

Wimblington

The Village Plan

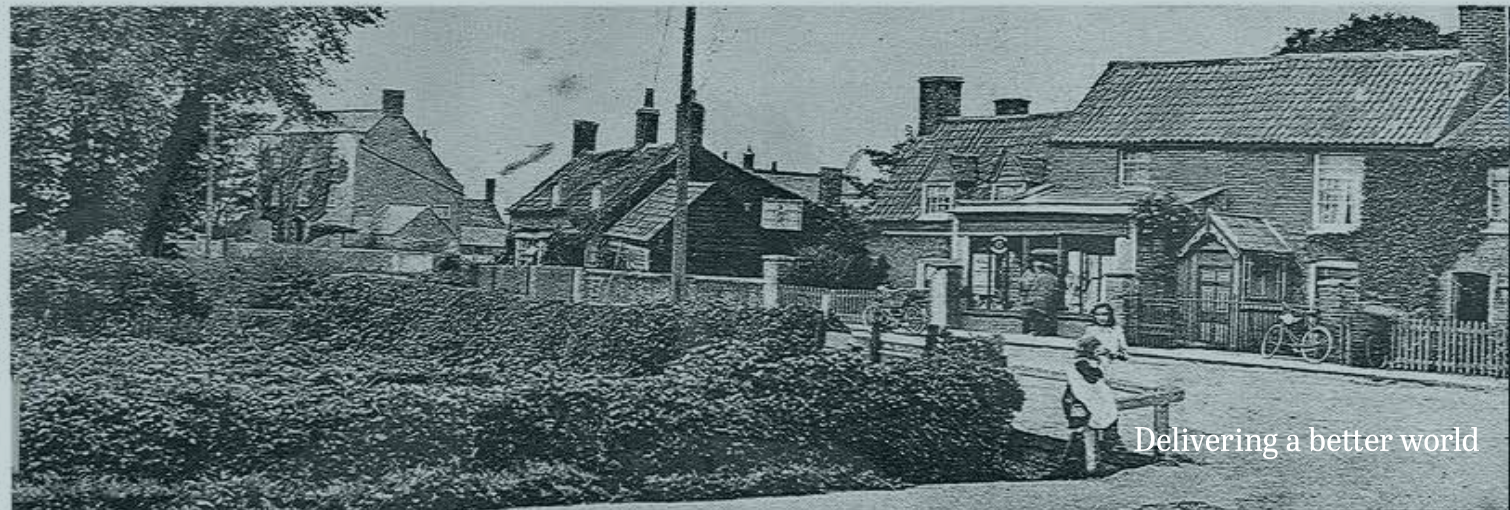
2023



WIMBLINGTON AND STONEA

Design Guidance and Codes

Final Report
September 2023



Quality information

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Contents

1	1. Introduction	4		
	1.1 About this document	5		
	1.2 Overview of Wimblington	7		
	1.3 Signpost to other documents	8		
	1.4 How to use this document	10		
2	2. Neighbourhood area context analysis?	12		
	2.1 Surrounding context	12		
	2.2 Movement networks	13		
	2.3 Landscape, ecology and heritage	14		
	2.4 Topography and flood risk	15		
3	3. Character area analysis	17		
	3.1 Defining the character areas	17		
4	4. Design guidelines and codes	23		
	4.1 Placemaking	23		
	4.2 General principles and guidelines	24		
	4.3 Wimblington design guidelines and codes	25		
5	5. Checklist	59		



Introduction

01

Through the Department for Levelling Up, Housing and Communities Neighbourhood Planning Programme led by Locality, AECOM was commissioned to provide design support to Wimblington and Stonea Parish Council in support of the Wimblington and Stonea Neighbourhood Plan. The support is intended to provide design guidance and codes based on the character and local qualities of the parish to help ensure future development, particularly forthcoming housing, coheres with and enhances Wimblington and Stonea.

1.1 About this document

The Design Codes are written in order to support the design aims of the Neighbourhood Plan. They support the main document by providing design guidance and codes for development in Wimblington and Stonea .

The Design Code does this by understanding the existing character of and setting out the Neighbourhood Plan Steering Group's analysis of character areas. The Design Code sets out codes and guidance for the whole of the parish, and for the identified character areas.



F.1

Figure 01: Steps undertaken to produce this document



KEYS

-  Neighbourhood Area
-  A road
-  B road
-  Settlement

0 miles

0.5 miles



1.2 Overview of Wimblington

Wimblington is a village and civil parish located in the Fenland district of Cambridgeshire. The name Wimblington was first noted in a document circa 975, where it appears as Wimblingetune which means 'the town or settlement of Winebald's people'. The historic character of the village is supported by the 12 listed buildings scattered throughout the parish. The most notable of which is the Grade II* listed North House which is believed to be dated back to the later 17th century.

The A141 (otherwise known as the Isle of Ely Way) bisects the parish and connects the village to the larger settlements of Chatteris and March. March is the location of the most nearby railway station, offering routes to a wide range of destinations including Birmingham, Peterborough, Cambridge, Ipswich, Norwich, Sheffield, Colchester and Stansted Airport. Given this, the parish is actually quite well connected considering its very rural character. The village itself is serviced by 2 separate bus routes which all

connect the parish with local towns.

The village is set in the low lying landscape of the Fenland. Formerly a vast, impenetrable marshland, the fens now help to feed the country as it is ideal for farming. This explains why Wimblington is surrounded by arable farmland.

The village of Wimblington has a modest number of amenities including a surgery, a convenience store, a village hall, a church, a bowls club, a recreation ground, golf range, sports field and club and The Anchor public house. As well as this, on the outskirts of the settlement there are warehouses for the storage of potatoes, a large grain store and a transport depot.

Located to the east of Wimblington is Stonea which is a small rural settlement set in the arable fenland farmland. It is made up entirely of residential and farming uses with all of the services in the parish located in Wimblington.



Figure 03: Example of the landscape surrounding the village.



Figure 04: Example of the linear street character on one of the villages secondary roads.

1.3 Signpost to other documents

National and local policy documents can provide valuable guidance on bringing about good design and the benefits accompanying it. Some are there to ensure adequate planning regulations are in place to ensure development is both fit for purpose and able to build sustainable, thriving communities. Other documents are more technical and offer specific design guidance which can inform design codes and masterplanning activities.

Applicants should refer to these key documents when planning future development in the Wimblington Neighbourhood Area. The following documents have informed the design guidance within this report.

NATIONAL LEVEL

2021 - National Planning Policy Framework

DLUHC

Development needs to consider national level planning policy guidance as set out in the National Planning Policy Framework (NPPF) and the National Planning Policy Guidance (NPPG). In particular, NPPF Chapter 12: Achieving well-designed places stresses the creation of high-quality buildings and places.

2021 - National Design Guide

DLUHC

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

2020 - Building for a Healthy Life Homes England

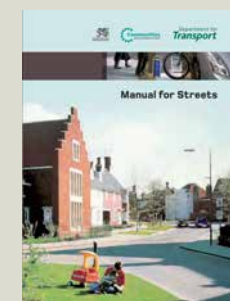
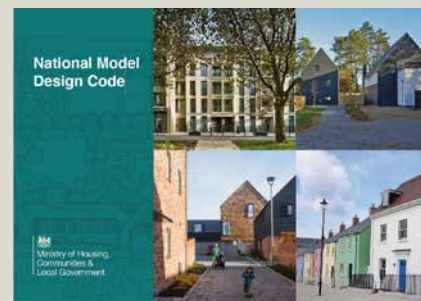
Building for a Healthy Life (BHL) is the new (2020) name for Building for Life, the government-endorsed industry standard for well-designed homes and neighbourhoods.

The new name reflects the crucial role that the built environment has in promoting wellbeing. The BHL toolkit sets out principles to help guide discussions on planning applications and to help local planning authorities to assess the quality of proposed (and completed) developments, but can also provide useful prompts and questions for planning applicants to consider during the different stages of the design process.

2007 - Manual for Streets

Department for Transport

Development is expected to respond positively to the Manual for Streets, the Government's guidance on how to design, construct, adopt and maintain new and existing residential streets. It promotes streets and wider development that avoid car dominated layouts and promote active travel.



Fenland Local Plan (adopted May 2014)

Covering the period up to 2031, the Fenland Local Plan sets out a strategy for development in the district and predates the latest version of the NPPF. The vision of the plan is to encourage, grow and promote its market towns and villages to make them attractive places to live. New development will be of a high-quality design with higher environmental standards. The document includes the following policies to ensure that development is of a high quality in design terms whilst also respecting the natural and cultural heritage of assets:

Emerging Local Plan (2021-2040)

The emerging Local Plan is the Fenland Local Plan 2021-2040 and was published in August 2022. This is the most up to date published version of the plan and was consulted on between August and October 2022. A proposed submission version of the emerging Local Plan is due to be published in summer 2023. After consultation this version of the plan will then be submitted to the Inspector and once adopted will replace the 2014 version. As this plan is yet to be adopted it does not currently carry significant weight in the neighbourhood plan process, but future policies should be considered.

1.4 How to use this document

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

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

Actors	How they will use the design guidelines
Applicants, developers, & 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.
Fenland District Council	As a reference point, embedded in policy, against which to assess planning applications. The Design Guidelines should be discussed with applicants during any pre-application discussions.
Wimblington and Stonea Parish Council	As a guide when commenting on planning applications, ensuring that the Design Guidelines are complied with.
Local Wimblington and Stonea 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.



**Neighbourhood area
context analysis**

02

2. Neighbourhood area context analysis

This section outlines the positive physical, historic and contextual characteristics of Wimblington and Stonea

2.1 Surrounding context

Wimblington a village in Cambridgeshire, and Stonea a nearby hamlet, are surrounded by countryside and vast plains of arable farmland. Stonea consists of a scattered collection of farmsteads and houses with the majority sited along the Sixteen Foot Bank, a man-made river which forms part of the Middle Level Navigations. Wimblington is a more built-up residential area and is home to a number of services including a Parish Hall, a local shop and pub, a petrol station, primary school and a local doctor's surgery. Both Wimblington and Stonea are located just off the A141 between March and Chatteris.



Figure 05: The Wimblington village centre.



Figure 06: Historic terraced housing.

2.2 Movement networks

A permeable network of streets makes moving around a place easier and provides a choice of routes. In Wimblington, residential areas are served by secondary through roads off the primary A141. Residential roads are typically defined by cul-de-sac topology and take the form of a tree shaped road network.

Public transport is very limited in the area and bus services are limited to 2 routes that extend as far as Wisbech and Cottenham, and more locally to Manea, March and Chatteris. These buses operate infrequently often 1 bus or less per hour. The Neighbourhood Area also benefits from a train station approximately 1.2km south in Manea on the Wisbech and St. Ives branch of the Great Eastern Railway which connects the parish to Peterborough and Ipswich.

As a result of the infrequent public transport options within the area, residents tend to rely heavily on the use of car travel for work, recreation, and other activities.

The major roadway through the Neighbourhood Area is the A141 which travels north- south adjacent to Wimblington Parish. It provides access to neighbouring towns like March to the north, and Chatteris and Huntingdon to the south. Directly through the centre of the plan site are 2 B roads (B1093 and B1098) which connect Wimblington to Manea to the east and Upwell to the north.

Several Public Rights of Way (PRoW) exist within the neighbourhood area and provide walking opportunities across the plan area. Public footpaths encourage active travel and offer local residents opportunities to enjoy local walks around the area. An example of one of these is Woodmans Way.

Stonea is a more rural part of the parish and currently has no public transport which puts emphasis on owning a car for the people that live or need to travel there.



Figure 07: Dangerous junction on the A141 which splits the village in two.



Figure 08: Rural road in Wimblington with no pavement.

2.3 Landscape, ecology and heritage

The landscape of the Neighbourhood Area is typically characterised by enclosed agriculture both modern form and pre-modern form and this varies in terms of sizes and shapes. Arable and Horticultural land dominates the plan area with pockets of grassland in the west and south-east of the designated area. Local topography is generally flat and the land low lying.

As well as this, much of the landscape is bisected by canals, dykes, ditches and other forms of drainage which is a typical characteristic of Fenland areas.

There are 12 listed buildings within the designated plan area, most of which are located in the centre of Wimblington along Addison Road, Church Street and Norfolk Street. As well as this there are 3 scheduled monuments (a site that's legally protected because of its historical importance), all 3 of which are located just west of Stonea.

The neighbourhood designation area includes a Site of Special Scientific Impact Risk Zone (SSSI) that covers the Sixteen Foot bank and Manea Road area. Assessment is therefore necessary to identify potential risks to SSSIs posed by development proposals. SSSIs are sites of special interest due to their wildlife; geology; and landform.



Figure 09: Typical arable farming field on the edge of the village.



Figure 10: Example of a sustainable urban drainage next to a new development to help combat flood risk.

2.4 Topography and flood risk

As is typical for fenland areas, the landscape surrounding Wimblington and Stonea is very flat. This leads to huge skies and panoramic views for miles which local residents benefit from. However, this does come with its downsides.

The majority of the Neighbourhood Plan Area is located within Flood Zone 3 which indicates there is a high probability of flooding and therefore any development will require a flood risk assessment. The village of Wimblington itself is located in Flood Zone 1.

Stonea is one of the built up areas in the parish that is located within Flood Zone 3 along with a small number of properties which border the flood risk zone on Eastwood End.

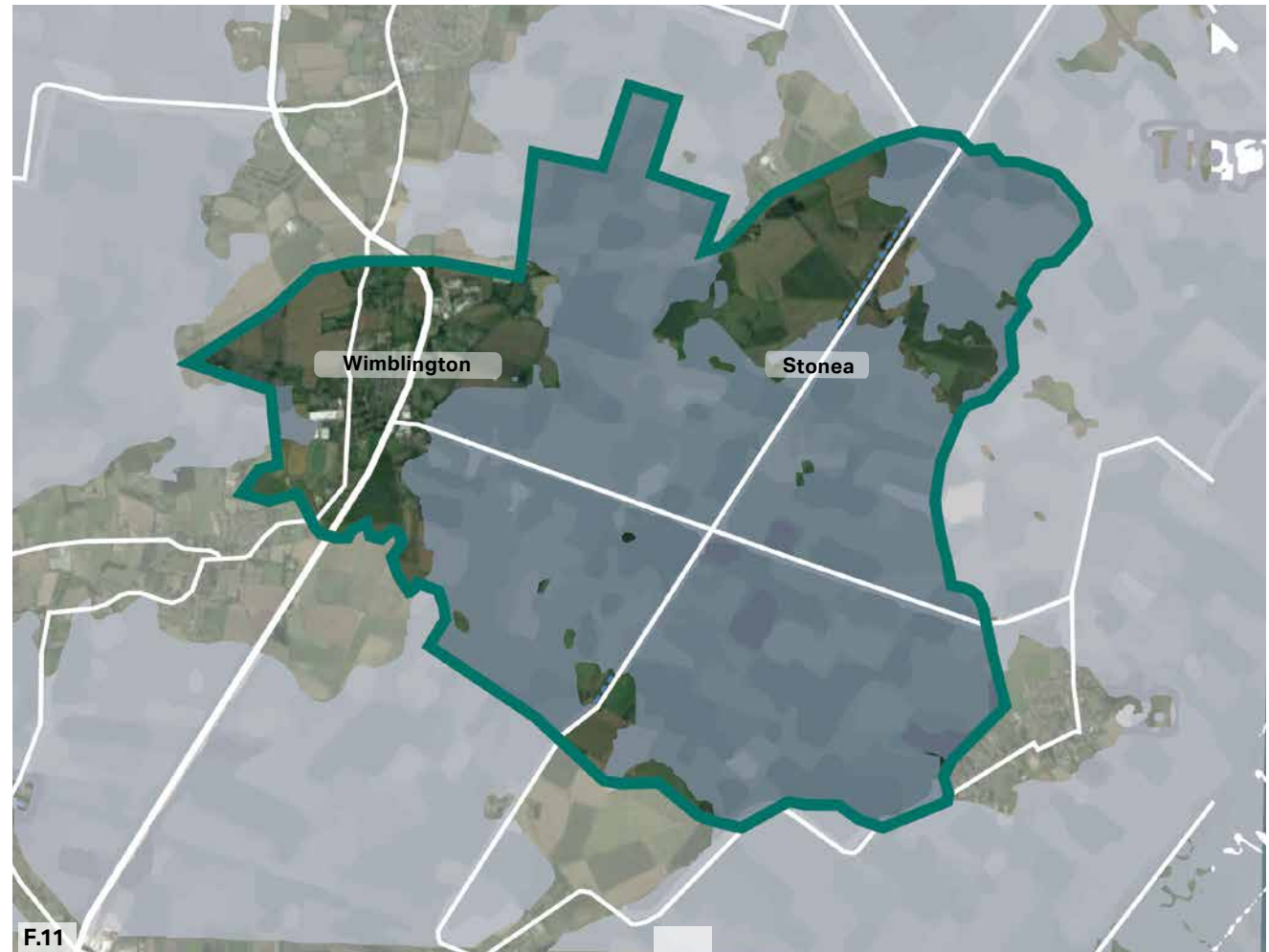


Figure 11: Flood risk map for Wimblington and Stonea parish.



Character areas

03

3. Village 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 character areas within the parish. The different areas are characterised by variations in the built form and architectural details, including: land use, pattern of development, building line/plot arrangement, boundary treatment, heights and roofline, public realm and materials.

For the purpose of this report, we have identified two character areas based on the two principal residential areas.

CA1- Wimblington



Wimblington is a small village settlement in Fenland District, Cambridgeshire. The village is connected by 2 main roads where residential development sprawls out from.

Land Use	The predominant land use within the village is residential with pockets of industrial and commercial uses towards the outskirts of the village. Other uses include open green space, cropland, and local amenities such as a school, pub, village store, petrol station, a golf range, two hairdressers, a general surgery, and a village hall.
Pattern Of Development	There are two primary roads that run through the village, the A141 and March Road/ Doddington Road. Historic maps indicate that the Between 1880 and 1970 the A141 was the Great Northern and Great Eastern joint railway line. March Road served as the main road into the village prior to the introduction of the A141. Urban development has sprawled from March Road since the early 1900s with majority of residential development today taking the form of cul de sacs. Development has since become accessible from the A141.
Building Line/Plot Arrangement	Buildings are typically set back between 5 and 20 metres from the road, allowing space for front gardens and driveways. Whilst residential setbacks are fairly consistent across the village, there are exceptions within the centre of Wimblington around Norfolk Street and Fuller’s Lane where residential development abuts the pavement. As roads within the village are meandering and lack definitive linear structure, the building line and plot arrangement varies in parts.
Boundary Treatment	Boundary treatments consist of timber fencing and low hedges for residential development. Wider boundary treatments consist of a mix of larger hedgings and other vegetation to dampen noise from the neighbouring major road.
Heights & Roofline	Properties are between 1 and 2.5 storeys in height throughout Wimblington
Public Realm	There is no definitive centre to the village to define the public realm. It is assumed the Parish Hall and local shop/post office act as the centre of the village. There is green space present such as 2 playing fields, and open grassland.
Materials	Render, red brick, yellow brick, painted brick, slate tiles, and red clay roof tiles are all common building materials in the village. Some residential development also presents thatched roofs.

CA1 - Wimblington



F.12



F.14

Figure 12: Typical flat faced house with red brick and white render in the parish.

Figure 13: Example of the streetscape of one of the new developments.

Figure 14: Historic georgian house in Wimblington.

Figure 15: Example of a grass verge alongside a public footpaths.

Figure 16: Sports recreation ground in Wimblington.



F.13



F.15



F.16

CA2- Stonea



Stonea is a hamlet that forms part of the Wimblington and Stonea Parish area. It is located approximately 5km from Wimblington to the north. Stonea is situated along the manmade river of Sixteen Foot Bank and is surrounded by flat plains of arable land.

Land Use	The predominant land use is arable farm land, with a scattering of residential housing in Stonea.
Pattern Of Development	There is 1 primary road (B1098) whereby development is presented in a linear form. The majority of building fronts face the primary road with the exception of industrial and commercial buildings which are accessible by tertiary roads. Most development is detached residential with some terrace developments further north of the hamlet.
Building Line/Plot Arrangement	Buildings are typically set back between 5 and 30 meters from the road, allowing space for front gardens and driveways. This is fairly consistent across the hamlet. Plots are arranged in a linear fashion with fronts facing the main road and gardens backing on to the arable land.
Boundary Treatment	Boundary treatments consist of a combination of low hedges, wooden fencing and dense foliage for residential development. Wider boundary treatments consist of a mix of larger hedgings and other vegetation.
Heights & Roofline	Properties are between 1 and 2 storeys in height throughout Stonea.
Public Realm	There is no definitive centre to the village to define a public realm due to the sporadicity of the development. Stonea lacks public footpaths and pavements along the main access road making it unsuitable for regular access.
Materials	Render, red brick, yellow brick, slate tiles, and red clay roof tiles are all common building materials.

CA1 - Stonea



F.17

Figure 17: Stonea Camp - Central ditch and bank
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F.19

Figure 18: Stonea Level Crossing
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Figure 19: The Golden Lion
© Copyright Alex McGregor

Figure 20: Stonea Ancaster Farm
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Figure 21: Stonea Bridge Farm
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F.18



F.20



F.21



**Design guidelines and
codes**

04

4. Design guidelines and codes

This chapter provides guidance on the design of development, setting out the expectations that applicants for planning permission in Wimblington and Stonea Parish will be expected to follow.

4.1 Place making

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 place-making and draw on the principles set out in many national urban design best practice documents.

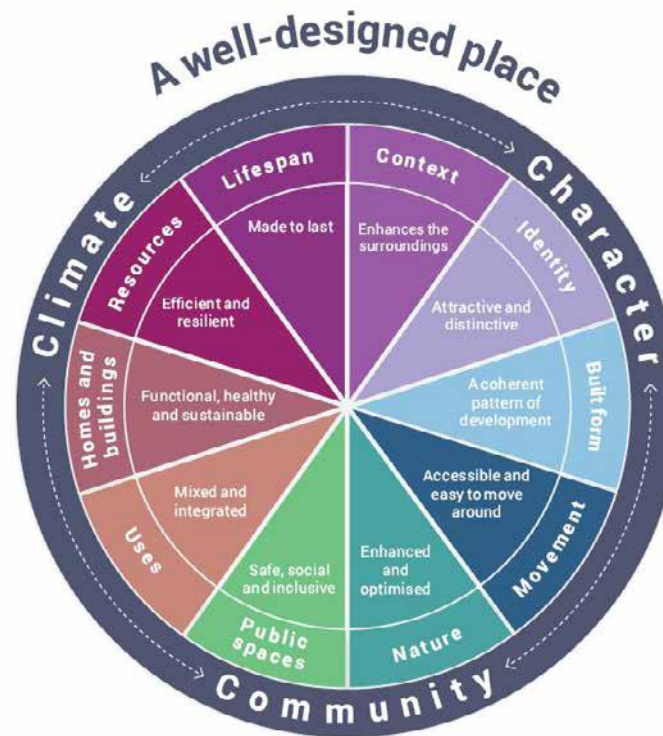


Figure 22: The 10 characteristics of well-designed places.
(Source: National Design Guide, page 8).

4.2 General principles and guidelines

The design guidelines and codes, with reference to Wimblington and Stonea Neighbourhood Plan Area, will follow a brief introduction of the general design principles.

The guidelines and codes developed in the document focus on residential environments including new housing development in the Parish, as well as any potential in-fill or small scale development or housing extension.

In any case, considerations of design and layout must be informed by the wider context, considering not only the immediate neighbouring buildings, but also the landscape and rural character of the wider locality. The local pattern of streets and spaces, building traditions, materials and natural environment should all help to determine the character and identity of a

development.

It is important that full account is taken of the local context and that the new design embodies the 'sense of place' and also meets the aspirations of people already living in that area. Therefore, some design principles that should be present in any design proposal are:

- Reflect the rural character of the village;
 - Respect the heritage, landscape and key views identified in the Parish;
 - Aim for high quality design that reflects and respects the local vernacular;
 - Integrate with existing paths, streets, circulation networks and improve the established character of streets, greens and other spaces;
 - Harmonise and enhance existing village in terms of physical form, architecture and land use;
- Ensure all components e.g. buildings, landscapes, access routes, parking and open space are well related to each other;
 - Incorporate necessary services and drainage infrastructure without causing unacceptable harm to retained features; and
 - Aim for innovative design and eco-friendly buildings while respecting the architectural heritage and tradition of the area.

4.3 Wimblington and Stonea design guidelines and codes

This section introduces a set of design principles that are specific to Wimblington Parish. These are based on:

- Baseline analysis of the area in Chapter 2;
- Understanding national design documents such as National Design Guide, National Model Design Code and Building for Healthy Life 12 Documents which informed the principles and design codes; and
- Discussion with members of the Neighbourhood Plan Steering Group.

The codes are divided into **5 sections**, shown on the next two pages, each one with a different number of subsections. Each section and subsection is numbered (e.g DC.01) to facilitate its reading and consultation.

Theme	Code	Title
DC.01 In keeping with local character	1	Heritage, views and landmarks
	2	Patterns of growth within the rural landscape
DC.02 Access and movement	3	Accessible and attractive footpath network / access to the countryside
	4	Prioritise walking and cycling
	5	People friendly streets
	6	Street lighting
	7	Parking and servicing
	8	Cycle parking
DC.03 Green and blue infrastructure	9	Create a green network
	10	Biodiversity
	11	Water management
	12	Trees
	13	Open spaces
DC.04 Built form	14	Boundary lines, boundary treatment & corner treatment
	15	Continuity and enclosure
	16	Legibility and wayfinding
	17	Building heights, density and housing mix
	18	Materials and architectural details
DC.05 Sustainability	19	Minimising energy use
	20	Lifetime and adaptability
	21	Minimising construction waste
	22	Recycling materials and buildings
	23	Electric vehicle charging points

DC.01 In keeping with the local character

Code 1 Heritage, views and landmarks

Wimblington Parish has a rich heritage spread widely across the area, comprising the landscape and rural heritage and its architecture. There are 12 listed buildings, but there are other buildings too that are important to the heritage of the village because of their contribution to its history.

Therefore, any new development needs to be aware of their existence and stimulate ways in which those assets could be further promoted and protected. Some design guidelines are:

- Scenic and tranquil views to the countryside should be retained and enhanced in future development. For example, footpaths bordered with rich vegetation can help protect particular views while improving walkability in the village;
- New development proposals should maintain visual connections to the surrounding landscape and long views out of the Parish. Development density should allow for spaces between buildings to preserve views of countryside setting and maintain the perceived openness of the village.
- Creating short-distance views broken by buildings, trees or landmarks helps to create memorable routes. Creating views and vistas allows easily usable links between places; and
- Development which affects any designated and non-designated heritage asset must respect the significance of the asset and must demonstrate how local distinctiveness is reinforced. For example, adding landscape and vegetation can create a buffer and mitigate any visual impact.



Figure 23: St Peters church, Wimblington.



Figure 24: Example of an expansive Fenland view that you get in the parish.

Code 2 Patterns of growth within the rural landscape

The Parish owes much of its character to the historic pattern and layout of the roads and buildings as well as its close relationship with the surrounding countryside. Some design guidelines for new development within Wimblington parish are:

- New development in close proximity to designated and non-designated heritage assets must propose green screenings to mitigate any unpleasant visual impact, while also preserving key views;
- New planting should adequately mitigate the impact of the new development and the loss of natural features.
- New development should be within the village footprint or a modest development annexed to it, while also protecting important views to the countryside;
- New development must demonstrate a good understanding of the scale, building orientation and enclosure of the surrounding built environment as well as consider the proximity to the fenland landscape;
- Any proposal that would adversely affect the physical appearance of a rural lane, or give rise to an unacceptable increase in the amount of traffic, noise, or disturbance must be avoided;
- Development densities should reflect the character of the village;
- The size of plots and their pattern should be varied to contribute to the rural character of the parish;
- Building setbacks should be slightly irregular to introduce an informality, but, in general, the building lines along the main roads should maintain a linear character;
- The roofline should be set lower than the vegetation backdrop, avoiding hard lines of the silhouette against the sky;
- Existing hedges, hedgerows and trees should be integrated into design, whilst more planting and vegetation is encouraged to form part of the green network strategy;
- Appropriate signage should be incorporated along the road to indicate the low speed limits or provide navigation; and
- All developments should include a green space that will benefit the local community.



Figure 25: Modern linear development along March Road

DC.02 Access and movement

Code 3 Accessible and attractive footpath network/ access to the countryside

The existing network of footpaths in the parish is limited undermining the safe and easy access to the surrounding countryside. The footpath network needs to be attractive and accessible to encourage people opting for it while getting closer to nature. Therefore, new developments should make sure that safe and suitable footpath networks are provided and maintained and some guidelines are:

- Where possible, newly developed areas must retain or provide direct and attractive footpaths between neighbouring streets and local facilities and amenities. Establishing a robust pedestrian network across new developments and among new and existing development is key in achieving good levels of connectivity and promoting walking and cycling;
- Where possible, new proposed footpaths should link up green and blue spaces and woodlands to create a network of green walking routes and promote biodiversity. For example, footpath connections and other green links could connect new developments with the recreation ground and accessible open spaces.
- Design features such as gates or barriers to footpaths must be kept at a minimum and the latter must be avoided;
- Strategically placed signposts can assist pedestrians and cyclists with orientation and increase awareness of publicly accessible paths beyond the parish to surrounding villages and towns, e.g. March. However, new signposts must respect the rural character of the parish and avoid creating visual clutter; and
- Footpath network needs to be in place before first occupation of houses on the sites.



Figure 26: Pavement with on street car parking in the parish.



Figure 27: Cul-de-sac street which allows for pedestrian and cycle connections to the surrounding neighbourhoods and countryside.

Code 4 Prioritise walking and cycling

There is a limited network of cycle paths and footpaths in the parish that undermines walking and cycling. It is a consensus that the existing footpath network needs to be improved and enhanced to provide safe and easy access to the local amenities, e.g. Village Store, Post Office, Village Hall, Playing Field and Church, and surrounding countryside. In addition, the design of new footpaths should be an integrated part of the design in new development and some guidelines are:

- Varied links should be enabled and created to favour pedestrian and cycle movement. These routes should be always overlooked by properties to create natural surveillance and offer good sightlines and unrestricted views to make people feel safer;
- Cul-de-sac development pattern should be avoided in new developments. However, if it is proposed then it should be connected to footpaths to avoid blocking pedestrian and cycle flow;
- Design features such as barriers to vehicle movement, gates to new developments, or footpaths between high fences must be avoided; and
- All newly developed areas must provide direct and attractive footpaths between neighbouring streets and local facilities. Streets must be designed to prioritise the needs of pedestrians and cyclists.



Figure 28: Footpath integrated within residential development in Wimblington offering pedestrians with onward connectivity.

DC.02 Access and movement

Code 5 People-friendly streets and green links

It is essential that the design of new development includes streets that incorporate the needs of pedestrians, cyclists, and, if applicable, public transport users. Some guidelines for future development are:

- Streets must meet the technical highways requirements, as well as being considered a 'place' to be used by all. It is essential that the design of new development includes streets and junctions that incorporate the needs of pedestrians, cyclists, and if applicable, public transport users;
- It is important that on-street parking, where introduced, does not impede the access of pedestrians and other vehicles and it is well vegetated;
- Within the development boundaries, streets should not be built to maximise vehicle speed or capacity. A range of traffic calming measures could be introduced by design;
- New streets should be linear with gentle meandering, while also providing evolving views to the surrounding countryside;
- Routes should be laid out in a permeable pattern, allowing for multiple choices of routes, particularly on foot and cycle. Any cul-de-sacs should be relatively short and provide onward pedestrian links;
- Streets must respect the existing vegetation, while also incorporating new opportunities for landscaping, green infrastructure, and sustainable drainage;
- Any new development should provide well-connected streets of varied character to filter traffic and speed. A legible street hierarchy should include primary, secondary, tertiary roads and edge lanes. The next pages present illustrations examples of those street typologies; and
- Any new development should be respectful to existing trees and wildlife and try to integrate them into the design of streets.

Primary streets

- Primary streets are the widest neighbourhood roads and also the main routes used for utility and emergency vehicles, as well as buses (e.g. March Road);
- Primary streets must be defined by strong building lines. Primary frontages alongside the road should include taller and more dense developments; and
- Street trees and/or green verges along the road should be provided to contribute to the village identity, local biodiversity, and provide cooling and shading.

Secondary streets

- Secondary streets should accommodate carriageways wide enough for two-way traffic. On-street parking may be accommodated on the street or inset into green verges;
- Carriageways should be designed to be shared between motor vehicles and cyclists. Vertical traffic calming features such as raised tables may be introduced; and
- Where possible, secondary streets should be tree-lined on both sides.

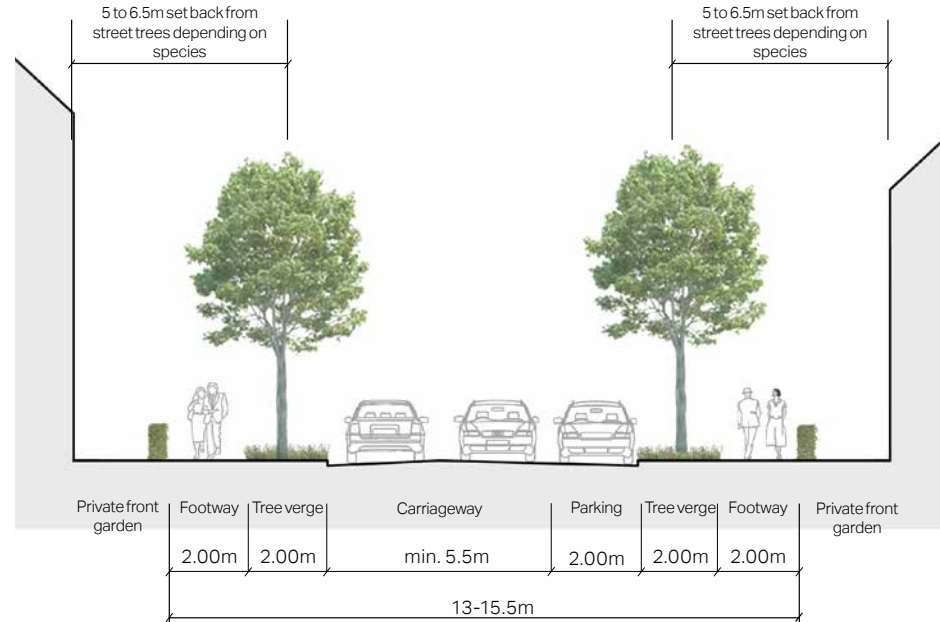


Figure 29: Cross-section to illustrate some dimensions for primary streets.

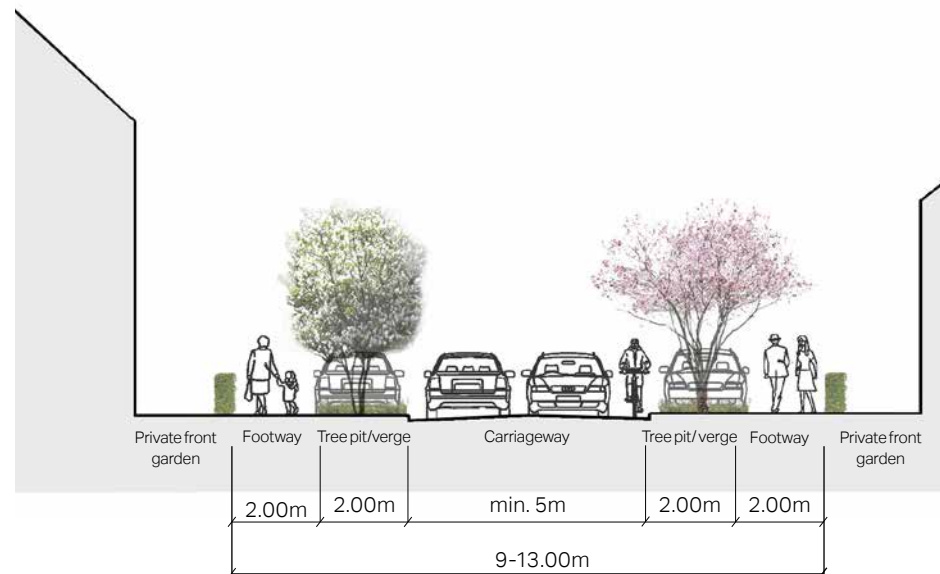


Figure 30: Cross-section to illustrate some dimensions for secondary streets.

DC.02 Access and movement

Edge lanes

- All the edges of new development areas should be served by continuous Edge Lanes to provide high level of connectivity;
- Edge lanes are low-speed streets that front houses with gardens on one side and a green space on the other. Carriageways typically consist of a single lane of traffic in either direction, and are shared with cyclists; and
- Variations in paving materials and textures can be used instead of kerbs or road markings.



Figure 32: Cross-section to illustrate some dimensions for edge lanes.

- Green links should be located within minimum 7.5m wide corridor adjacent to retained green assets;
- Shared or segregated footpath and cycleway to be provided within corridor;
- Footpath and cycleway to be hard surfaced and constructed of bound material which may also combine with vehicle access;
- Combined width of unsegregated footpath and cycleway to be a minimum of 3.0m; and
- Where required, SUDs features to be incorporated into corridor beside the surface of shared footpath and cycleway.

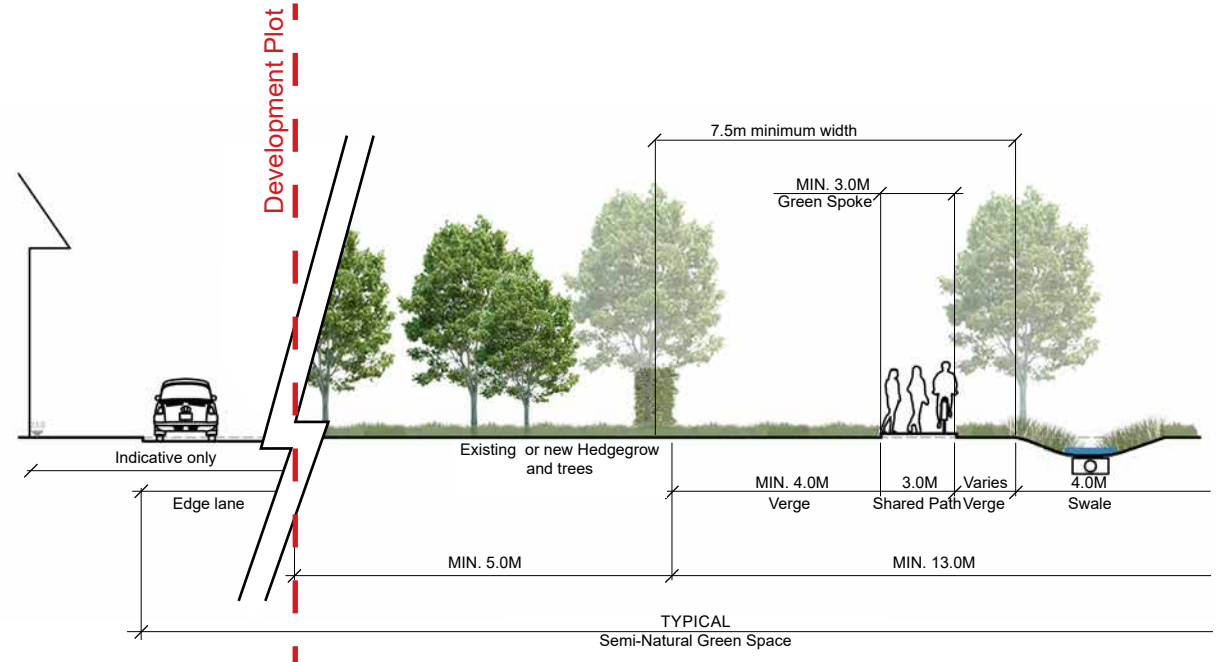


Figure 31: Section to illustrate some dimensions for green links.

DC.02 Access and movement



Figure 33: Example of a primary street with large street trees and green verges along the carriageway, Cambridge.



Figure 34: Secondary street with inset parking bays alternating with street trees on both sides of the street in Derwenthorpe, York.



Figure 35: Tertiary street with inset parking bays alternating with trees on both sides in Dewenthorpe, York.



Figure 36: Positive example of a meandering edge lane where properties with well vegetated front gardens overlook the adjacent open space, Newquay.



Figure 37: Edge lane with spaces for informal parking (left) and pinch points (right) in Poundbury, Dorchester.

Code 6 Street lighting

Many Councils stipulate 'dark night sky for star-gazing' areas. Much of the street lighting in the Parish was provided before thought was given to light pollution and energy efficiency.

However, artificial light provides valuable benefits and it makes areas feel more welcoming on a night-time. Therefore, any new development in the Parish, which is a rural area, needs to minimise the impact of street lighting and reduce light pollution that disrupts the natural habitat and human health. The 'dark skies' character of the countryside should be protected since it benefits both people and wildlife.

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

- Consider lighting schemes that could be turned off when not needed ('part-night lighting') to reduce any potential adverse effects;
 - Foot/cycle path light should be in harmony with surrounding rural landscape. Lightings, such as solar cat's-eye lighting, reflective paint and ground-based lighting could be introduced;
 - Choice of lighting should be energy-efficient and sustainable. The installation of motion sensors on the lights should be encouraged; and
 - Any new developments and house extensions designs should encourage to use natural light sources.
- Ensure that lighting schemes will not cause unacceptable levels of light pollution particularly in intrinsically dark areas. Dark at night is defined as more than 50m from an existing street light;



Figure 38: Example of a foot/cycle path which is lit by solar cat's-eye providing some light for pedestrian and cyclists without creating any disturbance to the nearby properties or unacceptable levels of light pollution.

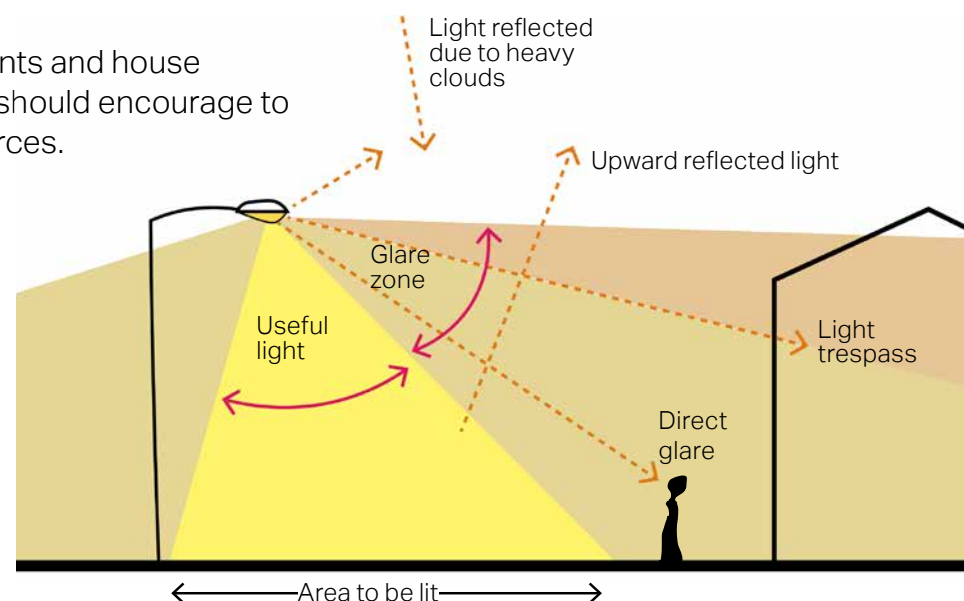


Figure 39: Diagram to illustrate the different components of light pollution and what 'good' lighting means.

DC.02 Access and movement

Code 7 Parking and servicing

Although, the aim to create a good network of walking and cycling routes within Wimblington Parish is a priority, the demand for private cars still remains high, at the time of writing, and therefore car parking has to be carefully integrated into the design. In addition, the energy efficiency aspect is also important and the need for more electric cars is rising. Please see Code 23 for more details and guidelines on electric charging points.

The car parking typology mainly found in the Parish is on-plot parking and therefore, new development should prioritise it over other parking typologies. However, there are also cases of garage parking, on-street parking and parking courts. Therefore, the design guidelines on the next pages will focus on the above mentioned typologies.

- Parking should be well integrated into design so as not to dominate the public realm;
- High-quality and well-designed soft landscaping, hedges, hedgerows, and trees, should be used to increase the

visual attractiveness of the parking and enhance the rural character of the Parish;

- Hard standing and driveways must be constructed from porous materials, to minimise surface water run-off and therefore, help mitigate potential flooding;
- Garage blocks are discouraged in any new development throughout the parish;
- If garages are used they must not dominate the appearance of dwellings

and must not reduce the amount of active frontage to the street; and

- They must provide minimum 3m x 7m internal space to park a car and provide space for storage to avoid the garage to be used for storage purposes only.



Figure 40: Typical car parking examples in Wimblington.

Servicing

With modern requirements for waste separation and recycling, the number and size of household bins has increased posing a problem with the aesthetics of the property and the management of the bins. Therefore, some guidelines for new development are:

- When dealing with waste storage, servicing arrangements and site conditions should be taken into account; in some cases waste management should be from the front of the building and in others, from the rear. It is recommended that bins are located away from areas used as amenity space;
- A specific enclosure of sufficient size should be created for all the necessary bins;
- Bins should be placed as close to the dwelling's boundary and the public highway, such as against a wall, fence, hedge but not in a way as to obstruct the shared surface for pedestrian and vehicle movements;
- Bins should be placed within easy access from the street and, where possible, with the ability to open on the pavement side to ease retrieval;
- Wheelie bin storages are recommended to improve the aesthetics of the environment; and
- Bin storage could be combined with cycle storage.

DC.02 Access and movement

Code 8 Cycle parking

Cycling, either for commuting or recreation, is a common activity in the Parish. Therefore, provision for cycle parking should be an integrated part in the design for new developments.

- 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.

- 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.

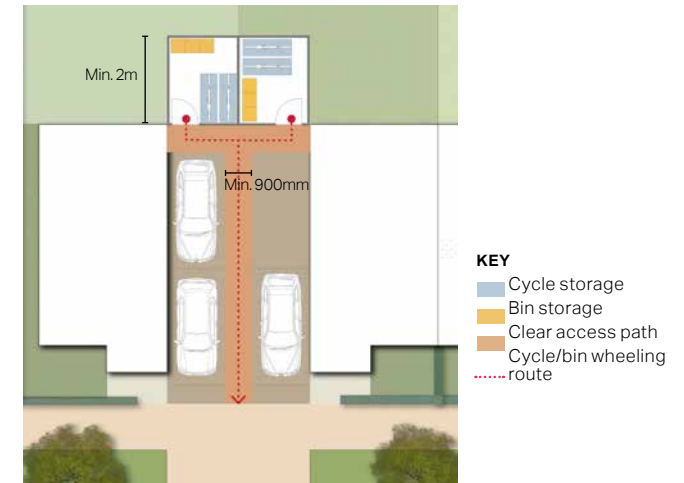


Figure 41: Indicative layout of a bicycle and bin storage area at the back of semi-detached properties.

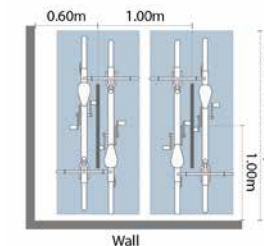


Figure 42: Sheffield cycle stands for visitors and cycle parking illustration.

Code 9 Create a green network

A well connected green network should be created throughout the new developments to preserve the rural feel of the village and provide links to the countryside for people as well as habitats. Opportunities should be sought to introduce green assets into design and contribute to biodiversity. Some design guidelines on green networks are:

- New development should avoid harming existing ecological assets, e.g. habitats and dependent local biodiversity, with the recognised wildlife corridors. Those green assets should be identified and integrated into the design process early on;
- New development should propose green links to enhance the links between Wimblington's wildlife network and the ecological/habitat connectivity;
- Green networks should link existing and newly proposed street trees, green verges, front and rear gardens, open spaces, habitat sites and the countryside together;
- Places to stop, rest and socialise (such as benches) should be incorporated into green networks/spaces;
- New development should front onto green assets and access should be granted for all groups of people;
- SuDS should be introduced, where possible, and incorporated into design of the green network to mitigate any flooding issue; and
- Green networks could contain some formal provision, such as a Neighbourhood Equipped Area of Play (NEAP), playing fields and an area for active recreation. There are many benefits include the improvement of the health and well-being of individuals and promotion of the development of inclusive communities.

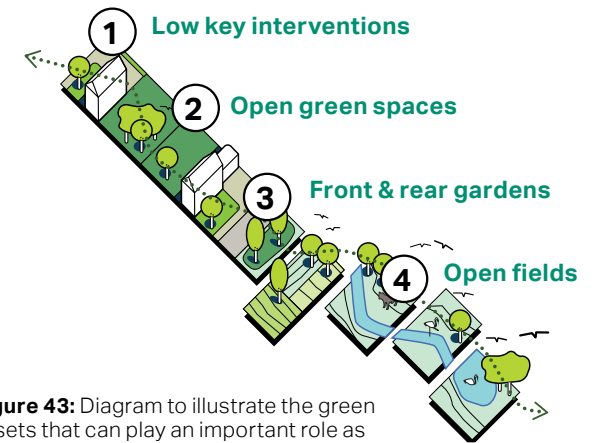


Figure 43: Diagram to illustrate the green assets that can play an important role as wildlife corridors.

DC.03 Green and blue infrastructure

Code 10 Biodiversity

In July 2019 Fenland District Council declared a Climate Emergency. The opportunity to avoid dangerous levels of global heating is closing and action is required swiftly at all levels from the international to the individual. Biodiversity could be highly affected and therefore new development should prioritise its enhancement through design. Some design guidelines are:

- New development should protect and enhance the existing habitats and wildlife corridors (as identified in the Ecology Network/Green Infrastructure map which was part of CDC's Biodiversity Mapping project). In particular, help increase movement between isolated populations and provide escape cover from predators and shelter during bad weather;
- Biodiversity, woodlands, hedgerows, ditches should be protected and enhanced where possible and be an integrated part of the design process rather than an afterthought;
- New development proposals should aim for the creation of new habitats and wildlife corridors, e.g. by aligning back and front gardens or installing bird boxes or bricks in walls;
- Gardens and boundary treatments should be designed to allow the movement of wildlife and provide habitat for local species. For that reason, rich vegetation and plantation is suggested;
- Blue assets can also contribute to biodiversity connectivity. Therefore, the existing ditches and ponds should be considered in design proposals when planning for wildlife corridors;
- All areas of biodiversity that require further planting/ enhancement should be planted before start of construction; and
- The choice of plants in new development should be appropriate to the setting of the proposal.



Figure 44: Example of a structure used as a frog habitat corridor located in an outdoor green space.



Figure 45: Example of a bird feeder located on a grass area opposite a public footpath.

Code 11 Water management

Sustainable drainage solutions (SuDS)

It is a general consensus that the risk of flooding is a major concern in the parish and the majority of the residents would want to see some improvements to the surface water drainage. Therefore, the introduction of some sustainable drainage systems, known as SuDS, would be beneficial for the village. Alongside regular maintenance of existing ditches.

The most effective type or design of SuDS would depend on site-specific conditions such as underlying ground conditions, infiltration rate, slope, or presence of ground contamination. However, a number of overarching principles that could be applied in new development are:

- Manage surface water as close to where it originates as possible;
- Reduce runoff rates by facilitating infiltration into the ground or by providing attenuation that stores water to help slow its flow down, so that it does not overwhelm water courses or the sewer network;
- Improve water quality by filtering pollutants to help avoid environmental contamination;
- Integrate into development and improve amenity through early consideration in the development process and good design practices;
- SuDS are often also 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 should be designed sensitively to augment the landscape and provide biodiversity and amenity benefits.



Figure 46: Example of SuDS for one of the newer developments in Wimblington.



Figure 47: Example of SuDS designed as a public amenity and fully integrated into the design of the public realm, Stockholm.

DC.03 Green and blue infrastructure

Storage and slow release

Rainwater harvesting refers to the systems allowing the capture and storage of rainwater as well as those enabling the reuse in-site of grey water.

Simple storage solutions, such as water butts, can help provide significant attenuation. However, other solutions can also include underground tanks or alternatively overground gravity fed rainwater systems that can have multiple application areas like toilets, washing, irrigation. In general, some design guidelines to well integrate water storage systems are:

- Consider any solution prior to design to appropriately integrate them into the vision;
- Conceal tanks by cladding them in complementary materials;
- Use attractive materials or finishing for pipes; and
- Combine landscape/planters with water capture systems.



Figure 48: Examples of water butts used for rainwater harvesting in Reach, Cambridgeshire.



Figure 49: Example of a gravity fed rainwater system for flushing a downstairs toilet or for irrigation.

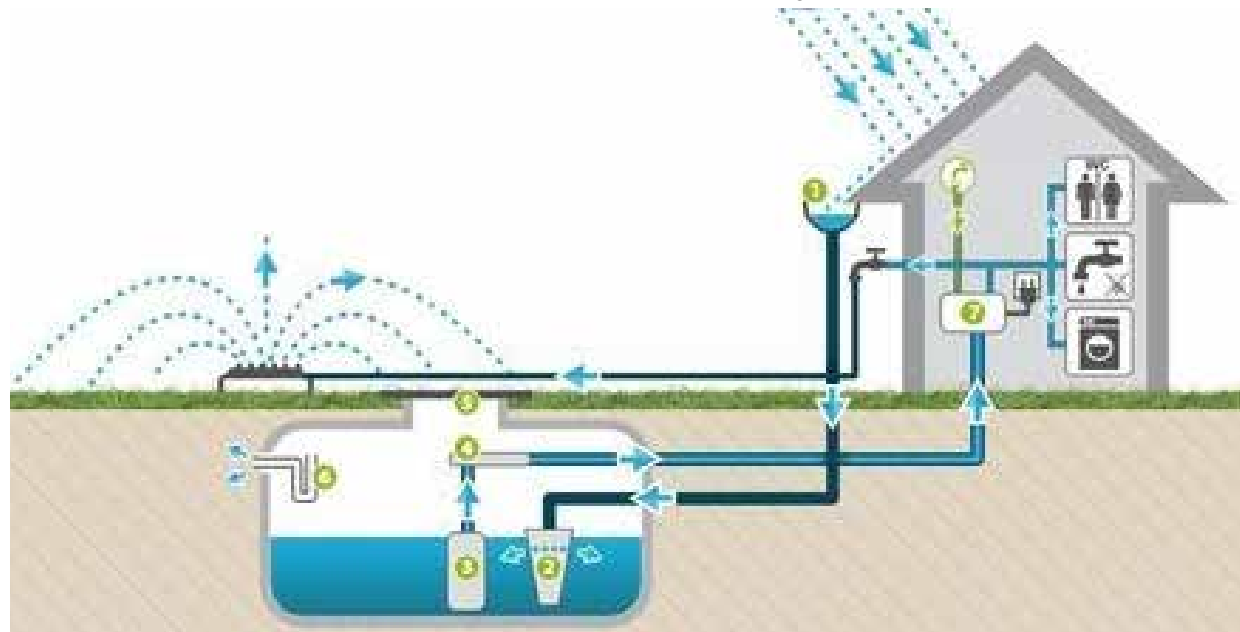


Figure 50: Diagram illustrating rainwater harvesting systems that could be integrated into open space and residential developments.

Permeable paving

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 paving offers a solution to maintain soil permeability while performing the function of conventional paving. Therefore, some design guidelines for new development are:

- 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; and
- Permeable paving can be used where appropriate on footpaths, private access roads, driveways, car parking spaces (including on-street parking) and private areas within the individual development boundaries.

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

- Sustainable Drainage Systems - non-statutory technical standards for sustainable drainage systems¹.
- The SuDS Manual (C753)².
- Guidance on the Permeable Surfacing of Front Gardens³.

1. 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

2. CIRIA (2015). The SuDS Manual (C753).

3. 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

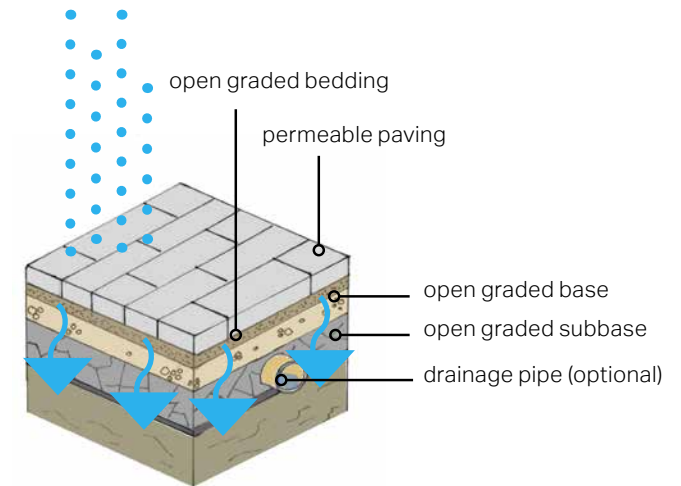


Figure 51: Diagram illustrating the function of a soak away.



Figure 52: Example of a permeable paving that could be used from driveways.

DC.03 Green and blue infrastructure

Code 12 Trees

New street planting helps maintain visual consistency along the public realm. It is associated with better mental health and well-being by reducing stress, lessening heat islands, and providing protection from natural elements such as wind and rain. Some guidelines for new developments are:

- Aim to preserve existing mature trees and hedges by incorporating them in the new landscape design;
- To ensure resilience and increase visual interest, a variety of native tree species is preferred over a single one;
- Flower beds, bushes and shrubs should be welcomed in new developments, since they contribute to the livelihood of the streetscape and create visual interest and colour to their surroundings;
- Hedgerows can be planted in front of bare boundary walls to ease their visual presence or they can be used to conceal on-plot car parking and driveways within curtilages;
- Native trees can normally be used to mark reference points and legibility;
- Native trees should also be present in any public open space, green or play area to generate environmental and wildlife benefits; and
- The success of tree planting is more likely to be achieved when it has been carefully planned to work in conjunction with all parts of the new development, parking, buildings, street lights etc.



Figure 53: Property in the parish that uses hedges and trees as boundary treatment.



Figure 54: Example of trees and other forms of vegetation shaping the streetscape in Wimblington, creating a rural feel.

Code 13 Open spaces

Open spaces play a vital role in creating a positive environment and preserving the rural feel of Wimblington. These are places fostering community and gathering, thus creating lively places in neighbourhoods. Therefore, new development should prioritise the design of open spaces and some design guidelines are:

- The location of new open spaces within new development should be decided based on the location of the existing ones considering the needs of the existing population too;
- Landscape should not be used as a divisive measure between new and existing development however, green buffer zones between older and new development are acceptable. This can be achieved by procuring a landscape consultant early on in the design process;
- Connectivity to recreational space should be provided linking multifunctional spaces (woodland, sport pitches and play areas);
- All recreational spaces should be designed to link up with each other and also link up with existing adjoining sites taking particular note of enhancing green links;
- Surrounding buildings should overlook play areas and public spaces to encourage movement and natural surveillance;
- Open spaces should be equipped with good quality street furniture to create pleasant seating areas, shaded spaces avoiding hidden spots; and
- The materials and style of any street furniture in the open spaces should be consistent throughout the Parish and aim to proudly represent the local character.



Figure 55: The sports field in Wimblington.



Figure 56: Properties overlooking a public open space which is equipped with grass areas, large green trees and street furniture, Poundbury.

DC.04 Built form

Code 14 Boundary lines, boundary treatments and corner treatment

Together with the creation of potential local landmarks, three more crucial aspects of a successful streetscape and urban form is the issue of corners, boundary lines and boundary treatments. Therefore, the following guidelines should be applied in new development.

- Buildings should front onto streets. The building line should have subtle variations in the form of recesses and protrusions, to follow the existing context of Wimblington. Gaps between buildings are generally encouraged to allow for views to the surrounding countryside;
- Buildings should be designed to ensure that streets and/or public spaces have good levels of natural surveillance. This can be ensured by placing ground floor habitable rooms and upper floor windows facing the street;
- Natural boundary treatments should reinforce the rural character of the village and help define the street. They should be mainly continuous hedges and occasionally low-height walls made of traditional materials found elsewhere in the Parish such as local bricks;
- In the case of edge lanes, natural boundary treatments can act as buffer zones between the site and the countryside and offer a level of protection to the natural environment and open unobstructed views;
- If placed at important intersections the building could be treated as a landmark and thus be slightly taller or display another built element, signalling its importance as a wayfinding cue;
- The form of corner buildings should respect the local architectural character. Doing so improves the street scene and generates local pride;
- All the façades overlooking the street or public space should be treated as primary façades; and
- Road layouts should be designed to slow traffic and advantage pedestrians over vehicles.



Figure 57: Grass verge and planters being used as boundary treatment.



Figure 58: Local example of timber fencing and hedgerows being used as boundary treatment.

Code 15 Continuity and enclosure

Focal points and public spaces in new development should be designed in good proportions and delineated with clarity. Clearly defined spaces help create an appropriate sense of enclosure - the relationship between a given space (lane, street, square) and the vertical boundary elements at its edges (buildings, walls, trees).

Some design guidelines that should be considered for achieving satisfactory sense of enclosure are:

- When designing building setbacks, there must be an appropriate ratio between the width of the street and the building height. Ratios between 1:2 and 1:3 (building height/street width) will generally create spaces with a strong sense of enclosure;
- Careful positioning of walls, railings, landscaping and paving can achieve visual continuity and well-defined open spaces to link buildings together and define public and private spaces;

- Buildings should be designed to turn corners and create attractive start and end points of a new street or frontage;
- Trees, hedges, and other landscaping features can help create a more enclosed streetscape in addition to providing shading and protection from heat, wind, and rain; and
- In the case of terraced and adjoining buildings, it is recommended that a variety of plot widths, land use, building heights, and façade depth should be considered during the design process to create an attractive streetscape and break the monotony.



Figure 60: The great sense of enclosure along this footpath is given by the close distance of buildings in relationship to the width of the footpath, Poundbury.

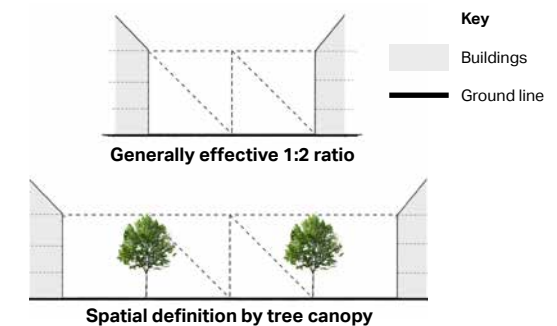


Figure 59: A ratio of 1:2 (top) or 1:3 is generally appropriate for residential streets. In addition, enclosure can be defined by trees instead of buildings (bottom).

DC.04 Built form

Code 16 Legibility and wayfinding

When places are legible and well signposted, they are easier for the public to understand, therefore likely to both function well and be pleasant to live in or visit. It is easier for people to orient themselves when the routes are direct and visual landmarks clearly emphasise the hierarchy of the place. Some design guidelines are:

- Signage could be strategically located along walking and cycling routes to signalise location of local and heritage assets;
- Obvious and unambiguous features should be designed in new development. Those will help create memorable routes;
- Buildings, as well as public arts, historic signage totems or even an old and sizeable tree could act as landmarks;
- Buildings which are located at corners, crossroads or along a main road could play a significant role in navigation. For that reason, the architectural style of those buildings could be slightly

differentiated from the rest to help them stand out;

- New signage design should be easy to read. Elements like languages, fonts, text sizes, colours and symbols should be clear and concise, and avoid confusion;
- Signage can also help highlight existing and newly proposed footpaths and cycle lanes, encouraging people to use them more;
- Signage should relate well to the setting of the host building, whilst illuminated signage will not be recommended; and



Figure 61: Example of signage that could be integrated along footpaths to navigate people towards important destinations

- Applicants are encouraged to use wooden, hand painted and non illuminated signage, avoiding the use of garish or day-glo colours.



Figure 62: One of the local public footpaths in the parish.

Code 17 Building heights, density and housing mix

Building heights, density and housing mix are three important parameters that should be designed and decided with careful consideration of Wimblington's rural context.

Buildings heights

There is a low housing density in the Parish reinforcing its rural character. More specifically, properties tend to be 1- or 2-storey high with decent-sized rear gardens. The rooflines are irregular and they often get interrupted with nature. Chimneys decorating the roof also interrupt the roofline offering a visual interest.

Some design guidelines are:

- New development should propose maximum height of 2 storeys to preserve the existing context, as well as respecting the surrounding countryside;
- Monotonous building elevations should be avoided, therefore subtle changes in roofline should be ensured during the design process;
- Locally traditional roof detailing elements such as roofing materials, chimney stacks and edge treatments should be considered and implemented where possible in cases of new development; and
- Roofline should be set lower than the vegetation backdrop, avoiding hard lines of the silhouette against the sky.



Figure 63: Typical housing density in the parish.



Figure 64: 2 and 2.5 storey houses with panoramic views of the countryside.

DC.04 Built form

Building density

The concept of density is important to planning and design as it affects the vitality and viability of the place. The density within the Parish is quite low which is justified by its rural character. Therefore, some guidelines for new development are needed to ensure that the existing housing density numbers are respected.

- Density should be low in line with the village and the immediate surroundings to enhance the character of the existing settlement;
- Housing densities should be reduced towards development edges and along rural edges in order to create a gradual transition towards the countryside;
- Small scale development and in-fills are encouraged.

Housing mix

The aspiration for the Parish is to ensure that there is a mix of housing types and supply of social and affordable housing to cater for the needs of a wider group of people. Therefore, a mix of new housing could attract a wide group of people and boost the local economy. Some design guidelines for new development are:

- New development should propose a mix of housing to include a range of house types and sizes, both developer and self built, to allow for a variety of options and bring balance to the population profile. The existing mix of housing in the village, including detached, semi-detached, bungalows and terraced housing, should be enhanced; and
- Affordable housing should be a priority in new development and its quality and architectural design should be of high standards to complement the local vernacular.



Figure 65: Traditional flat faced detached house which is found throughout the parish.



Figure 66: New large bungalow development in Wimblington.

Code 18 Materials and architectural details

Wimblington Parish has a wide variety of architectural styles and details that can act as references for new development. Some design guidelines for new development are:

- Architectural design shall reflect high quality local design references in both the natural and built environment and make a valuable contribution to the rural character of the village;
- Appropriate materials may include timber, naturally finished timber boarding, tiles, slate, shingles, brick, flint and appropriately coloured render;
- The choice of colour and finish of materials is an important design factor in reducing the impact of the buildings on the surrounding landscape. Generally very light colours, like white, cream or light grey, and large areas of intense strong colours do not blend well with the rural landscape. Thus, muted and darker tones could be a better option; and

- The use of traditional, natural and preferably locally sourced materials is generally more appropriate than man-made synthetic, pre-coloured materials.

The below materials should inform the design of new developments:

Roofing



Grey slate roof tiles



Clay tiles



Thatched



Gabled dormer with timber details



Gabled roof with chimney

DC.04 Built form

Walling



Local stock brick



White/cream render



Timber framed (mock tudor)



Pebble dash



Red brick



Local stone combined with brick

Windows, doors & other details



Bay windows



Modern casement windows



Sash window



Gabled porch



Hipped porch



Typical white painted timber door in the area

DC.05 Sustainability

Wimblington and Stonea Parish Neighbourhood Plan is aspired to have a positive impact to the environment and thus, any future development should aim to be eco-friendly.

In general, sustainability principles should accord with the latest national and local guidances. The codes 19-23, include some design guidelines for new development.

Code 19 Minimising energy use

Buildings contribute almost half (46%) of carbon dioxide (CO₂) emissions in the UK. The government has set rigorous targets for the reduction of CO₂ emissions and minimising fossil fuel energy use.

There is a good number of energy efficient technologies that could be incorporated in buildings. The use of such principles and design tools is strongly encouraged to future proof buildings and avoid the necessity of retrofitting.

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.

F.69 features an array of sustainable

design features. Those on the top show the features that should be strongly encouraged in existing homes, while those on the bottom show additional features that new build homes should be encouraged to incorporate from the onset.

Code 20 Lifetime and adaptability

The fastest route to building a functional, supportive, neighbourly community is to build homes that people can and want to live in for most of their lives instead of having to move every time domestic circumstances change.

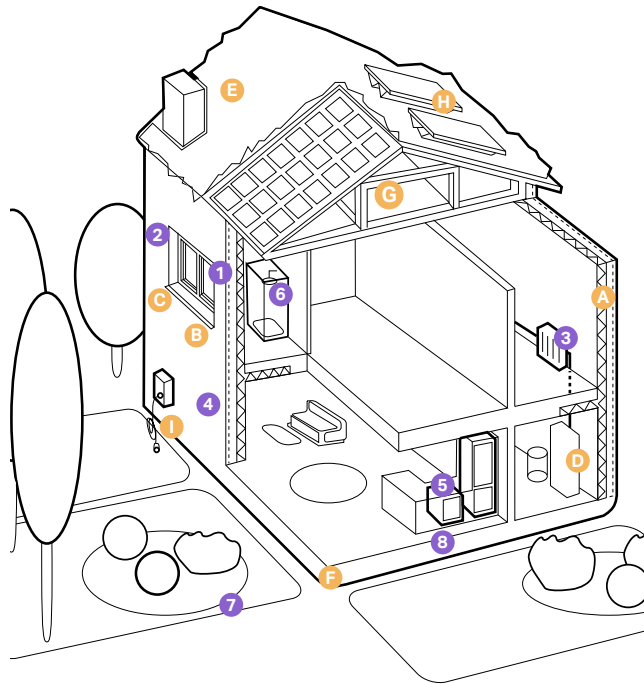
'Lifetime' homes means designing in the flexibility and adaptability needed to allow for easy incorporation of wheelchair accessibility, addition/removal of internal walls, and ease of extension - both vertically and horizontally. This is particularly important for the aged, infirm or expanding/contracting families who may be dependent on nearby friends and family for emotional and physical support.



Figure 67: Use of shingle-like solar panels on a slate roof, with the design and colour of the solar panels matching those of the adjacent slate tiles.



Figure 68: Positive example of implementing solar panels since the design stage.



Existing homes

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

Additional features for 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**
and no new homes on the gas grid by 2025 at the latest
- D  **More fresh air**
with mechanical ventilation and heat recovery, and passive cooling
- E  **Water management and cooling**
more ambitious water efficiency standards, green roofs, rainwater harvesting 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 panel**
- I  **Electric car charging point**

Figure 69: Diagram showing low-carbon homes in both existing and new build conditions.

DC.05 Sustainability

Code 21 Minimising construction waste

As part of the environmental management system it is important that the waste generated during construction is minimised, reused within the site or recycled.

Developers should plan to re-use materials by detailing their intentions for waste minimisation and re-use in Site Waste Management Plans. The actions that this plan will include are:

- Before work commences, the waste volumes to be generated and the recycling and disposal of the materials will be described;
- On completion of the construction works, volumes of recycled content purchased, recycled and landfilled materials must be collated;
- Identify materials used in high volumes;

and

- The workforce should be properly trained and competent to make sure storage and installation practices of the materials is done under high standards.

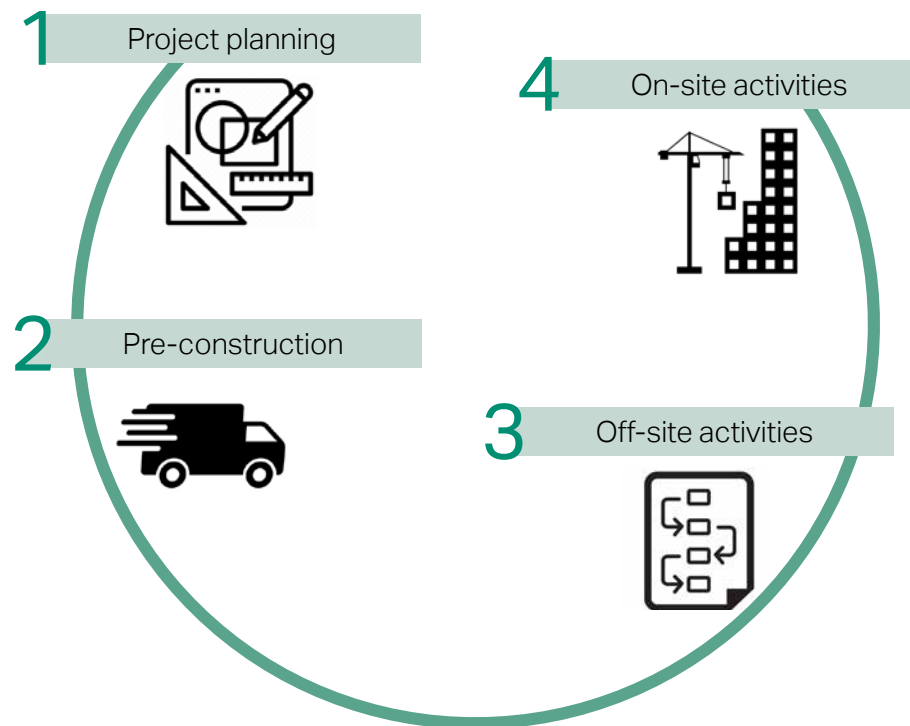


Figure 70: Diagram to illustrate the 4 main stages where waste management practices can be implemented.

Code 22 Recycling materials and buildings

To meet the government's target of being carbon neutral by 2050, it is important to recycle and reuse materials and buildings. Some actions for new development are:

- Reusing buildings, parts of buildings or elements of buildings such as bricks, tiles, slates or large timbers all help achieve a more sustainable approach to design and construction;
- Recycling and reuse of materials can help to minimise the extraction of raw materials and the use of energy in the production and transportation of materials; and
- Development should also maximise the re-use of existing buildings (which often supports social, environmental and economic objectives as well).

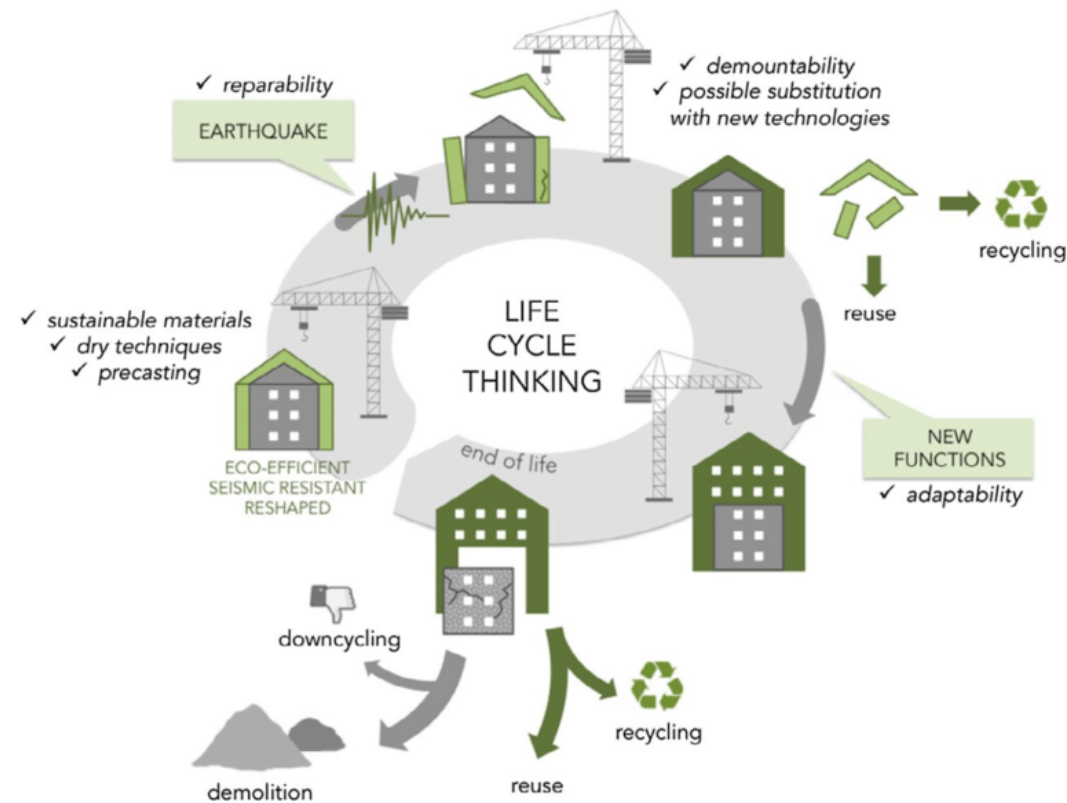


Figure 71: Diagram to illustrate the life cycle thinking for recycling materials and buildings. (Source: https://www.researchgate.net/publication/319464500_Combining_seismic_retrofit_with_energy_refurbishment_for_the_sustainable_renovation_of_RC_buildings_a_proof_of_concept)

DC.05 Sustainability

Code 23 Electric vehicle charging points

Wimblington and Stonea Parish Council support transport proposals that can boost uptake in electric cars and other non fossil fuel

powered vehicles. Below are design guidelines on how new development should design for electric vehicle charging points:

On-street car parking or parking courts

- Car charging points should always be provided adjacent to public open spaces. Street trees and vegetation are also supported to minimise any visual contact with the charging points;
- 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.

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



Figure 72: Example of on-street electric vehicle charging points.



Figure 74: Example of off-street electric vehicle charging points.



Checklists

05

5.1 Checklist

Because the design guidelines and codes in this chapter cannot cover all design eventualities, this section provides a number of questions based on established good practice against which design proposals in Wimblington should be evaluated. The aim is to assess all proposals by objectively answering the questions below. Not all the questions will apply to every development.

The relevant ones, however, should provide an assessment as to whether the design proposal has taken into account the context and provided an adequate design solution. As a first step, there are a number of ideas or principles that should be present in all proposals.

These are listed under 'General design guidelines for new development'. Following these ideas and principles, a number of questions are listed for more specific topics.

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, greens, and other spaces;
- Harmonise and enhance existing settlement in terms of physical form, architecture and land use;
- Relate well to local topography and landscape features, including prominent ridge lines and long-distance views;
- Reflect, respect, and reinforce local architecture and historic distinctiveness;
- Retain and incorporate important existing features into the development;
- Respect surrounding buildings in terms of scale, height, form and massing;
- Adopt contextually appropriate materials and details;
- Provide adequate open space for the development in terms of both quantity and quality;
- Incorporate necessary services and drainage infrastructure without causing unacceptable harm to retained features;
- Ensure all components e.g. buildings, landscapes, access routes, parking and open spaces 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

Local green spaces, views & character:

- Have opportunities for enhancing existing amenity spaces been explored?
- Will any communal amenity space be created? If so, will this be used by the new owners and how will it be managed?
- Is there opportunity to increase the local area biodiversity?
- Has the proposal been considered within its wider physical context?
- Has the impact on the landscape quality of the area been taken into account?
- How does the proposal impact on existing views which are important to the area and how are these views incorporated in the design?

3

Building line, access and boundary treatment:

- What are the characteristics of the building line?
- How has the building line been respected in the proposals?
- Has the appropriateness of the boundary treatments been considered in the context of the site?
- What is the arrival point, how is it designed?
- Does the proposal maintain or enhance the existing gaps between settlements?
- Does the proposal affect or change the setting of a listed building or listed landscape?
- Is the landscaping to be hard or soft?

4

Street grid and layout:

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

5

Building heights and roofline:

- What are the characteristics of the roofline?
- Have the proposals paid careful attention to height, form, massing and scale?
- 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?

6

Building materials & surface treatment:

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

7

Buildings layout and grouping:

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

8

Household extensions:

- Does the proposed design respect the character of the area and the immediate neighbourhood, and does it have an adverse impact on neighbouring properties in relation to privacy, overbearing or overshadowing impact?
- Is the roof form of the extension appropriate to the original dwelling (considering angle of pitch)?
- Do the proposed materials 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?

8 (continues)

Household extensions:

- 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

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 in all instances?
- 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?

