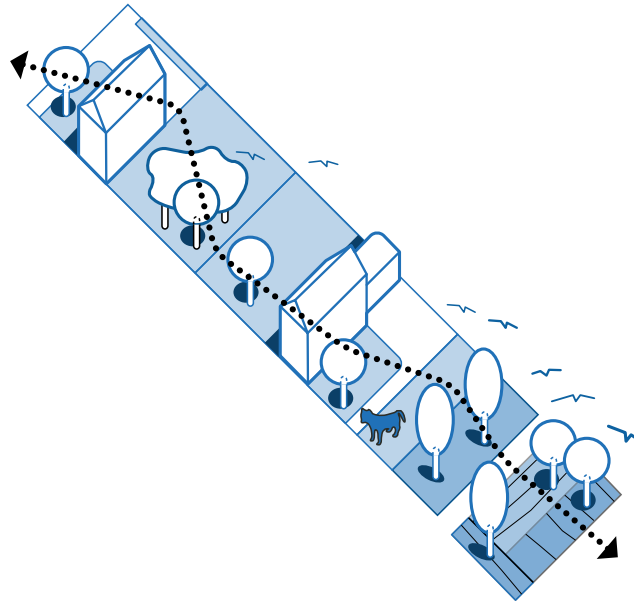


Figure 96: Diagram to highlight the importance of creating wildlife corridors.

Figure 97: Examples of a bughouse decorating rear gardens or public green spaces.

Figure 98: Examples of a frog habitat decorating rear gardens or public green spaces.



EE 06 ELECTRIC VEHICLE CHARGING POINTS

Witcham Parish strongly supports proposals for private transport using electrically and other non fossil fuel powered vehicles. These proposals can be integrated both on and off street. Some design guidelines on how new development should design for electric vehicle charging points are:

On-street car parking or parking courts

- Car charging points should always be provided adjacent to public open spaces. The use of street trees and vegetation to minimise any visual impact of the charging points will be supported;
- Where charging points are located on the footpath, a clear footway width of 1.5m is required next to the charging point to avoid obstructing pedestrian flow; and
- Car charging points within parking courts are highly supported, since they can serve more than one vehicle.



Figure 99: Example of on-street electric vehicle charging points.



Figure 100: Example of electric vehicle charging points in a parking court.

Off-street car parking

- Mounted charging points and associated services should be integrated into the design of new developments, if possible with each house that provides off-street parking; and
- Cluttering elevations, especially main façades and front elevations, should be avoided.



Figure 101: Example of off-street electric vehicle charging points.

4.2 Applying the design codes to the character areas

This section illustrates how the codes introduced above might be applied in each of the character areas presented in 3.1.

This does not mean that all of the codes should not be considered throughout the parish. The codes ensure that crucial characteristics of the settlements such as the recreation ground, listed buildings of local interest and trees and tree belts are not harmed by any future development. These should be read jointly with the previous codes.

Developers seeking to build in these areas should refer to these sections when considering the street layout, placemaking and architectural features of new development.

CA1 - The Conservation Area

EXISTING CHARACTERISTICS

- Mainly low density residential use with some community features (church and recreation ground);
- An open linear streetscape with properties lining either side of the road facing each other breaking down at the edges where it turns into Headleys Lane on the eastern edge;
- Generally detached houses with a variety of setbacks from the street. Predominantly with varying heights of boundary walls;
- Footpath provision is on either side of the road and narrow in places. These finish at the High Street junction with Headleys Lane;
- The village recreation ground is the focal point where there is the village hall and the village's bus stop which creates an emphasis on the surrounding greenness;
- Views towards significant buildings such as the Church of St Martin and Witcham House are preserved along the High Street;

- Views between properties to the rear gardens and beyond;
- Detached houses with generous set backs are a feature in this village; and
- Trees, soft landscaping and open spaces are an important visual aspect.

PROPOSED CHARACTER

- Protect the local character and retain the history of properties through similar use of materials and colour palette. Use the array of gault brick, old Cambridge brick, red brick, painted render, grey slates, clay tiles, clay pantiles. The use of just one material should be avoided if possible;
- Protecting the landscape features such as the village recreation ground, overhanging trees and other green spaces to preserve the natural character of The Conservation Area;
- Provision of the same boundary treatments such as hedges and verges. A variety of wall heights is acceptable when used in conjunction with green features;

- Protect views down the High Street and Back Lane towards significant buildings such as the Church of St Martin and between properties;
- Future developments should not exceed two storeys.

APPLYING THE DESIGN CODES

- **SL 01 PATTERN OF DEVELOPMENT:**
Preserve the linear pattern of the development. New buildings need to conform to the existing building line along the High Street and protect the views toward the Church and countryside.
- **BF 07- ARCHITECTURE DETAILS, MATERIALS AND COLOUR PALETTE:**
Development should use or be influenced by the local vernacular.
- **SP 04 CAR PARKING:**
All parking should be designed to be on-plot.

CA2 - Village approaches

EXISTING CHARACTERISTICS

- Multiple uses such as low density residential, agricultural and light industrial;
- The landscaping surrounding Witcham creates a green barrier that shields the village from the outside when approaching the village from the A142, along The Slade, views are of St Martins Church above a tree canopy with glimpses of residential roofs;
- Sections of continuous frontages along a linear road pattern (The Slade and Martins Lane);
- Pavements on both or one side of the road;
- Low density throughout most of the settlement, although the new development on The Slade is slightly higher density;
- The majority of properties are detached with generous front gardens and open space facing rear gardens with gaps of varying widths between buildings allowing views through. The overall impression is of open green space.

PROPOSED CHARACTER

- Protect the local character such as the views towards the tree belts and hedgerows surrounding the village that hide Witcham from the outside;
- Respect the existing building line;
- Properties should face onto the roads providing a natural surveillance;
- On-street car parking should be discouraged;
- Future development should not exceed 2 storeys in height;
- The roofs should be built in gabled or hipped roof styles; and
- Density of development existing in the village should be respected by any new development.

APPLYING THE DESIGN CODES

- **BF 04 DESIRED HEIGHT PROFILE:** Roof styles should be open-gabled or hipped roof. The building heights should not exceed 2 storey to ensure they are in keeping with the existing local character.
- **BF 07- ARCHITECTURE DETAILS, MATERIALS AND COLOUR PALETTE:** Development should use or be influenced by the local vernacular.
- **EE 05 WILDLIFE FRIENDLY FEATURES:** Comprehensive landscape buffering should be encouraged to provide a buffer between development and the countryside.

CA3 - Silver Street area

EXISTING CHARACTERISTICS

- The character area runs down Silver Street with small cul-de-sacs branching off. This and the nature of Silver Street creates less of a linear feel compared to the rest of Witcham;
- Tree lined streets and large front gardens creates a leafy and open feel to the area.
- Detached houses and bungalows are the main typology;
- Spacious front and back gardens with big plot sizes;
- Silver Street narrows the further you move away from the cross roads;
- There are gaps between buildings providing views towards the countryside, adding to the rural feel of the area; and
- There are several instances of on street car parking and parking courts.

PROPOSED CHARACTER

- Retain and enhance the rural character and pattern of development, most importantly in the areas that fall within the Conservation Area where the character of Witcham is heavily protected by policy;
- New developments should incorporate gaps between properties that provide views towards the countryside, maintaining the rural feel of the area;
- Establish a consistent boundary treatment such as low and well-manicured hedgerows. These provide a degree of privacy and visual interest; and
- Look to prevent inappropriate development in the surrounding countryside.

APPLYING THE DESIGN CODES

- **BF 02 DEFINE FRONT AND BACK GARDENS:** Front and back gardens should reflect what is surrounding in the character area. Gardens on both sides should be generous enough to add to the wildlife and green corridors in Witcham.
- **SP 07 TREES AND LANDSCAPING:** Retain existing native trees and integrate new trees into the design of new development. Preserve gaps and respect the views towards the countryside.
- **SP 04 PARKING:** Any new development in the Silver Street area should provide on-plot car parking in order to remove clutter from the road, creating a friendlier streetscape for active travel.

CA4 - Countryside area

EXISTING CHARACTERISTICS

- Predominantly arable farm fields with small farmsteads scattered throughout the countryside area;
- Long distance views towards Witcham, surrounding settlements and the countryside;
- Narrow rural lanes with grass verges on either side; and
- The Ouse Washes SSSI is located in the north of the area and is a defining element of the area's character.

PROPOSED CHARACTER

- Retain and enhance the rural character and spaced out pattern of development;
- Protect the tree belt surrounding Witcham so that it can retain its character as a settlement from the outside;
- New development should not obstruct existing key views both towards and outwards from Witcham;
- Establish a vegetated boundary treatment such as hedgerows. These provide space for biodiversity to flourish and retain the rural character of the area; and
- Look to prevent inappropriate development in the surrounding countryside.

APPLYING THE DESIGN CODES

- **BF 08 CONVERSION OF AGRICULTURAL BUILDINGS**
Retain characteristic features of historic working buildings such as the openings, which should not be filled in, ventilation slots (often patterned) and any use-specific historic additions.
- **SP 07 TREES AND LANDSCAPING:**
Retain existing native trees and integrate new trees into the design of new development. Preserve gaps and respect the views towards the countryside.
- **EE 05 WILDLIFE FRIENDLY FEATURES:** Comprehensive landscape buffering should be encouraged to provide a buffer between development and the countryside.

4.3 Checklists

As the design guidance and codes in this document cannot cover all design eventualities, this chapter provides a number of questions based on established good practice against which the design proposal 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 considered 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 guidance for new development'. Following these ideas and principles, several questions are listed for more specific topics on the following pages.

1

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, green spaces, 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;
- Positively integrate energy efficient technologies;
- 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 finally incorporate renewable energy sources.

2

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 (continues)

Local green spaces, views & 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?
- 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?
- 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?

3

Local green spaces, views & character:

- Have opportunities for enhancing existing amenity spaces been explored?
- Will any communal amenity space be created? If so, how will this 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 (continues)

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?

5

Buildings layout and grouping:

- If any of the buildings were to be heated by an individual air source heat pump (ASHP), is there space to site it within the property boundary without infringing on noise and visual requirements?
- 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 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?

6

Buildings 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?

7

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 treatment been considered in the context of the site?

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 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?

9 (continues)

Building materials and 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?
- 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?

9

Building materials and surface treatment:

- 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?

11

Architectural details and design:

- If the proposal is within a conservation area, how are the characteristics reflected in the design?
- Does the proposal harmonise with the adjacent properties? This means that it follows the height massing and general proportions of adjacent buildings and how it takes cues from materials and other physical characteristics.
- Does the proposal maintain or enhance the existing landscape features?
- Has the local architectural character and precedent been demonstrated in the proposals?
- If the proposal is a contemporary design, are the details and materials of a sufficiently high enough quality and does it relate specifically to the architectural characteristics and scale of the site?
- Is it possible to incorporate passive environmental design features such as larger roof overhangs, deeper window reveals and/or external louvres/shutters to provide shading in hotter months?
- Can the building designs utilise thermal mass to minimise heat transfer and provide free cooling?
- Can any external structures such as balconies be fixed to the outside of the building, as opposed to cantilevering through the building fabric to reduce thermal bridge?

Delivery

05



5. Delivery

5.1 How to use this guide

The Design Guidelines will be a valuable tool in securing context-driven, high quality development within the parish of Witcham. They will be used in different ways by different users in the planning and development process.

What follows is a list of those users and how they will use the design guidelines:

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

About AECOM

AECOM is the world's trusted infrastructure consulting firm, delivering professional services throughout the project lifecycle — from planning, design and engineering to program and construction management. On projects spanning transportation, buildings, water, new energy and the environment, our public- and private-sector clients trust us to solve their most complex challenges. Our teams are driven by a common purpose to deliver a better world through our unrivaled technical expertise and innovation, a culture of equity, diversity and inclusion, and a commitment to environmental, social and governance priorities. AECOM is a *Fortune 500* firm and its Professional Services business had revenue of \$13.2 billion in fiscal year 2020. See how we are delivering sustainable legacies for generations to come at [aecom.com](https://www.aecom.com) and [@AECOM](https://twitter.com/AECOM).