AECOM locality the power of community

Marshland St James

DESIGN GUIDANCE AND CODES

FINAL REPORT | MAY 2022

Quality information

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Revision History

Issue no.	Issue date	Details	Issued by	Position
7	30.05.2022	Review	Ben Castell	Director
6	30.05.2022	Address comments	Hoorieh Morshedi	Urban Designer
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4	29.04.2022	Review	Ben Castell	Director
3	22.04.2022	Review, research	Luis Juarez	Associate Director
2	22.04.2022	Research, site visit, drawings	Hoorieh Morshedi	Urban Designer
1	21.04.2022	Research, drawings	Chatnam Lee	Graduate Urban Designer

Contents

Introduction

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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 Marshland St James Neighbourhood Area. 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 Steering Group has sought to develop a set of design codes guiding any future development in the village.

The National Planning Policy Framework (NPPF; 2021, paragraph 127) 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 Neighbourhood Area and future developments.

STEP 4

Draft report with design guidelines.

STEP 5

Submission of a final report.

01

1.2 Area of study

Marshland St James is a civil Parish in Norfolk. It is situated within King's Lynn and West Norfolk Borough and lies just south of the Norfolk Coast Area of Outstanding Natural Beauty (AONB). The village is also south of the A47, which links King's Lynn to Wisbech.

The village is a linear settlement and is situated 11 miles southwest of King's Lynn. The main settlement area is Smeeth Road. The settlement also protrudes further south along Smeeth Road.

Marshland St James, St John's Fen End & Tilney Fen End are jointly designated as a Rural Village by the Core Strategy[1].

The village lies in a flat landscape and is surrounded by open countryside providing wide horizons. The presence of mature trees and hedgerows gives a pleasant enclosed character to some part of the area such as the areas around the primary school and cemetery.

The village falls within "The Fens-Settled Inland Marshes" Landscape Character Type. This character area is located to the northeast of Downham Market with the Middle Level Main Drain diagonally cutting the area in half. Land use in this large-scale, low-lying landscape is predominantly managed arable farmland[2].

There are various buildings in the village which are either single or two-storeys in height, providing a low-dense built environment.

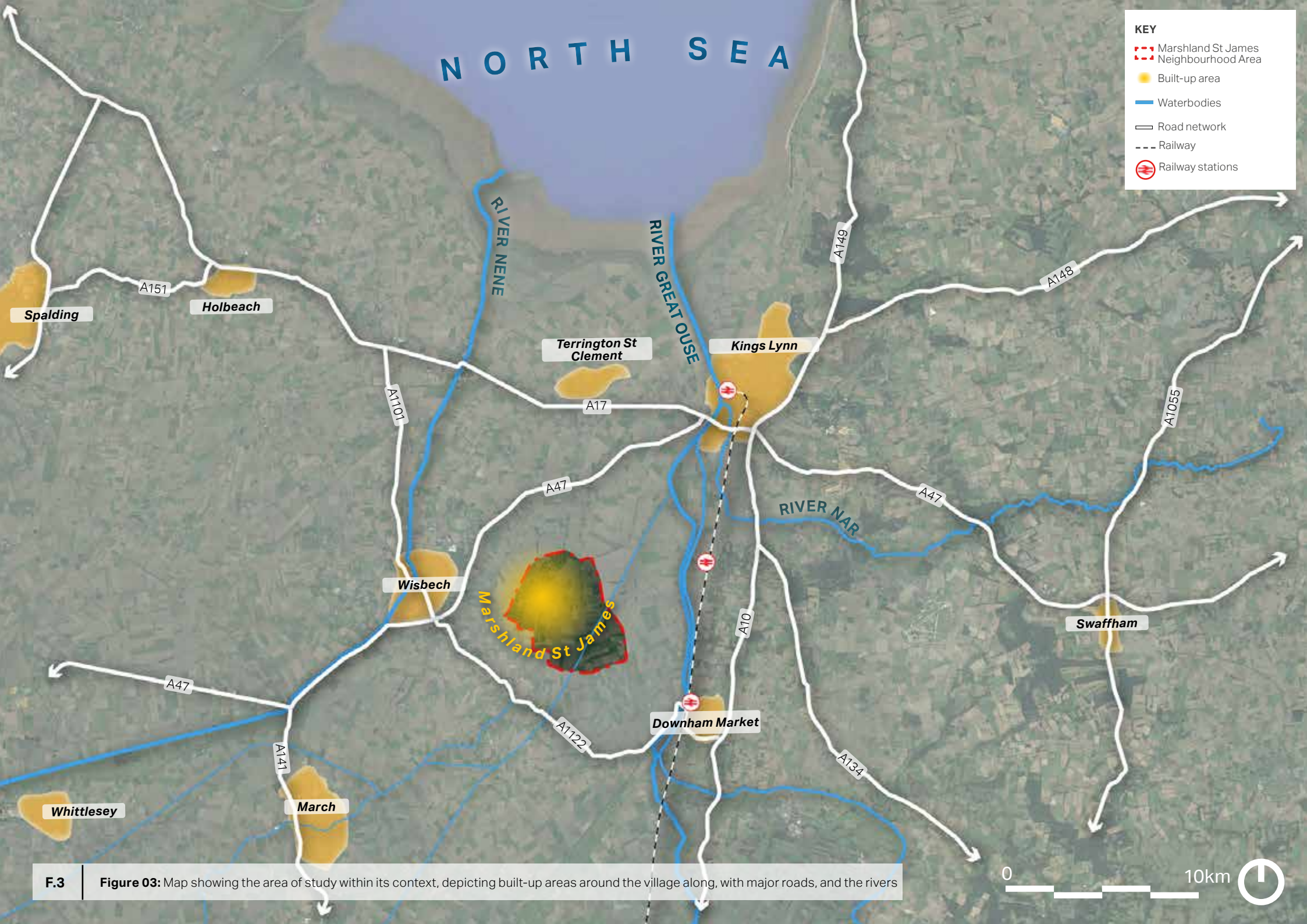
The village has some services such as Marshland St James VC Primary School, a nursery, Marshland Hall with its extensive sport and meeting facilities and St James Methodist Church. It has public transport albeit just one return journey to Kings Lynn per week. According to Census Data 2011, the population of the village is 1,336.

Figure 01: A bungalow on Smeeth Road with spacious front garden

Figure 02: Station House on Smeeth Road

1. Core Strategy - King's Lynn & West Norfolk Borough Council, 2011

2. King's Lynn & West Norfolk Landscape Character Assessment, King's Lynn & West Norfolk Borough Council, 2007



F.3 | **Figure 03:** Map showing the area of study within its context, depicting built-up areas around the village along, with major roads, and the rivers

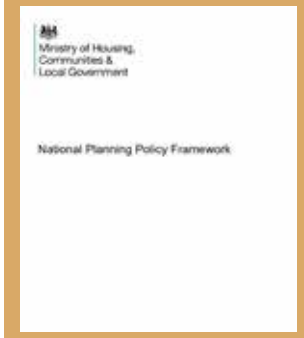
01

1.3 Design guidance and best practice

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

National Design Guidance

2021



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 2021). The NPPF was updated in July 2021 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 126 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 includes: 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

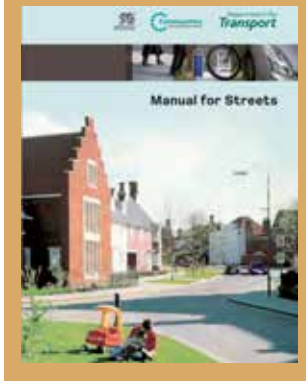
The draft National Model Design Code provides guidance on the production of design codes, guides and policies to promote well-designed places. It sets out the key design parameters that need to be considered when producing design guides and recommends methodology for capturing and reflecting views of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

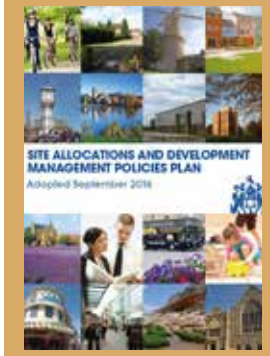
Development is expected to respond positively to the Manual for Streets, the Government's guidance on how to design, construct, adopt and maintain new and existing residential streets. It promotes streets and wider development that avoid car dominated layouts and promote active travel.

2011

Core Strategy - King's Lynn & West Norfolk Borough Council

The Core Strategy is part of Local Development Plan. Adopted in 2011, The Core Strategy sets out the spatial planning framework for the development of the borough up to 2026 and is part of King's Lynn and West Norfolk's Local Development Framework. The Core Strategy provides guidance on the scale and location of future development for the next 15 years. It also includes the policies needed to deliver the Core Strategy vision and objectives, and a system for monitoring whether the strategy is being delivered. The Core Strategy is a Development Plan Document, which means it forms the starting point for determining planning applications. All other Development Plan Documents must conform to the adopted Core Strategy.

2016



Site Allocations and Development Management Policies Plan - King's Lynn & West Norfolk Borough Council

The Site Allocations and Development Management Policies Plan is part of the Local Development Plan, and supplements the adopted Core Strategy. It allocates land to deliver the development requirements of the Core Strategy, such as housing, employment, recreation, green spaces, community and leisure uses. Additionally, it includes development management policies which apply across the Borough and these will be used when determining planning applications.

2007

Landscape Character Assessment - King's Lynn & West Norfolk Borough Council

The study provide an integrated assessment of the landscape character of the Borough to serve as a baseline inventory to better understanding King's Lynn and West Norfolk's landscapes. It will be used as a technical evidence base to inform the Local Development Framework (LDF).

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 Surrounding context

Smeeth Road is the main road that passes through the settlement. It branches off from Chapel Road in the north and extends to Downham Road (A1122) in the south of the Parish.

Sitting in low dense context, some buildings date back to pre 1900 and are typically less than two-storeys in height. The properties are constructed by timber, red brick, whitewash brick and rendered finishes.

The only Grade II listed building is Marshland Smeeth and Fen War Memorial with the List Entry Number (LEN) 1444678. It stands at the entrance to Marshland St James Cemetery which is a simple Latin cross on a tapering four-sided plinth.

The settlement edge is defined by relatively small, open fields with distinctive fields boundaries. Fruit orchards with rectangular plots ordered into rows are relatively common. These rows often channel views and where orchards occur alongside roads, views across the landscape are restricted. Conifer planting is also common in the Neighbourhood Area.

St John's Fen End is located around the bridge over the Smeeth Lode Drain.

To the east of the village there is Middle Level Drain, Relief Channel, Nar downstream of Abbey Farm, Polver Drain and other drains which all run to the Great Ouse (See **Figure 04**).

F.4

Figure 04: Map showing surrounding context and key designations in Marshland St James. These include the depiction of the study area, listed buildings, priority habitats such as woodlands, the Public Rights of Ways and cycleway

Figure 05: Marshland Smeeth and Fen War Memorial , Grade II listed, located at the entrance to Marshland St James cemetery

Figure 06: A majority of Marshland St James Neighbourhood Area is made up of open fields and farmlands

Figure 07: Warehouse buildings associated with farmlands are found across the Neighbourhood Area

2.2 Movement network

The area is served by a network of rural roads that follow an irregular path. Various roads provide links towards the A47. Within the village, a few cul-de-sacs lead off Smeeth Road.

National Cycle Route 1 runs through the north of Neighbourhood Area along Trinity Road and part of Smeeth Road. It connects the village to King's Lynn to the east and Wisbech to the west.

The village has public transport, albeit just one return journey to Kings Lynn per week. The closest railway station to Marshland St James is Emneth Station which is about an hour away by foot.

A number of Public Rights of Way (PRoW) connect the village with the surrounding countryside and beyond, providing good walking routes. There is no public transport within the village.

Figure 08: Smeeth Road, a local road that forms the spine of development for Marshland St James Neighbourhood Area

Figure 09: Footpath along the Middle Level Main Drain

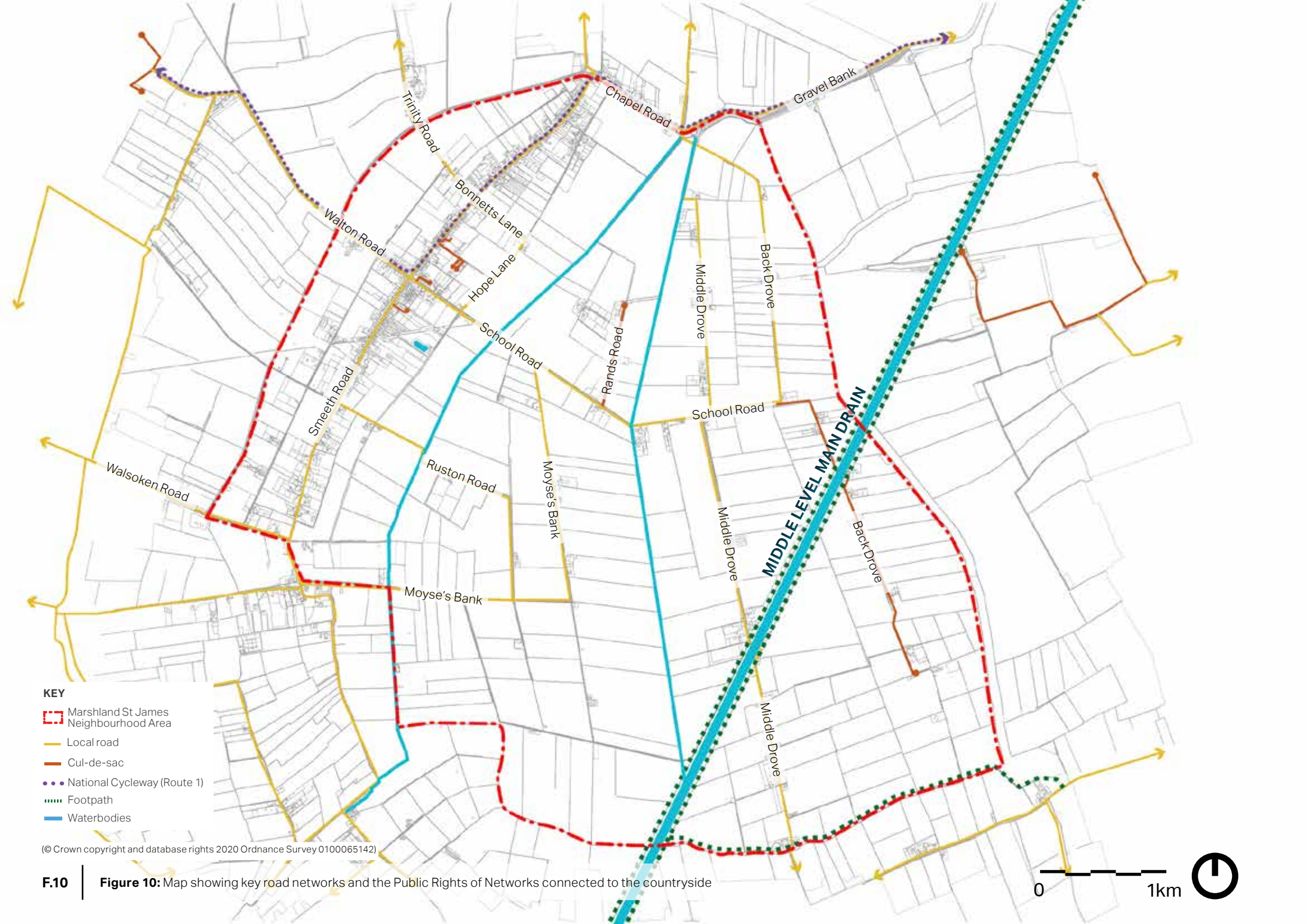


Figure 10: Map showing key road networks and the Public Rights of Networks connected to the countryside

2.3 Landscape and open space network

As previously mentioned, the village falls within "The Fens-Settled Inland Marshes" Landscape Character Type. This area benefits from wide skies and a strong sense of openness and remoteness. Some of the ecological features are rows of poplars, clumps of trees and other tall vegetation. It has a sparse settlement pattern along with a very strong sense of tranquility through the area[1].

Other notable green infrastructure elements include a range of meadows, Conifer planting and fruit orchards along Smeeth Road with a couple of woodlands scattered in the area. Mature trees and open fields define the edge of the village along Low Road.

Figure 11: Views of open fields the farmland that serve as key green infrastructure to the area and are typical of the rural character of Marshland St James

Figure 12: Play area and playing fields adjacent to Marshland Hall, Smeeth Road

1. King's Lynn & West Norfolk Landscape Character Assessment, King's Lynn & West Norfolk Borough Council, 2007

F.13 | **Figure 13:** Map showing landscape and open space network, PRoW networks, cycleway, and other green infrastructure

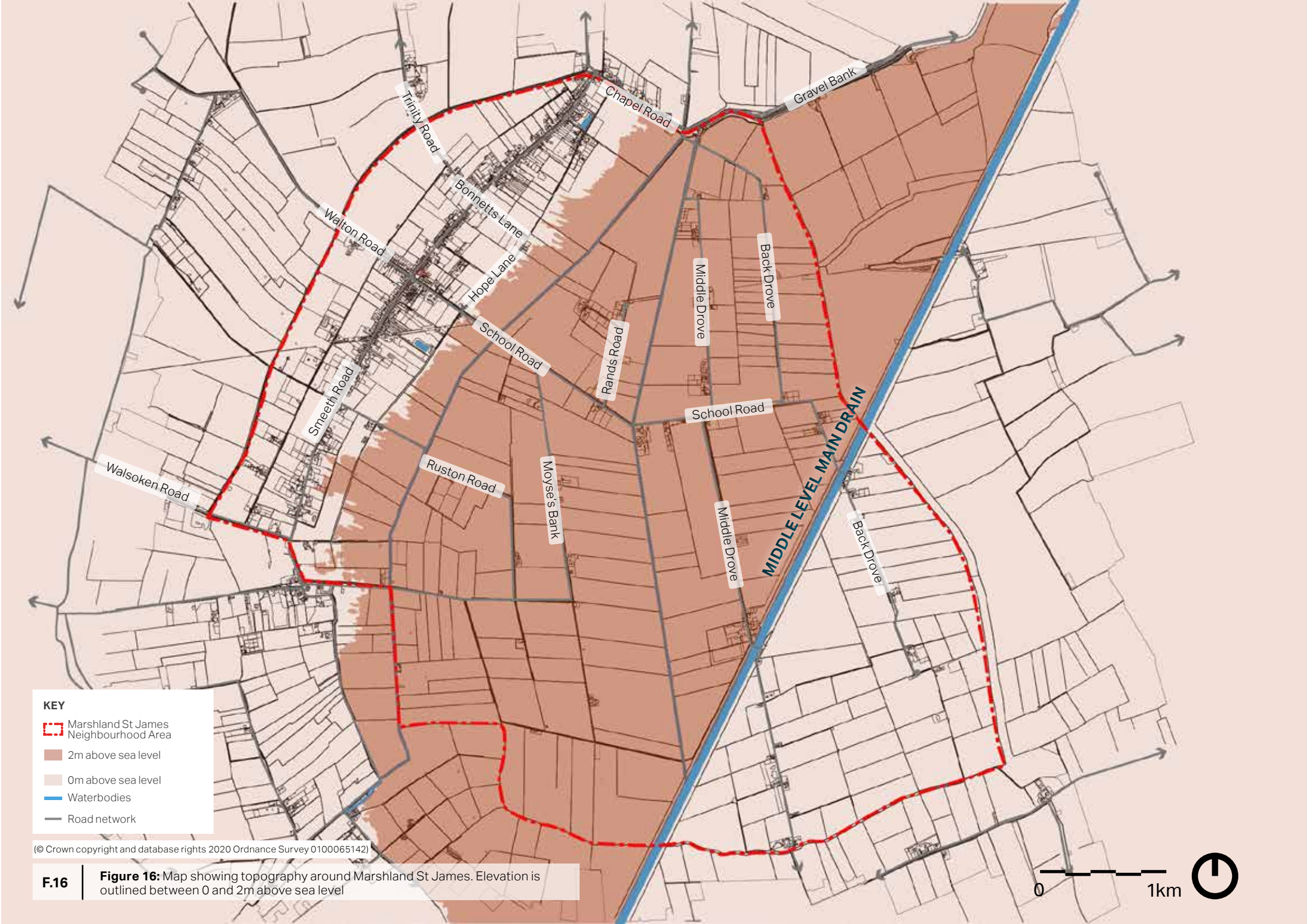
2.4 Topography and flood risk

Marshland St James Village has a simple terrain characterised by a distinctively flat landscape providing wide panoramic views. Earthworks in the form of rivers and creek embankments bring topographic change and strong, straight lines of contrast. Being an intensively farmed arable landscape, the area predominantly comprises of geometric fields divided by straight drainage channels and dykes, and underlain by slits.

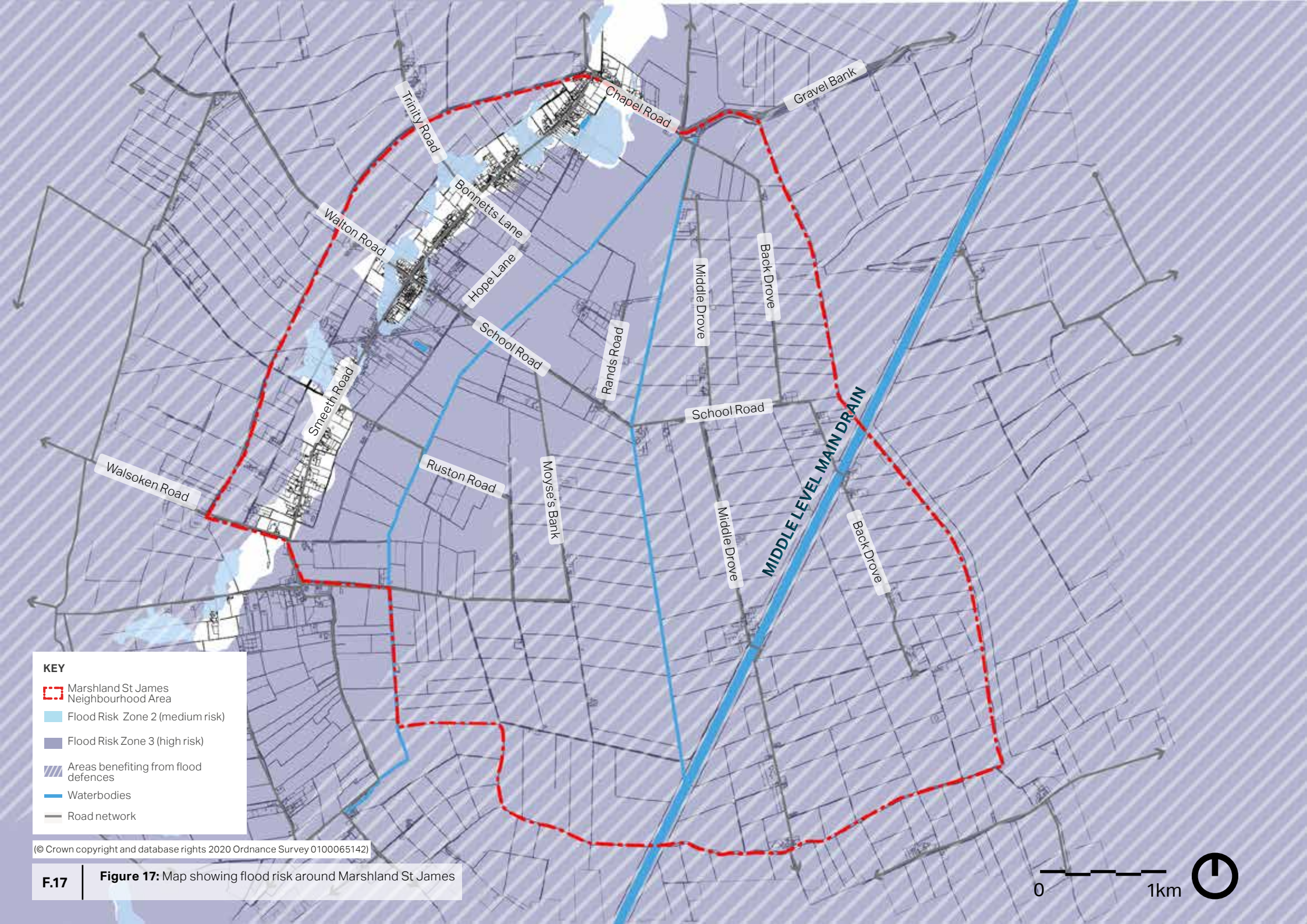
The Neighbourhood Area is extensively affected by Flood Zone 3 and in some parts by Flood Zone 2 along Smeeth Road. Areas benefiting from flood defences as shown on **Figure 16**.

Figure 14: Marshland St James is characterised by a generally flat topography with subtle changes in elevation for areas close to the Middle Level Drain

Figure 15: The Middle Level Drain poses a medium level of surface water flood risk across Marshland St James



F.16 **Figure 16:** Map showing topography around Marshland St James. Elevation is outlined between 0 and 2m above sea level



F.17 **Figure 17:** Map showing flood risk around Marshland St James

Village character assessment

03

3. Village character assessment

Following on from the analysis set out above, this part of the report focuses on the different character areas within the village.

3.1 Defining the character areas

The different areas are characterised by variations in movement, views and landmarks, green space and landscape cover, public realm and streetscape, built form and architectural details.

The village of Marshland St James as it stands today has three character areas (See **Figure 18**), which have been defined with the Neighbourhood Forum, and are as follows:

- CA1- Smeeth Road
- CA2- Countryside
- CA3- Edge of Settlement

CA1- Smeeth Road

CA2- Countryside

CA3- Edge of Settlement

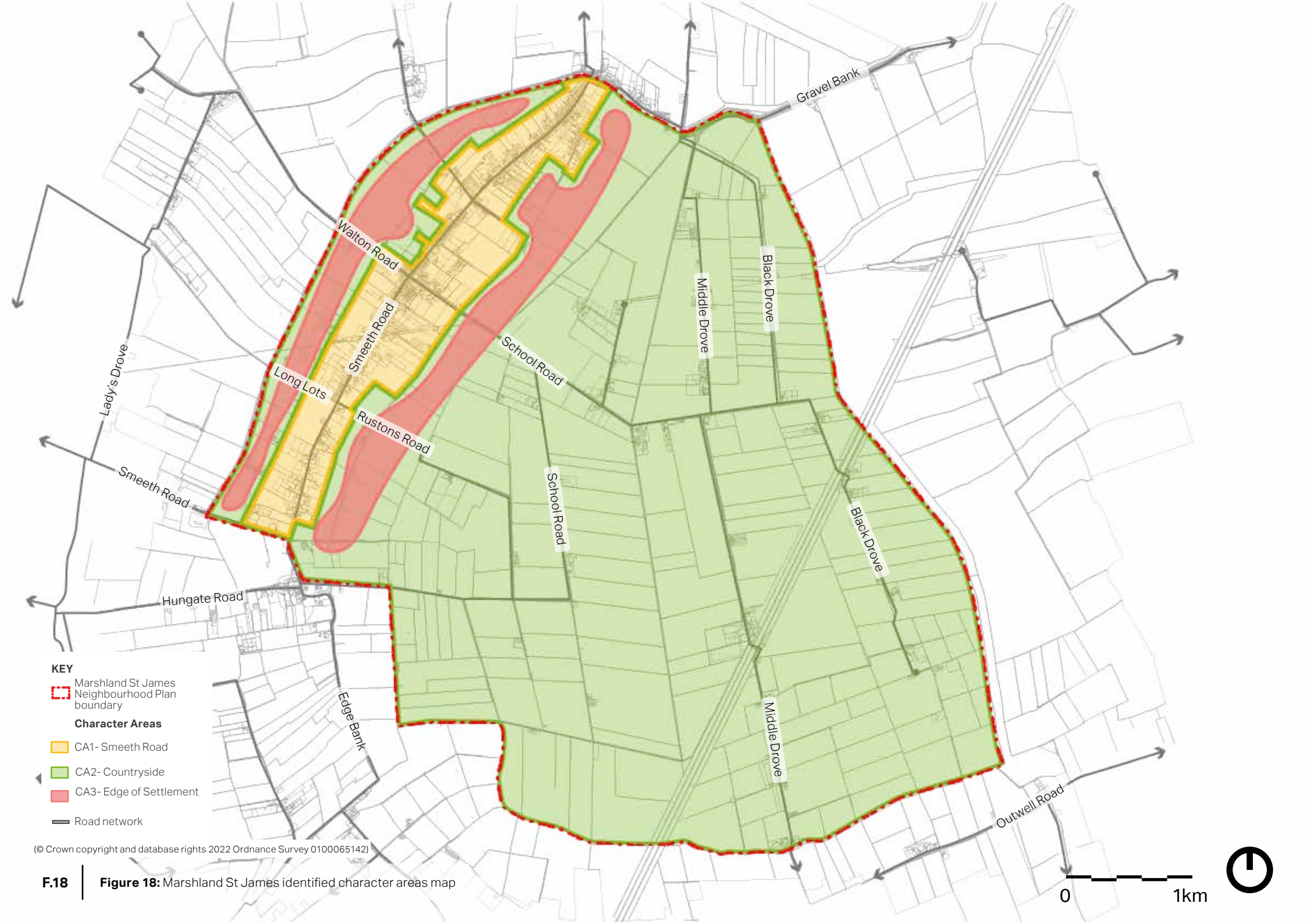


Figure 18: Marshland St James identified character areas map

CA1- Smeeth Road

Smeeth Road is the main road that runs through the Neighbourhood Area. It has numerous roads branching out towards the primary road network. The main settlement is distributed along Smeeth Road and mainly between the junction of Rustons Road/Long Lots and School Road/ Walton Road.

The majority of properties are bungalows with some detached and semi-detached houses. The building height does not exceed two storey.

Land Use	The area is mostly residential. The other land uses are St James' Methodist Church, a school, a play area, farmland, the village hall, Virginia Lake Caravan Park and some retail uses.
Pattern Of Development	Linear pattern along Smeeth Road with some straight roads such as School Road, Walton Road, Rustons Road and Long Lots.
Building Line/Plot Arrangement	Buildings are well set back from the street, providing active frontages. Houses are generally built on larger plots in this character area, providing ample front and back gardens. Parking spaces are accommodated either at the front or side of the houses or on the side of properties.
Boundary Treatment	This area bounded by open fields. Hedgerows, low walls, trees and wooden fences form the boundary treatment.
Heights & Roofline	Building heights range between 1-2 storey. Typical roof lines include pitched or hipped roof built by slate or pantile along with chimney stacks.
Public Realm	Presence of orchards, meadows, green verges along Smeeth Road and spacious front gardens enhance the rural atmosphere of the village. There are narrow footpaths on one side of the road which could potentially affect pedestrian safety.

CA1- Smeeth Road pictures


F.19


F.21

Figure 19: Station House on track of the disused train track located on Smeeth Road

Figure 20: Open field along Smeeth Road

Figure 21: Play area adjacent to Marshland St James Village Hall on Smeeth Road

Figure 22: A two-storey detached house on Smeeth Road built with red brick and inlet

Figure 23: A bungalow with bow window and multi pane casement window on Smeeth Road


F.20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CA2- Countryside

This character area forms the larger portion of Neighbourhood area and includes an intensively farmed arable landscape comprising mainly geometric fields cut up by straight drainage channels and dykes.

Despite the various human influences within the area, the area is very rural and provides a sense of openness and tranquility.

Land Use	Low lying landscape providing panoramic views with some scattered meadows and farmlands.
Pattern Of Development	There is no defined pattern of development in this character area. However, there are some farmhouses scattered occasionally in this area.
Building Line/Plot Arrangement	Farmhouses are generally built in larger plots with spacious front and back gardens.
Boundary Treatment	Hedgerows and mature treas are the main form of boundary treatments
Heights & Roofline	The building heights do not exceed 2 storey and the majority of house roof styles are pitched or hipped.
Public Realm	Extensive area of open fields and scattered drainage channels are some of the key features in this character area that need to be retained.

CA2- Countryside pictures


F.24

Figure 24: Modern two-storey building on Moyse's Bank with shed roof style and mix of red brick and weatherboarding

Figure 25: Willowdale Farm Rescue with spacious front garden. Gabled detached houses are built by yellow brick and pantile

Figure 26: A hipped bungalow with casement window

Figure 27: View towards open fields within the Character Area


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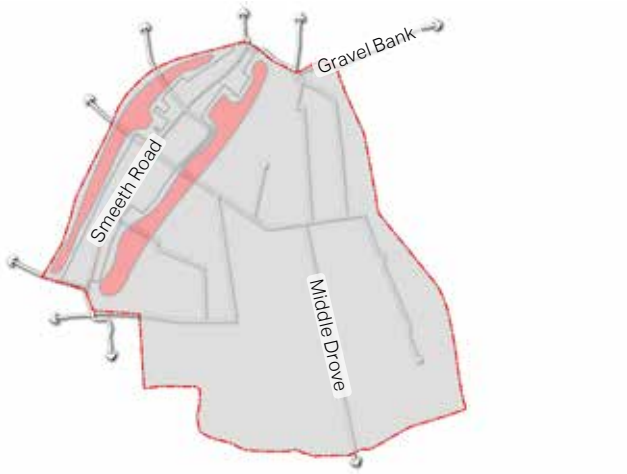
CA3 - Edge of Settlement



The Edge of Settlement Character Area is located around the main settlement. This character area is mainly open fields with some scattered buildings and industrial estates.

Land Use	This character area comprises of open fields, orchards, farmlands, industrial estates and meadows. Any future developments within this area would need to respect the rural character and openness of this area.
Pattern Of Development	There are two linear stretches along the Smeeth Road Character Area. Any future development in this area should follow the linear development patterns of Smeeth Road.
Building Line/Plot Arrangement	There are some scattered buildings around this character area which are mainly industrial along with some farm houses. The building plots are very large with spacious front and back gardens.
Boundary Treatment	This area is mainly open fields which act as a natural edge to the character area. Hedgerows, low walls and wooden fences are some of the boundary treatment used in this area.
Heights & Roofline	The height of the buildings are normally one storey. A feeling of gradual transition form the main settlement along Smeeth Road to the edge of the development should be encouraged.
Public Realm	Buttonhole Lake, a fishing pond, is located in the area. This area benefits from extensive plots of open fields which need to be retained. There are various drainage channels running along this character area which all go to the Great Ouse.

CA3 - Edge of Settlement pictures

Figure 28: Two-storey house built by hipped roof and painted brick on School Road

Figure 29: One of the ditches along Edge of Settlement Character Area

Figure 30: View westwards towards open fields

Figure 31: Semi-detached houses built by red brick with slate roof

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 of existing properties in the Marshland St James 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 Introduction

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

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 five categories. The first four sections are relevant to the whole Neighbourhood Plan Area while the fifth section introduces design codes for each of identified character areas and therefore codes may not be applicable to the whole of Marshland St James. More detail about this structure is provided in section 4.1.3. Both national and regional guidances, 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 make future development as endearingly popular 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 and 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 place-making and draw on the principles set out in many national urban design best practice documents including the National Design Guide, Building for a Healthy Life and the Urban Design Compendium.

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 lanes 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, the following design codes have been created to apply to the whole Neighbourhood Plan Area. After introducing the design guidance 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

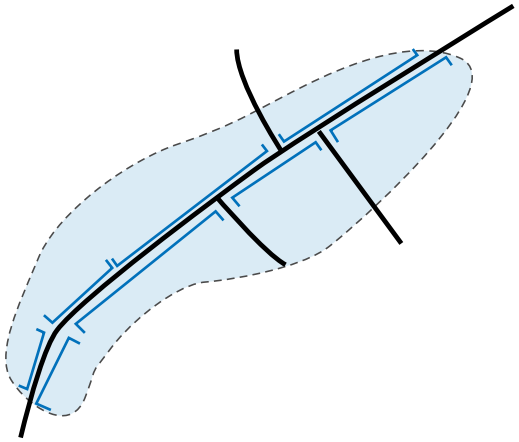
EE. Environmental and energy efficiency

SL. Settlement layout

SL 01- PATTERN OF DEVELOPMENT

Marshland St James has a linear development with recent development evolving around the Smeeth Road and the edge of the main settlement. Any new development should respect the following principles:

- Proposals should maintain the continuity of built form along the main routes. However, buildings should not be repetitive, and should provide variety of building types and design with coherent scale, massing and detailing;
- Treatment of main road frontages should include tall trees, hedgerows and the boundary walls, wooden fences typical of the village to increase the sense of enclosure and linear form;
- Linear pattern settlement almost always orientates inwards towards the main road and turns its back towards the landscape to the rear. Building frontages should reinforce the linearity of the street, where possible; and
- Boundary treatments can vary, from low walls to soft landscaped edges on the periphery of the settlement. Residential development with a hard edge which imposes an abrupt transition from the settlement to the surrounding countryside should be avoided.



F.32

Figure 32: Diagram showing the linear pattern development

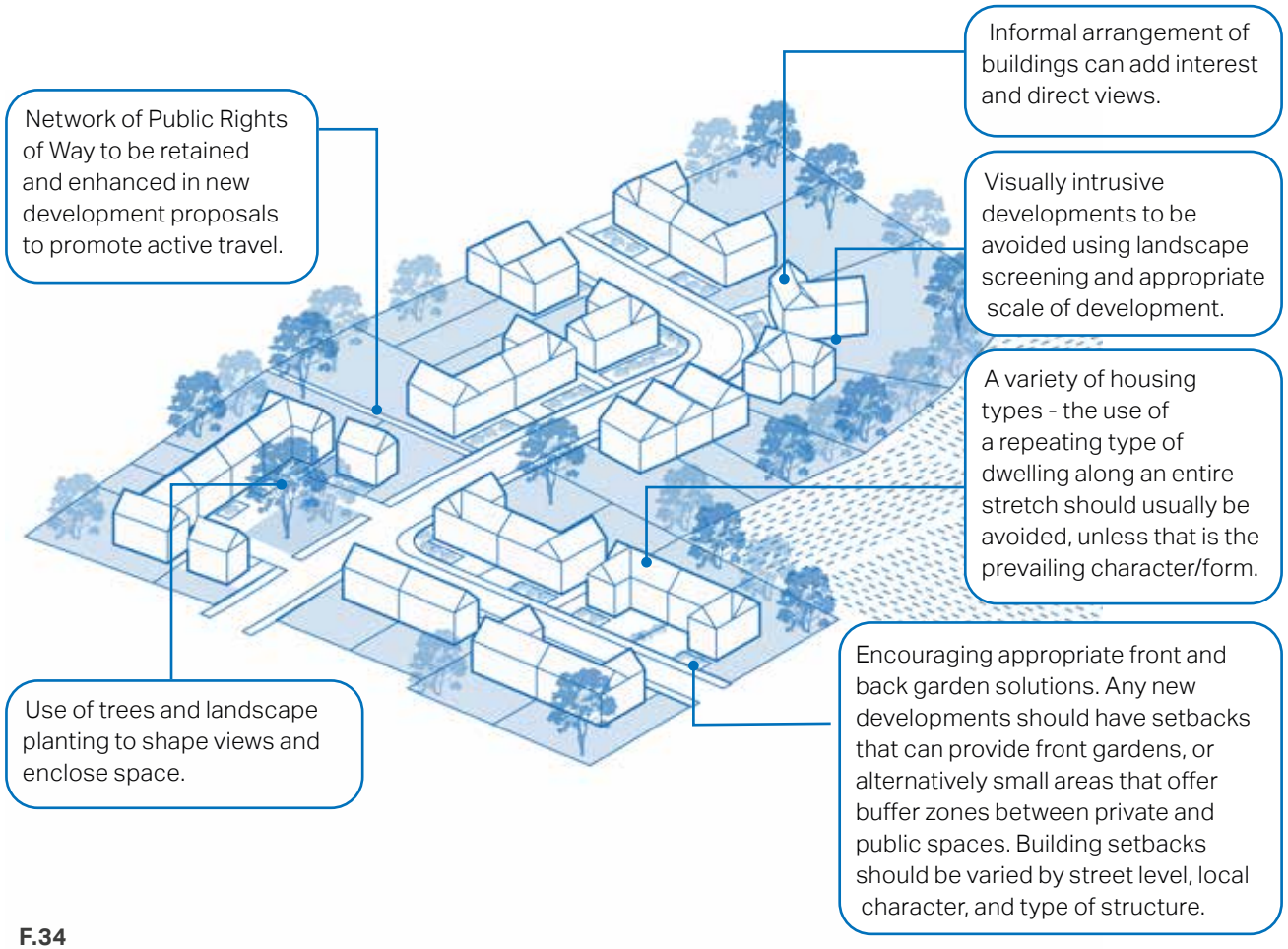
F.33

Figure 33: Positive local example where building lines are kept uniform and a variety of boundary treatments applied - including wooden fences, green verges and hedgerows off Walton Road

SL 02- LAYOUT OF BUILDING

The Neighbourhood Area owes much of its character to the linear pattern and layout of its buildings and settlements. New developments should respect the particular building patterns of each settlement in order to contribute positively to their character. 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 permeable, promoting active travel at all times, providing plentiful non-vehicular connections;



F.34

Figure 34: Diagram showing layout of buildings elements such as enhancing PRoW networks, respecting views and front and back gardens solution which could positively contribute to local character

- Layout, clustering and massing should take precedent from the best examples of development within the surrounding context. The following 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.


F.35


F.37


F.36

Figure 35: Linear cluster of semi-detached houses along Smeeth Road, forming a uniform building line with appropriate setback from the pavement and views to nearby countryside visible from building gaps

Figure 36: Housing arranged with setback from the pavement, buffered by landscaping and a green lawn with on plot parking space on Smeeth Road

Figure 37: More recent housing developed on Smeeth Road in a linear pattern with hardscaped boundary treatments such as wooden fences and gravel driveways

SP. Streets and parking

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

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

The three street typologies include the main access street, the general street and the edge lane.

The following has been compiled to indicate which character areas the three main typologies are applicable to considering some areas do not have examples of all three typologies.

Main access street

This street typology can be applied to any future development that connects to the village. Some policies within this typology can be proposed to encourage more space on footways and provide cycle lanes to promote active travel.

General Street

This is a general street typology that can be found in some parts of Smeeth Road and the Edge of Development Character Areas. Footways, verges, trees and landscaping, front gardens and green boundary treatments are included and form a key part of the character.

Edge Lane

Edge lanes are quiet residential roads that act as a transition between the built-up village and the surrounding woodland areas and countryside. They are seen in some of the Edge of Development and Countryside Character Areas. Some of the developments do not have either the pavements or adequate width of pavements which need to be incorporated in the new developments wherever possible.

SP 01- MAIN ACCESS STREET

This street type provides the main access for new development and connects it to the rest of the village. It will provide access for additional vehicular journeys between Marshland St James and new developments. The desired design features for this street type are:

- Street design speed of 20mph maximum with signage informing drivers of speed restrictions;
- Provide front gardens, privacy strips and street planting along to contribute to the ‘garden village’ character of the village;

- Where possible, locate parking to the side of properties and consider using garages to mitigate the impact of cars on the streetscape.
- If front parking is used, its presence should be minimised with thorough landscaping;
- Where on-street parking is proposed, it should be interspersed with trees to avoid impeding moving traffic or pedestrians;
- Green verges and street trees should be integrated in the design, where possible, to create attractive neighbourhoods and provide shade to pedestrians and cyclists; and
- Enhance and increase the width of the existing combined pavement along Smeeth Road and create a continuous pedestrian and cycling route linking Smeeth Road along National Cycle Route 1 (See **Figure 10**).

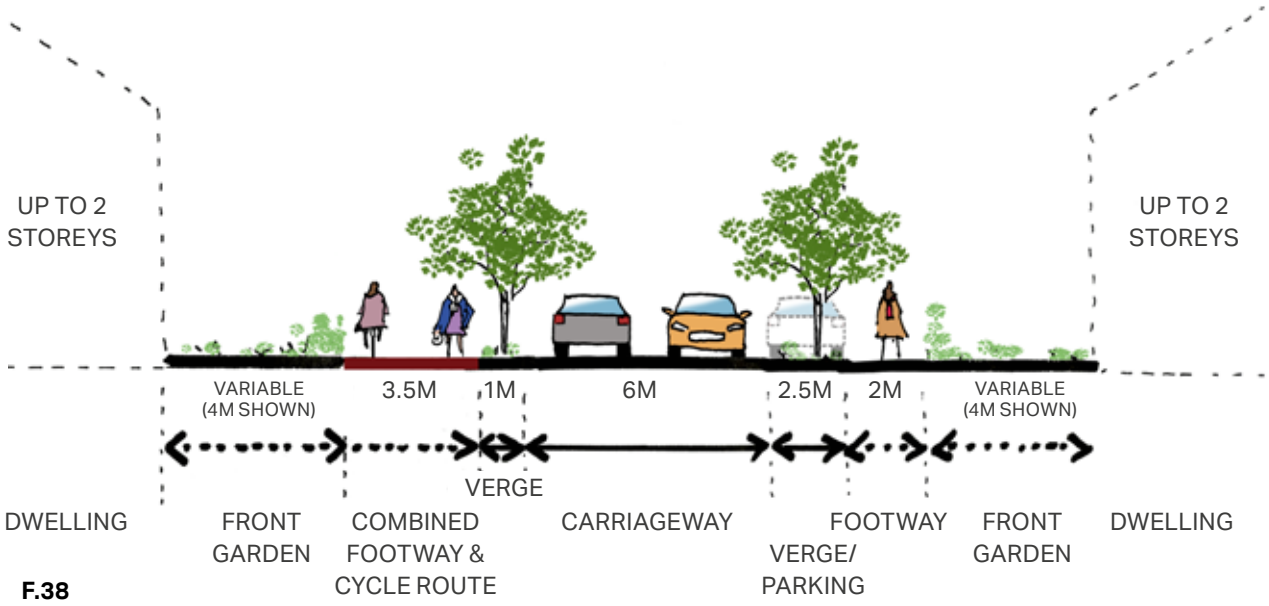


Figure 38: Diagram of a suggested main access street with combined footway and cycle route to promote active travel

SP 02- GENERAL STREET

The general street type is the prevalent street across 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, raised tables, horizontal deflection, and the like;
- Carriageways should accommodate two-way traffic and parking bays should be designed for cyclists to mix safely with motor vehicles;
- Front gardens should be well planted to create an attractive environment;
- Preferably, locate parking to the side of the property to mitigate the impact of cars on the streetscape;
- If cars are parked at the front at least 50% of the frontage should be landscaped and with a property boundary treatment;
- If terraced dwellings are used front parking courts are acceptable as long as car groupings are broken up (max 6 cars), and there is a high quality material and landscape treatment;
- As part of Marshland St James's defining character, street trees on streets are important and also help to mitigate climate change. If this is not possible, front gardens should be deep enough to host trees; and
- Avoid using cul-de-sac solutions; instead use street furniture (e.g. bollards) to stop vehicle circulation whilst allowing other movement types.

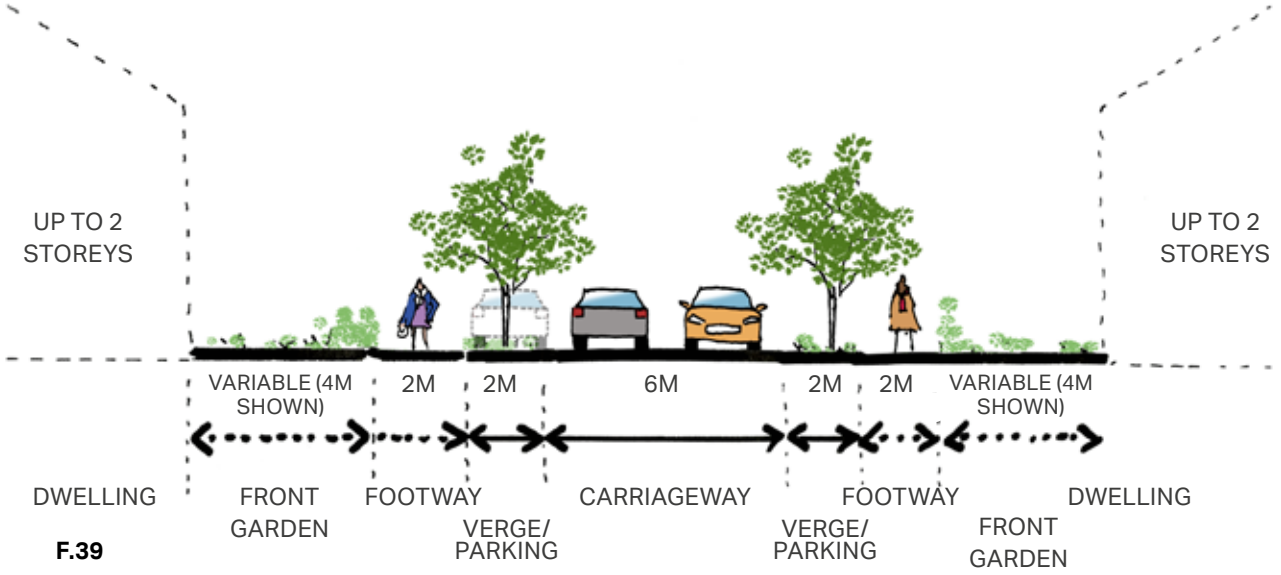


Figure 39: Illustrated street section of a general street that can be considered in new development

SP 03- 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. The desired design features for this street type are:

- Design 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 of Development and the Rural 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 and 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.

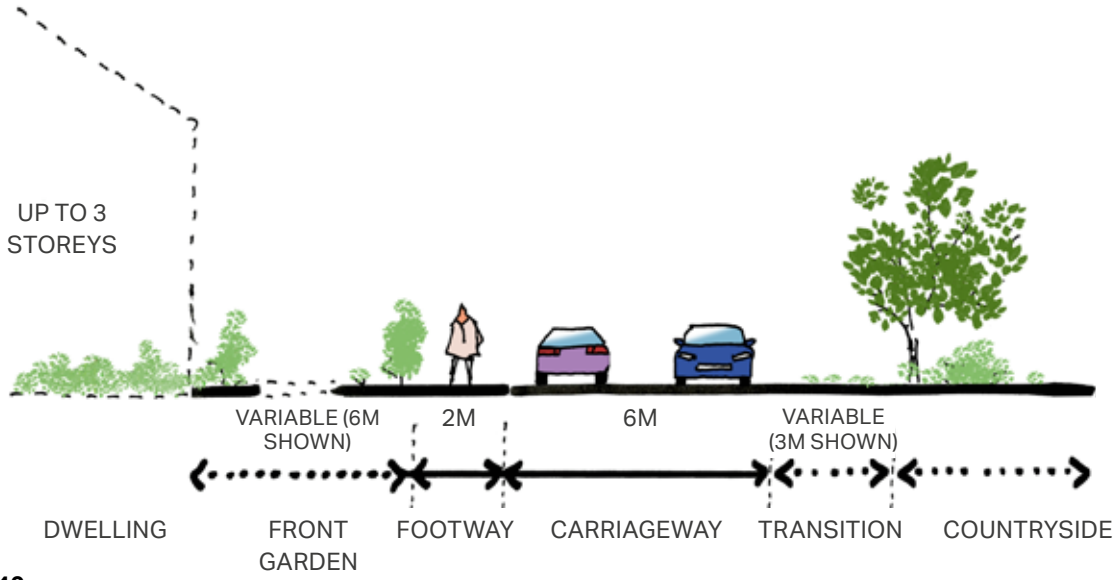


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Figure 40: Diagram of a suitable edge lane used at the edge of the built-up areas to act as a transition into the countryside

SP 04- 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.

- Where there is a choice, new development in Marshland St James should be selected where they would generate the least amount of car movements and be within a comfortable distance of local services. This will help to promote active travel, an important feature in 'livable' 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 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 road 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; and
- In addition, walking routes should not pass through hazardous areas such as fields with large animals, dykes, ditches or areas of flooding.

Figure 41: Public footpath along the Middle Level Main Drain, Marshland St James

SP 05 - CAR PARKING

Parking areas are a necessity of modern development. However, they do not need to be unsightly or dominate views towards the house. Parking provision should be undertaken as an exercise of placemaking.

- 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 means of walls, hedging, planting, and the use of quality paving materials;
- When needed, residential car parking can be translated into a mix of on-plot side, front, garage, and complemented by on-street parking;
- For family homes, cars should be placed at the side (preferably) or front of the property. For small pockets of housing, a rear court 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 improve impervious surfaces, for example, through the use of permeable paving. 1 or 2 bedroom dwellings should provide at least 1 on-plot parking space. Dwellings with 3 or more bedrooms should provide 2 on-plot parking spaces.

Figure 42: Parking spaces along the front of a property on a larger plot with ample front garden space

Figure 43: Parking at the front of a property along Smeeth Road with a small setback and double garage.

ON STREET PARKING

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.

- On-street parking must be designed to avoid impeding the flow of pedestrians, cyclists, and other vehicles, and can serve a useful informal traffic calming function;
- On low-traffic residential streets or lanes that are shared between vehicles and pedestrians, parking bays can be clearly marked using changes in paving materials instead of road markings; and
- Opportunities must be created for new public car parking spaces to include electric vehicle charging points. Given the move towards electric vehicles, every opportunity must be taken to integrate charging technologies into the fabric of road and street furniture in the public and private realm.

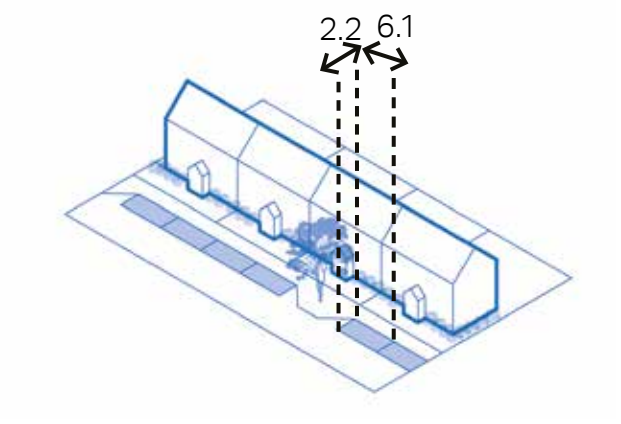

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Figure 44: Illustrative diagram showing an indicative layout of on-street parking

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Figure 45: Local example of on-street parking solution

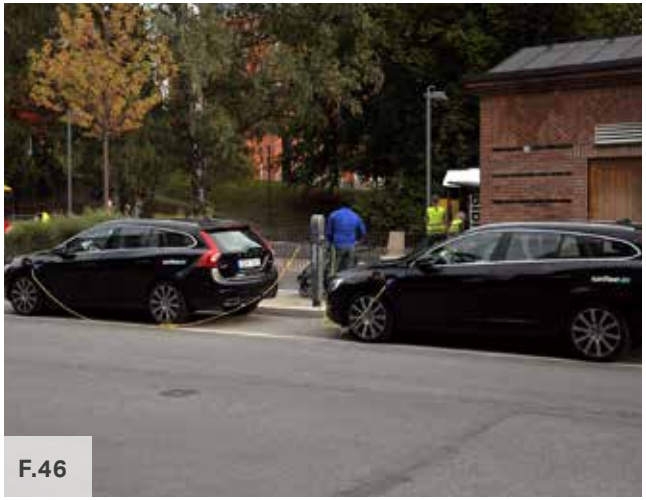

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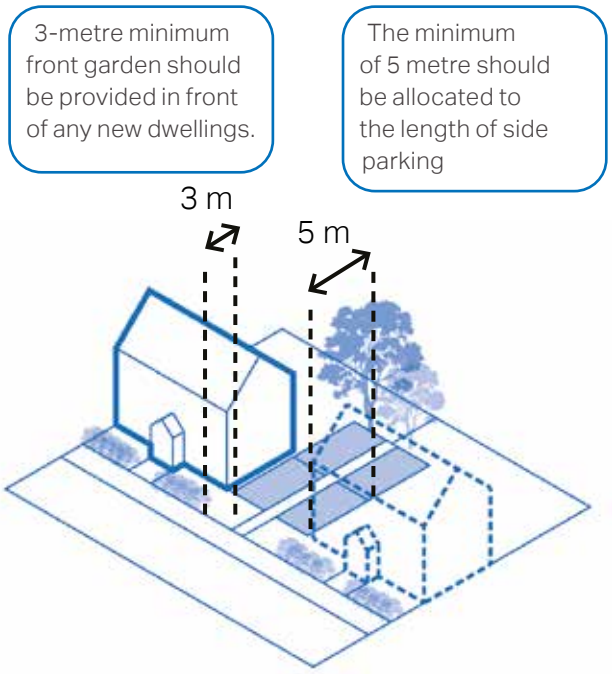
Figure 46: Inset on-street parking with electric vehicle charging points

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. Therefore, a maximum of 2 dwellings in a row will be permitted to provide parking in this way. Front gardens should be a minimum depth of 6m to allow movement around parked vehicles and also be well screened with hedgerows when providing parking space to the front of a dwelling; and
- Parking being provided on a driveway to the side of a dwelling 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.



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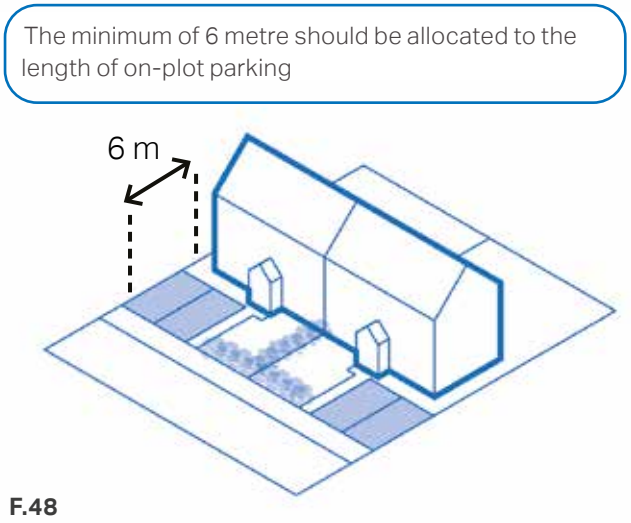

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Figure 47: Illustrative diagram showing an indicative layout of on-plot side parking

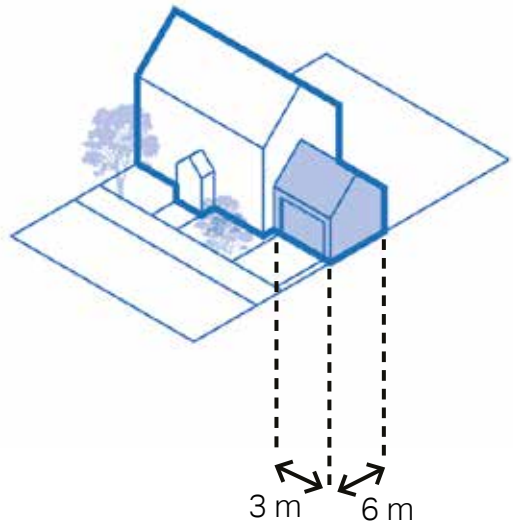
Figure 48: Illustrative example of the indicative layout for on-plot front parking

Figure 49: Local example of on-plot parking at the front of the house

Figure 50: Local example of on-plot parking to the side of the property

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 provide some room for storage. The minimum internal dimensions of a garage should therefore be 3m x 6m.



The internal dimensions of a garage should be 3m x 6m

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

Figure 52: Double garages with access from the front of a detached property

SP 06- TREES AND LANDSCAPING

Trees 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 shape and add character to open spaces.

There are different green spaces which need to be protected such as various fruit orchards, woodlands, conifer planting and meadows within the Neighbourhood Area.

F.53

Figure 53: Diagram showing green spaces and landscape planting

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;
- 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]
- Tree Species Selection for Green Infrastructure;[3]

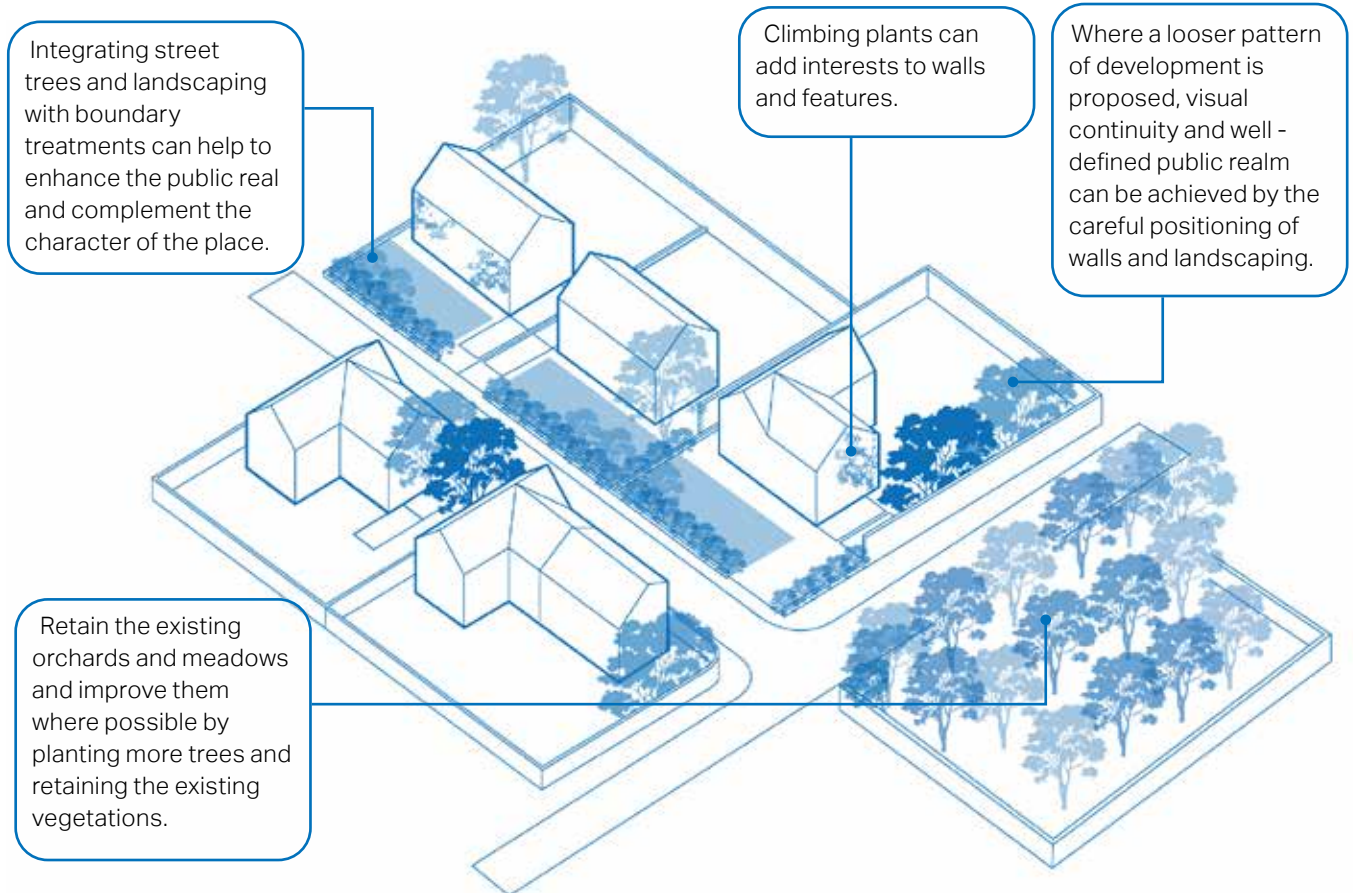


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Figure 54: Diagram showing trees and landscaping that complement the public realm and create a sense of enclosure

[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

[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

- BS 8545:2014 Trees: from nursery to independence in the landscape - Recommendations;[4] and
- BS 5837:1991 Guide for trees in relation to construction.[5]

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 of variation to provide added visual interest.

- Existing hedges, hedgerows trees and walls should, wherever appropriate, be retained to contribute to this sense of enclosure. Additional or replacement hedges and trees should be planted to maintain the continuity of existing hedges provide continuity of hedge and hedgerow tree cover; 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 practical use value. In a small-scale open space, trees provide focal point of interest.

[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

[5] British Standards Institution (1991). *BS 5837:1991 Guide for trees in relation to construction.* Available at: https://shop.bsigroup.com/ProductDetail/?pid=000000000000258384


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Figure 55: Tall trees retained to act as a buffer between properties and nearby open fields

Figure 56: The use of tall hedgerows as boundary treatment along property boundaries to provide screening whilst offering a good spatial enclosure for the street, Hunters Drove

Figure 57: Positive use of landscaping and planting at the front of a property to enhance the visual interest along the street

SP 07- 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 settlements 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 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;

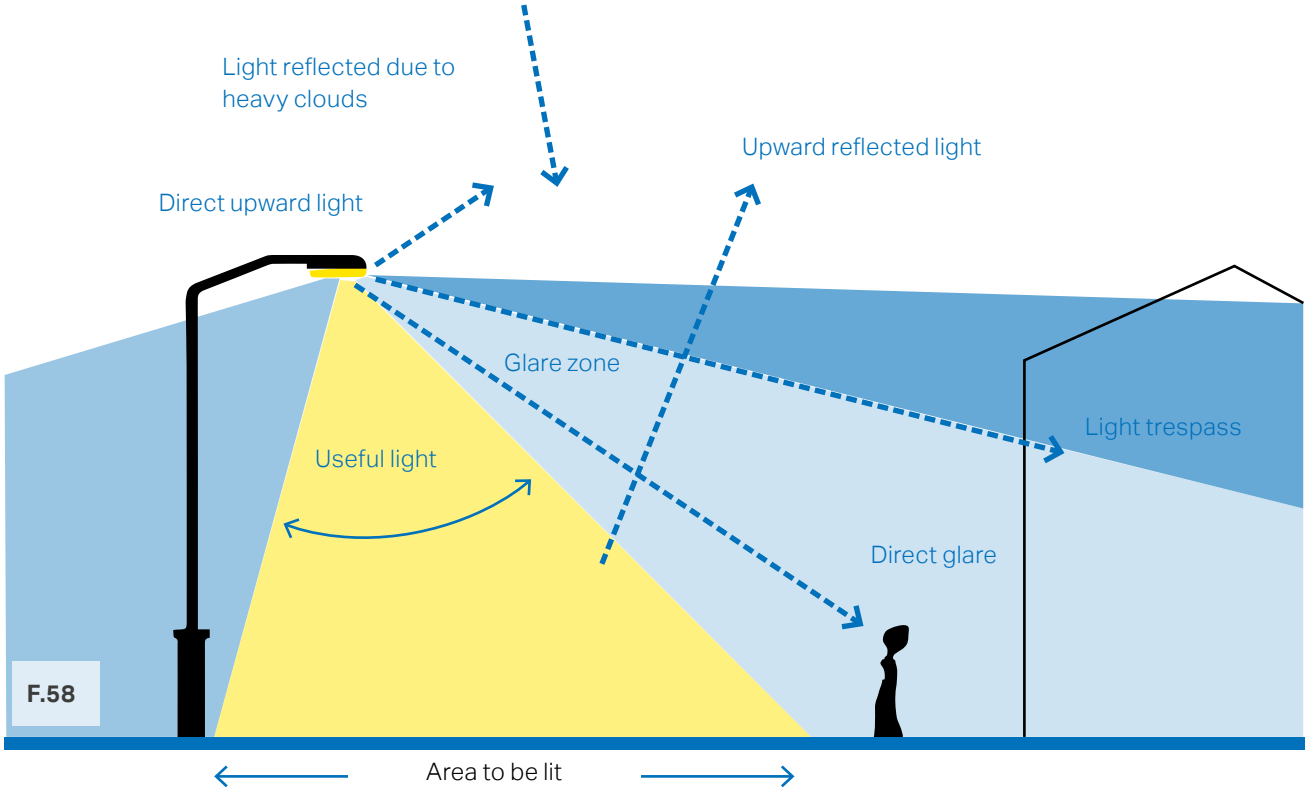

Figure 58:
Indicative diagram to illustrate the different components of light pollution and what 'good' lighting means

- 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;
- 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 background against which it is viewed. It 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 to use natural light sources.

B. Built form

The following section outlines policies that should be considered by developers when creating new development within Marshland St James. 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 predominant form in Marshland St James comprises 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 relation between size of plot, dwelling and spaces between dwellings. In general however, Marshland St James exhibits a low to medium density with heights averaging 1 to 2 storeys and a reasonable space between dwellings.

The following illustrative diagrams show this intention and new proposals would need to demonstrate said intention 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. 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.

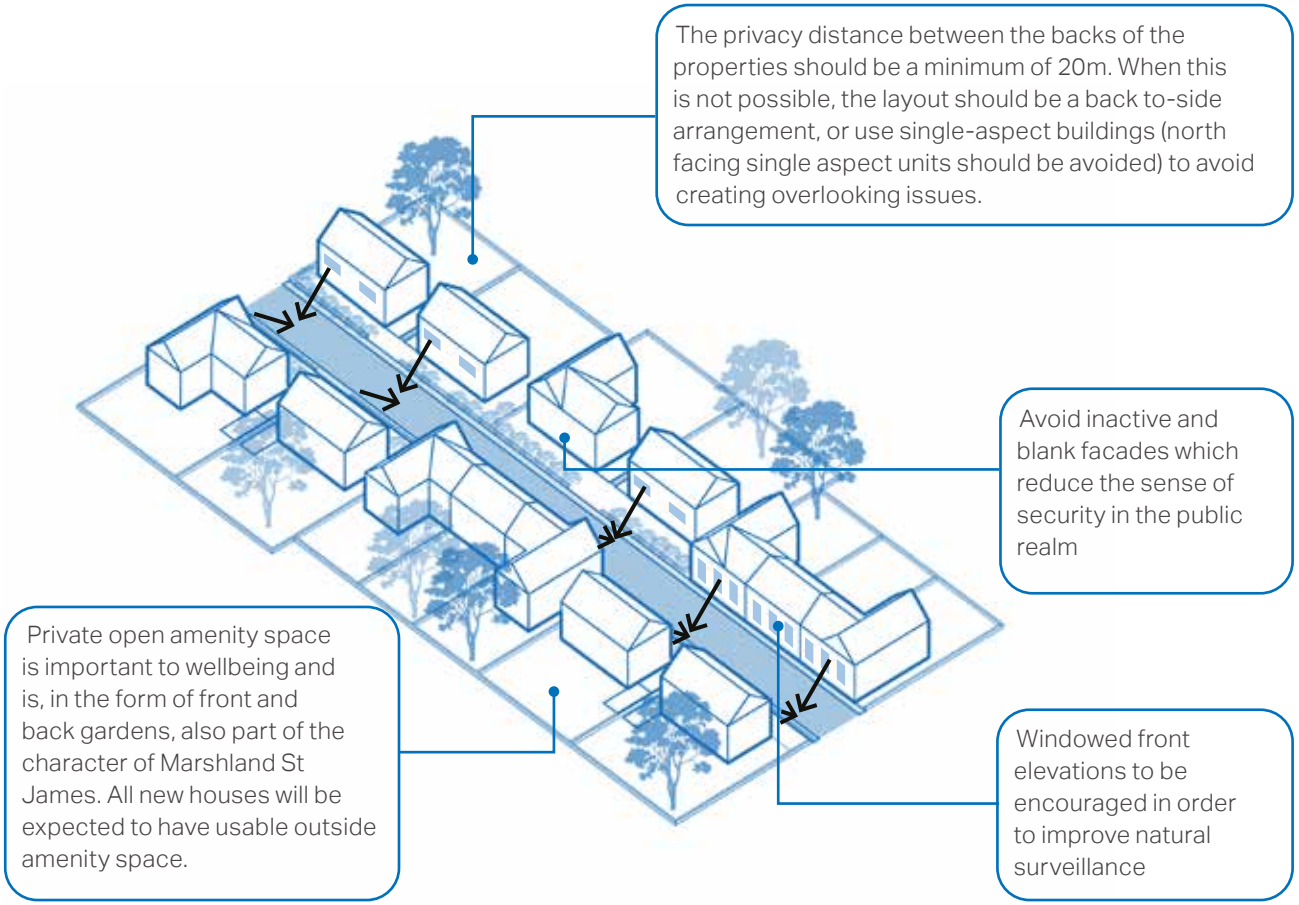

Figure 59:
Diagram to highlight the importance of natural surveillance to improve the security

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.

There are different garden dimensions in each of the character areas. In CA1, the front garden proportions range from 5 to 23m , with the majority of properties incorporating spacious front and back gardens between 13-100m. The Edge of Development Character Area's front and back garden size are expected to be larger in comparison to CA1 as they transition from the main settlement along Smeeth Road.

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

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

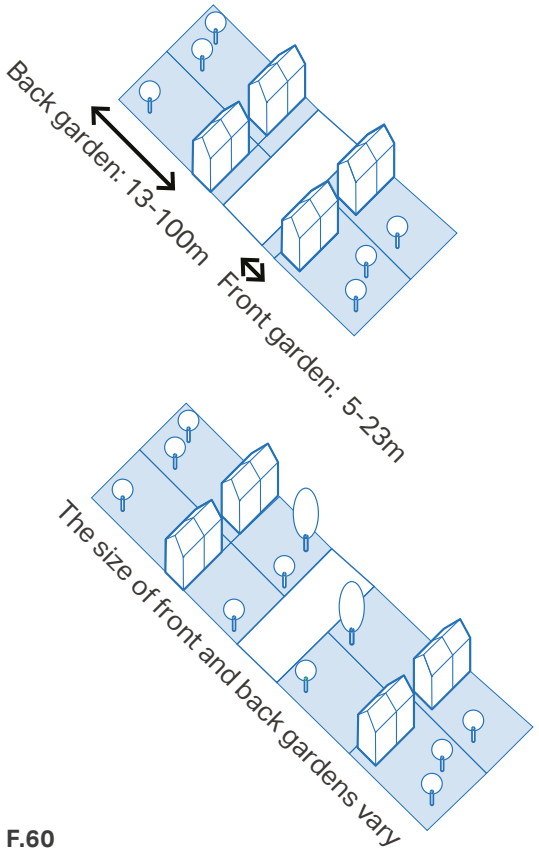

Figure 60: Proportion of green space varied. From top (Smeeth Road) and bottom (Edge of Settlement and Countryside Character Areas)

BF 03- MAINTAIN A CONSISTENT BUILDING LINE

The use of continuous building lines and setback distances contribute to the overall character of the area and the sense of enclosure of the streets and public spaces. Continuous building lines with a minimum gap create a strong distinction between public and private spaces, and provide definition to the public realm. Where buildings are more generously set back from the carriageway, the threshold spaces should be well landscaped.

- To ensure sufficient street enclosure private front threshold 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 61: Subtle changes in building lines with ample front gardens in Smeeth Road Character Area

Figure 62: Building line follows the straight form of Walton Road in the Edge of Development Character Area

Figure 63: Inconsistent building line with spacious front gardens in Countryside Character Area

BF 04- DESIRED HEIGHT PROFILE

- Development building heights should accord with the settlement character of one or two storey dwellings;
- Roofs in the village tend to be generally traditionally pitched, with some hipped examples. The use of slate on older houses or pantile are widespread and should be the main roofing material for new development in the Neighbourhood Plan Area;
- Innovation which explores the integration of green roof and solar panels 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 should be avoided; and
- Chimney type and height should be congruent with the typical Neighbourhood Plan Area chimney precedent examples.

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Figure 64: A well-proportioned 2-storey house with a hybrid of pitched and hipped roof - typical of housing stock in Marshland St James

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Figure 65: Solar panels installed on a pitched roof of a bungalow to maximise the use of renewable energy

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;

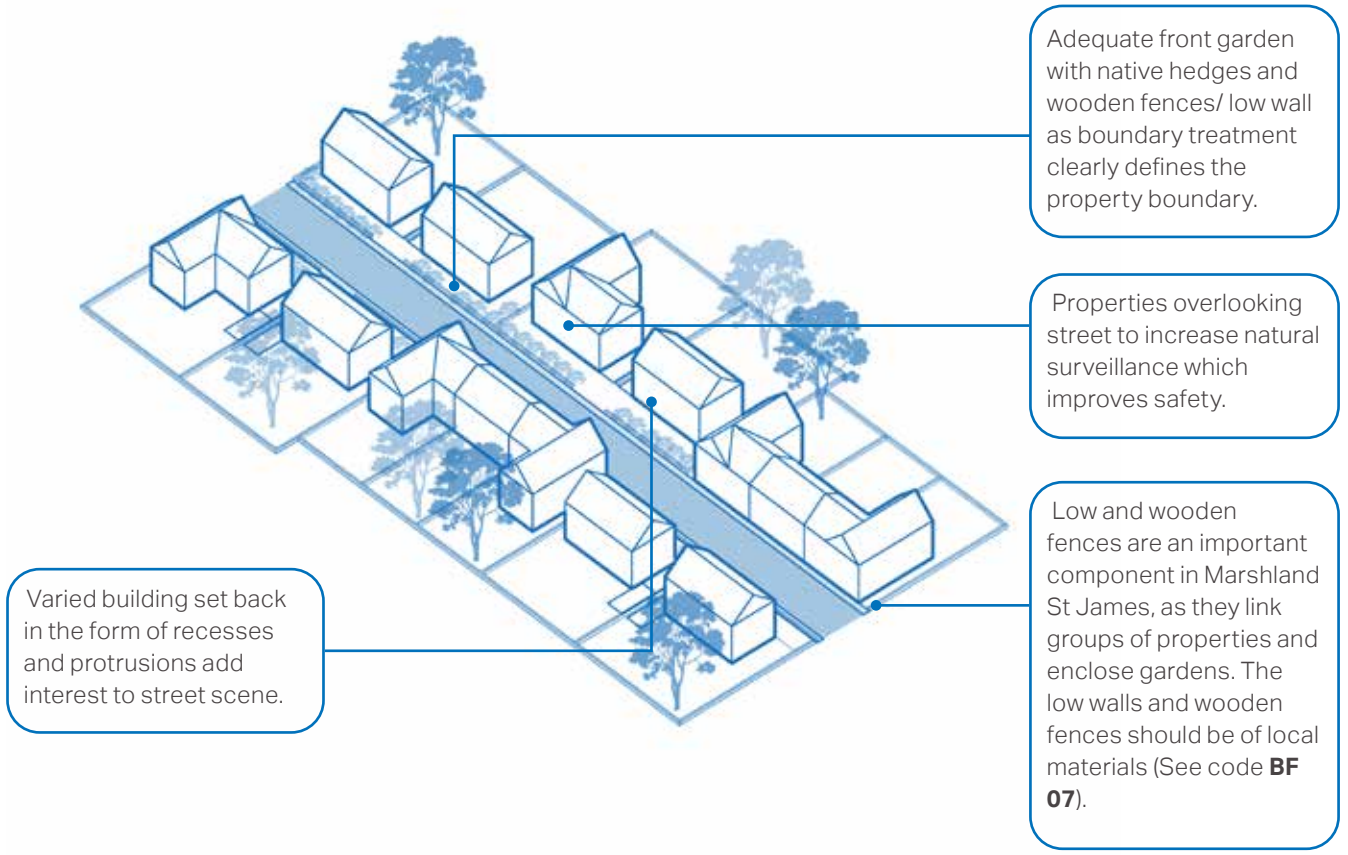

Figure 66: Illustrative diagram showing boundary treatments

- Front gardens/soft planted shallow setbacks should be provided in most instances;
- 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.


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Figure 67: Property on a large plot with generously sized front garden with large setback, buffered from the street by hedgerows

Figure 68: Positive example of a property employing landscaping and fencing to maintain privacy and to provide continuity to the building line

Figure 69: Appropriately setback property with shallow setback to provide passive surveillance to the street

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; and
- The pitch and form of the roof used on the building adds to its character and extensions should respond to this where appropriate.

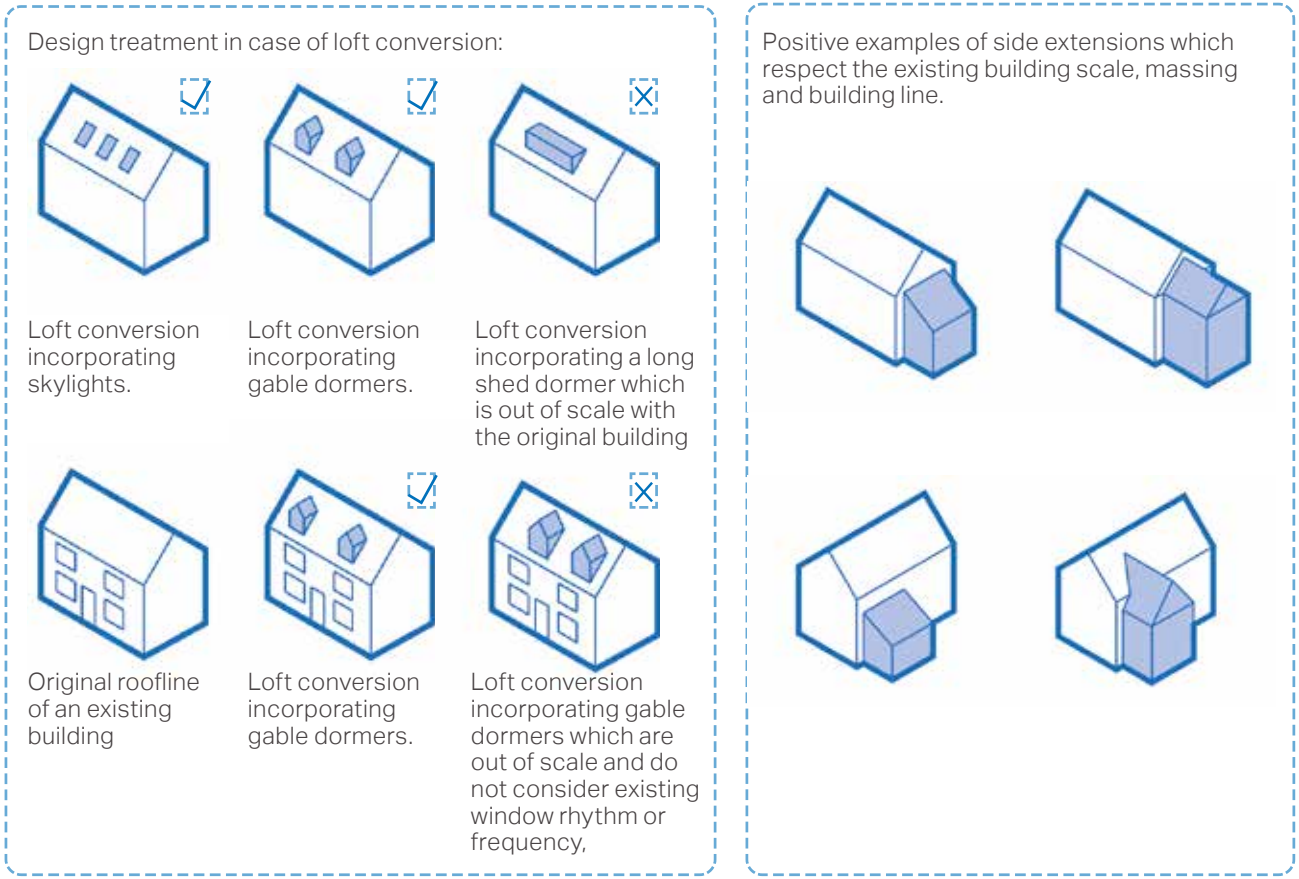

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Figure 70: Some examples for different type of building extensions

- 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; and
- 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.

Figure 72: Positive example of a property with well-proportioned dormer windows

Figure 71: An example of a property with an out of proportion dormer window, which is deemed unsympathetic to the local vernacular style

Figure 73: An example of a recent development with a disproportionately scaled window relative to the design for the rest of the property

BF 07- ARCHITECTURE DETAILS, MATERIALS AND COLOUR PALETTE

Pre-1900 buildings are predominant within Marshlands St James. The special character of buildings in Marshland St James arises from the mixture of red, brown, buff and whitewashed brick, timber and render finishes, and slate and pantiles.

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

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


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Figure 74: Example of a property with whitewashed brick finish, typical of the materials palette of Marshland St James

Figure 75: Example of an older property that can be dated back to the early C19th, with red brick facade

Figure 76: Bungalow with a mix of yellow bricks and stone facade

Informed by the local vernacular, the following pages illustrates acceptable materials and detailing for future housing developments in Marshland St James. 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 77: Property with yellow brick and black timber finishes on Smeeth Road

Figure 78: Example of a recent development that incorporates buff brick into the facade to remain in keeping with the local materials palette

Wall materials

There are different wall materials in the village such as red brick, timber, whitewashed brick walls and rendered finishes. The new buildings which are bungalows are built with red, buff or brown brick.

Fenestration materials

Various materials are used for windows and doors in Marshland St James, namely sash, casement, vasistas, box, bow windows, pithed porches and pediment entrances.

Roof materials

Most of the roofs of older buildings have slate coverings with interlocking roofstyles. Pantiles are also are visible for some of the properties. Occasional gabled and shed dormers used on some of the roofs. Chimneys are also key building features within the village.

Ground surface materials

Gravel and tarmac are used in the majority of surface with occasional herringbone pavements. The use of tarmac in future development should be avoided and and, instead, the use of impervious surface material should be encouraged.

Boundary treatment materials

There are a wide variety of boundary treatments in the village such as hedgerows, wooden fences, low walls, and mature planting

Wall

Red brick

Buff brick

Whitewashed brick

Render

Timber

Mix of brown brick and red brick for decoration

Fenestration

Bow window

Bay window

Casement window

Sash window

Box window

Sash windows

Pediment entrance

Gabled porch with details

Wooden door with details

Roof

Slate

Hipped dormer

Hipped roof with chimney stacks

Gabled dormer

Chimney stack with glazed pantile

Pitched roof with pantile

Ground surface

Mix of gravel and lawn as Impervious surfacing

Gravel

Herringbone pavements

Tarmac

Grey gravel

Granite setts

Boundary treatment

Wooden fence

Mix of wooden fence and hedges

Well-kept front garden with plants

Mix of wooden fence and shrubs

Mature trees as boundary treatment

Low wall

Colour palette

EE. Environmental and energy efficiency

Design codes in the following section apply to the whole Marshland St James Neighbourhood Plan Area. They contain important policies that will help to reduce our collective impact on the planet while allowing the natural environment in and around Marshland St James 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 dwelling to become more environmentally sustainable.

Owing to Marshland St James's rich green space and rural 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 Neighbourhood Area design scale as principles.

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

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

Figure 79: 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. 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 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 back 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** and no new homes on the gas grid by 2025 at the latest

D. **More fresh air** with mechanical ventilation and heat recovery, and passive cooling

E. **Water management and cooling** more ambitious water efficiency standards, green roofs and reflective walls

F. **Flood resilience and resistance** e.g. raised 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

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 on the exterior of a building to prevent heat loss. Particular attention should be paid to heat bridges around corners and openings at the design stage.

Provide acoustic insulation to prevent the transmission of sound between active (i.e. living room) and passive spaces (i.e. bedroom). Provide for insulation and electrical insulation to prevent the passage of fire between spaces or components and to contain 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. Link the interfaces between walls and floor and between walls and roof, including around the perimeter of any intermediate floor. Seal penetrations through the air barrier. Consider waste pipes

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.

The opposite diagram illustrates some of these key considerations.

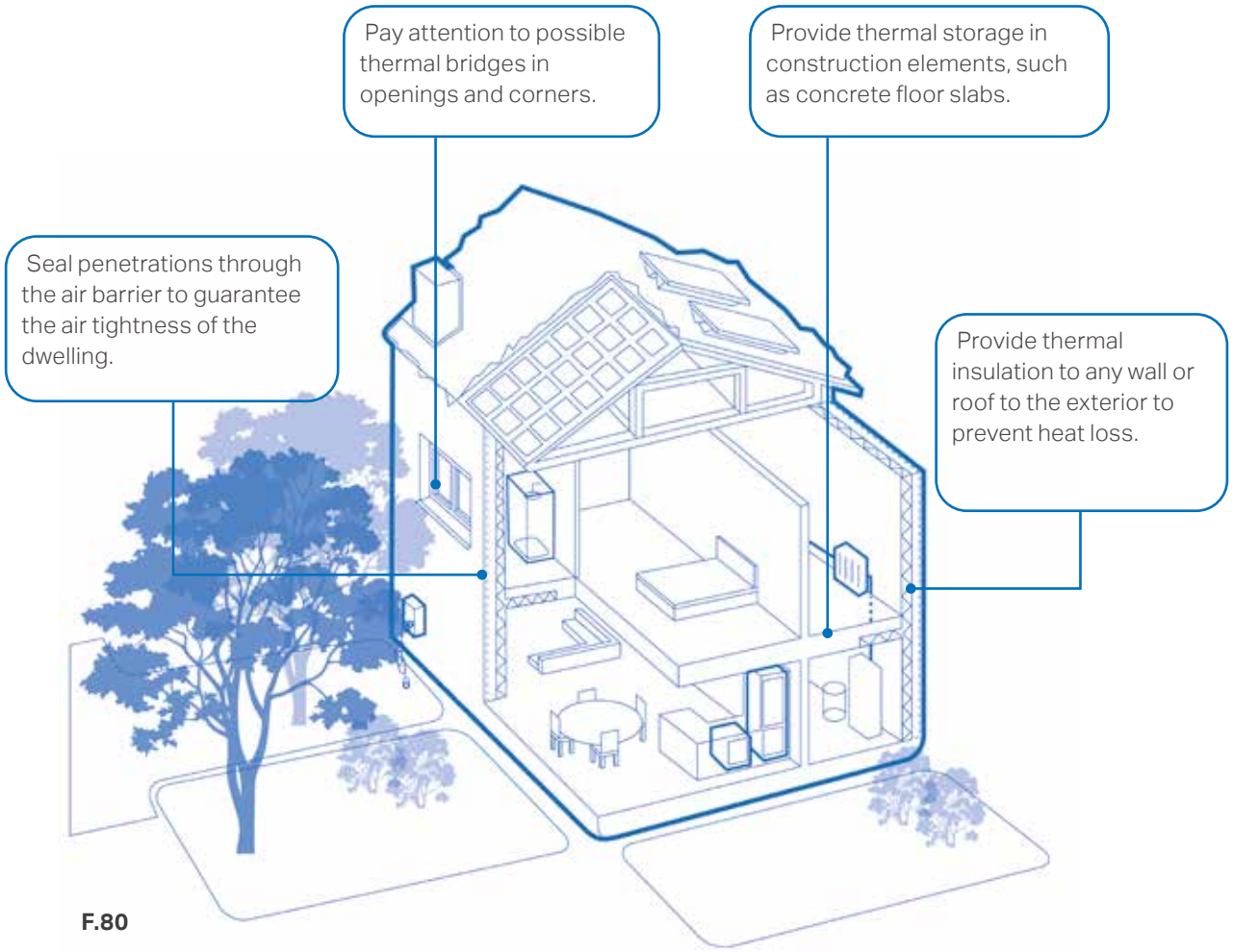


Figure 80: Diagram illustrating aspects of the building fabric to be considered

EE 03- FLOOD MITIGATION

The majority of the Marshland St James Neighbourhood Area is subjected to high levels of flood risk which affects mostly the less built up parts of the village, especially those located in close proximity to the Middle Level Main Drain, as shown on **Figure 16**.

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.

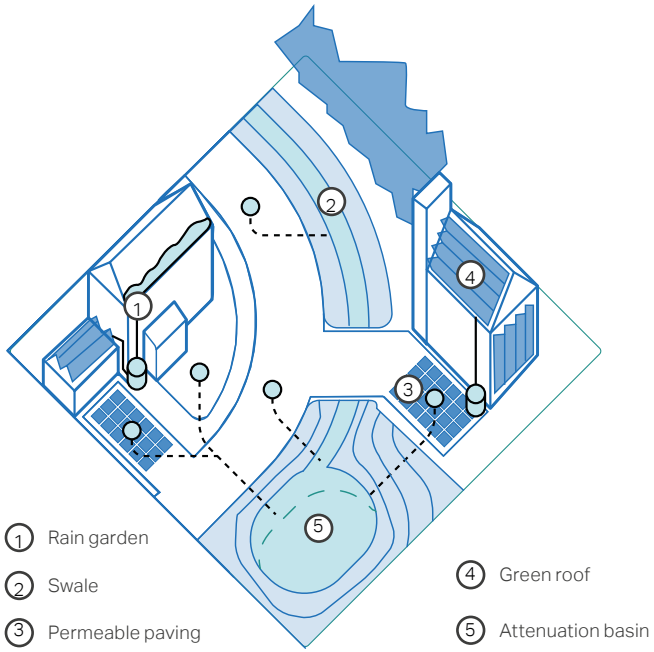
SUSTAINABLE URBAN DRAINAGE SYSTEM (SUDS)

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



F.81

Figure 81: Diagram showing the best use of harvesting water systems rain garden, swales, permeable paving, green roofs

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 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 82: Examples of SuDS designed as a public amenity and fully integrated into the design of the public realm, Sweden

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 83: Example of a rainwater harvesting tank in the shape of a bee hive

Figure 84: 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. 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:

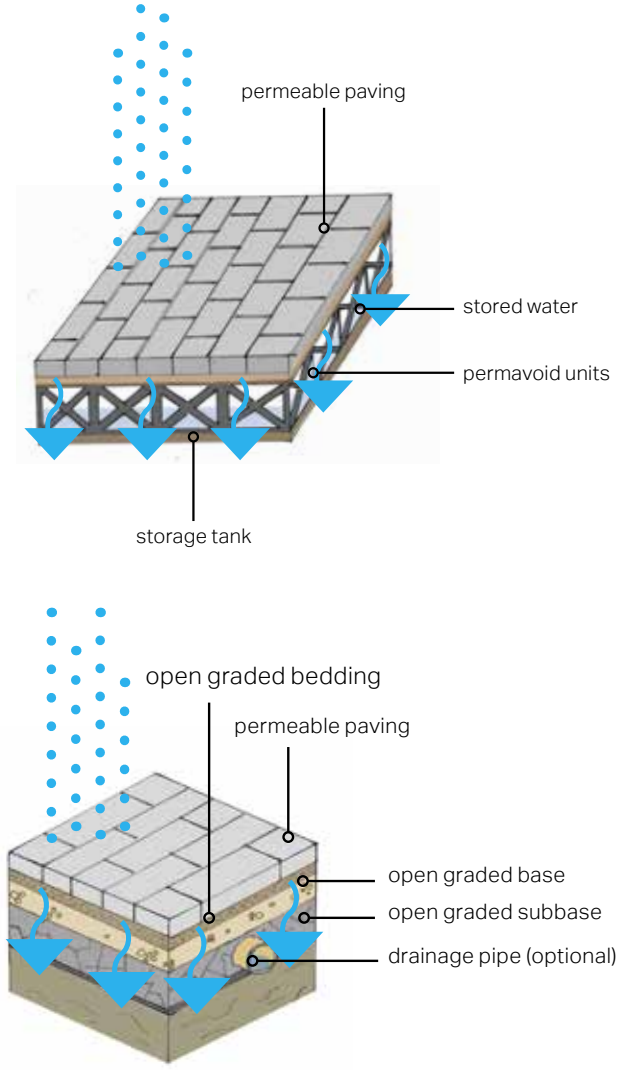
- Sustainable Drainage Systems - non-statutory technical standards for sustainable drainage systems;[4]

[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/uksi_20150596_en.pdf

[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



F.85

Figure 85: Diagrams illustrating the functioning of a soak away

- 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]

Figure 86: A good example of permeable paver (Source: https://www.paverconnection.com/testimonial/hedwig-village-permeable-driveway-and-patio-upgrade/)

Figure 87: A good example of clay paver (Source: https://www.londonstone.co.uk/brick-pavers/paving-bricks/)

[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

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;
- 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; and
- The illustrations below show some successful design solutions for accommodating bins within the plot.

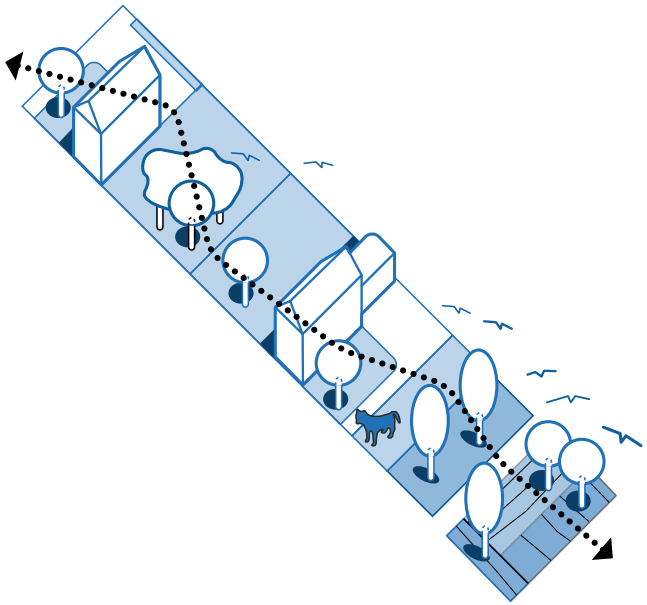
F.88

Figure 88: Examples of successful storage design solutions for accommodating bins and bicycles at the front of buildings

EE 05- WILDLIFE FRIENDLY FEATURES

Biodiversity and woodlands should be protected and enhanced where possible.

- Roadside verges, hedges, and trees should 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;
- Ensure habitats are buffered. Widths of buffer zones should be wide enough and based on specific ecological function;



F.89

Figure 89: Diagram to highlight the importance of creating wildlife corridors

F.90

Figure 90: Examples of a bughouse decorating rear gardens or public green spaces

F.91

Figure 91: Examples of a hedgehog home decorating rear gardens or public green spaces

- New development proposals should include the creation of new habitats and wildlife corridors such as planting wildflowers, trees and bulbs on the village green spaces, meadows, orchards and verges within the Neighbourhood Area. This could be by aligning back and front gardens or installing bird boxes or bricks in walls and improve habitat at ponds. Wildlife corridors should be included to enable local wildlife to travel to and from foraging areas and their dwelling area; and
- The loss of any tree and garden should be discouraged. Encourage permeable pavement and gardens which is beneficial to biodiversity net gain.

F.92

Figure 92: Open fields and meadows across the Neighbourhood Area should be protected and preserved to maintain biodiversity, Marshland St James

4.2 How to apply design codes to character areas

The character area codes are designed to provide specific guidance to areas within Marshland St James. These areas were set out in the character analysis undertaken in chapter 3. The specific guidance builds upon the general design codes outlined in the previous section and highlights guidelines that will both preserve and enhance the existing character of the area. These should be read jointly with the previous codes.

The codes within each character area are split into street codes and buildings codes to further outline particular features within the areas that need to be protected or improved. 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- Smeeth Road

CA2- Countryside

CA3- Edge of Settlement

CA1- Smeeth Road

The codes in the following pages address the Smeeth Road Character Area and both its street and built form characteristics.

Figure 93: Map showing Smeeth Road Character Area in Marshland St James

EXISTING CHARACTERISTICS

- Prevalence of residential areas on Smeeth Road alongside other community uses;
- The majority of houses are bungalows, detached and occasional semi-detached;
- On-plot front and side car parking; and
- Narrow pavement on one side of the road along Smeeth Road and School Road;

PROPOSED CHARACTER

- Respect the local vernacular and linear pattern along Smeeth Road, School Road, Walton Road, Rustons Road and Long Lots;
- Protecting the landscape features to preserve natural character of the village such as meadows, orchards and other green spaces and ponds;
- Respect the spacious size of front and back gardens and propose the same size for future developments;
- Do not exceed 2 storey building height along Smeeth Road;
- Provision of hedgerows, trees, wooden fence and low wall built with local materials as boundary treatments;
- Propose flood mitigation measures to address the area affected by flood; and
- Propose the new pavements to be 2m wide to improve pedestrian safety. Link the footpaths to other PRoW and cycle routes.

SMEETH ROAD STREET CODES

These street codes relate to the Smeeth Road Character Area within the village.

SP 01 **Main access street**

Street design speed of 20mph maximum with signage informing drivers to speed restriction.

SP 04 **Active travel**

Provision of 2m pavements and link the existing footpaths and proposed cycle routes along the road where possible to encourage active travel mode.

SP 05 **Car parking**

On-plot front or side parking should be proposed for future developments.

SP 06 **Trees and landscaping**

The orchards, green spaces, ponds and meadows should be enhanced and retained. Integrate new trees and vegetation in order to improve net gain and attract wildlife.

EE 03 **Flood mitigation**

Some flood mitigation measures should be used such as SUDS to mitigate the impact of flood risks.

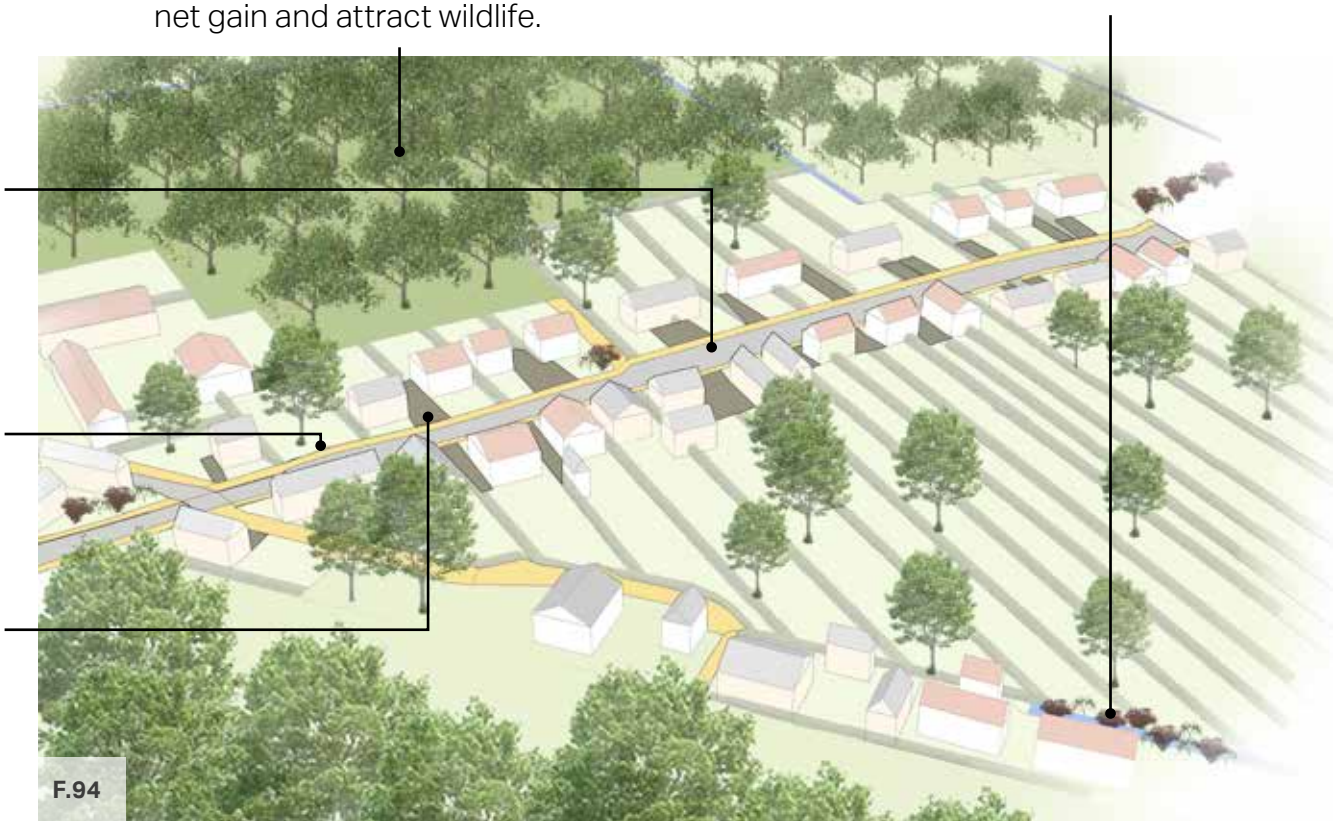


Figure 94: Diagram showing the 3D view of Smeeth Road Character Area and the street codes from an axonometric view

SMEETH ROAD BUILT FORM CODES

These built form codes relate to the Smeeth Road Character Area within the village.

SL 02 **Layout and grain**

New development should be planned to be permeable, providing well-connected non-vehicular connections to different places.

BF 01 **Overlook public space**

Improve sense of security and natural surveillance by facing the windowed front elevation of a dwelling to the street.

BF 07 **Architectural details and materials**

Materials and colours should respect the local vernacular.

BF 02 **Define front and back gardens**

Provide ample front and back gardens along the Character Area.

BF 05 **Establish a consistent property boundary**

The use of well-kept front gardens, hedgerows, low walls as boundary treatment should be encouraged. Design buildings to ensure that streets have good level of natural surveillance by placing ground floor habitable rooms and upper floor windows facing the street.

Figure 95: Diagram showing a typical area in Smeeth Road Character Area and built form codes from an axonometric view

CA2- Countryside

The codes in the following pages address the Countryside Character Area and both its street and built form characteristics.

Figure 96: Map showing Countryside Character Area in Marshland St James

EXISTING CHARACTERISTICS

- Low lying landscape with panoramic view towards countryside;
- Scattered meadows and farmlands across the Character Area;
- No defined development pattern; and
- Presence of multiple drainage channels and open fields in the area which need to be retained.

PROPOSED CHARACTER

- Careful attention needs to be given to the location of development. Consideration should also be given to ensure that development does not cause adverse effects to green and blue infrastructure;
- Propose spacious front and back gardens to maintain the rural character of the area;
- Retain the hedgerows and mature trees as boundary treatment and propose the same features in new developments;
- Propose new pedestrian and cycleway where possible to promote active travel;
- Building heights should be between 1-2 storey; and
- Design low-dense properties where possible to be in keeping with the rural character.

COUNTRYSIDE CODES

These street codes related to Countryside Character Area.

SP 04 **Active travel**

Enhance connectivity where possible.

SP 05 **Car parking**

On-plot front parking and on-plot garages can be proposed for this area. If cars are parked at the front, at least 50% of the frontage should be landscaped and with a boundary treatment.

SP 02 **General street**

Speed limit in built up areas should be 20mph. Carriageways should be at least 6m wide allowing two way traffic flow.

SP 06 **Trees and landscaping**

Preserve landscaping, orchards and trees whilst introducing new vegetation in areas where it is lacking.

Figure 97: Diagram showing the 3D view of Countryside Character Area and street codes from an axonometric view

COUNTRYSIDE BUILT FORM CODES

These built form codes relate to the Countryside Character Area.

BF 01 **Overlook public space**

New dwellings should face the roads and public open spaces to improve the natural surveillance.

BF 03 **Maintain a consistent building line**

Propose adequate front and back gardens to ensure sufficient street enclosure.

BF 04 **Desired height profile**

Roof styles should be pitched with some occasional hipped roofs. The building heights should not exceed 2 storeys.

BF 07 **Architectural details and materials**

Materials and colours should be used in a way to respect the local vernacular and adjacent built environment context.

EE 04 **Waste storage and servicing**

Bins should be placed as close to the dwelling's boundary and the public highway. For example, against walls, fences or hedges.

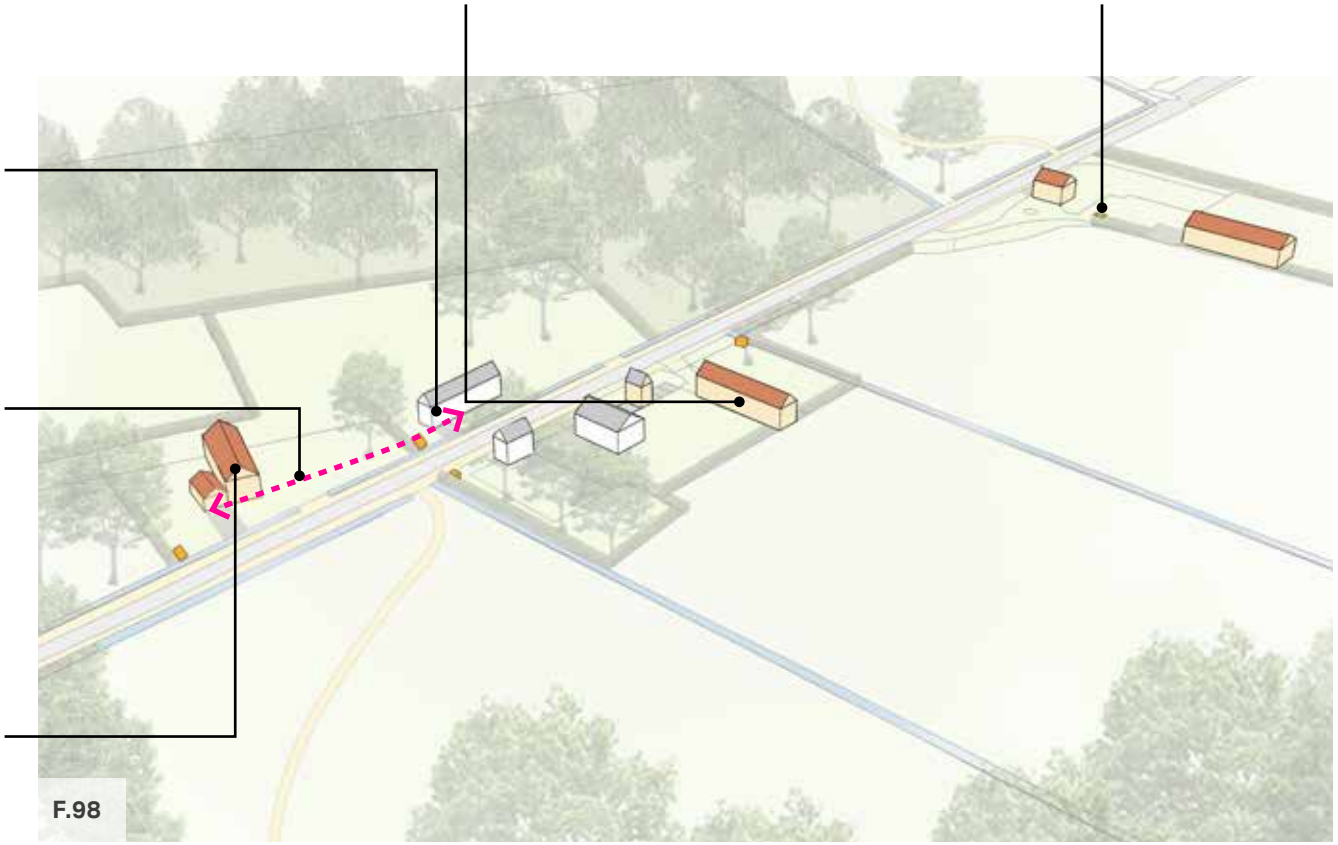


Figure 98: Diagram showing a typical area in Countryside Character Area and built form codes from an axonometric view

CA3- Edge of Settlement

The codes in the following pages address the Edge of Settlement Character Area and both its street and built form characteristics.

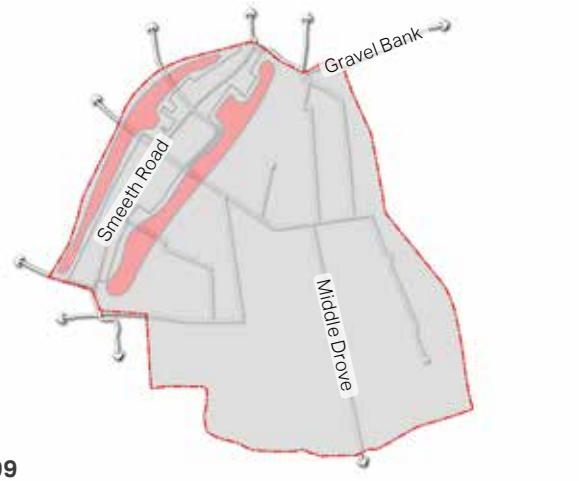


Figure 99: Map showing Edge of Settlement Character Area in Marshland St James

EXISTING CHARACTERISTICS

- The area comprises of open fields, orchards, farmlands, industrial estates and meadows;
- Building heights are normally one storey; and
- Presence of extensive plots of open fields, various drainage channels and a fishing pond are some of the green and blue infrastructure features.

PROPOSED CHARACTER

- Respect the sense of openness of the area. Encourage a sense of gradual transition from Smeeth Road to the Edge of Settlement Character Area;
- Provision of sufficient green buffer at the edge of settlement for screening to reduce the negative impact of developments on the Countryside Character Area;
- Design new developments to follow the linear development pattern along Smeeth Road Character Area;
- Provision of adequate green buffer between residential areas and industrial estates; and
- Propose hedgerows, low walls and wooden fences as boundary treatments to be in keeping with local character.

EDGE OF SETTLEMENT STREET CODES

These street codes relate to the Edge of Settlement within the village.

SP 03 **Edge lane**

The roads gently meander and provide planting buffer between the edge of the carriageway and the countryside in order to introduce a more informal and intimate character. Connect the roads to the existing network of Public Rights of Way and the general movement network.

SL 01 **Pattern of developments**

Preserve linear pattern of the development. Encourage a gradual transition from main settlement to the Edge of Settlement Character Area.

SP 06 **Trees and landscaping**

Retain the existing trees and integrate new vegetation where possible. Preserve gaps and respect the views towards the countryside.

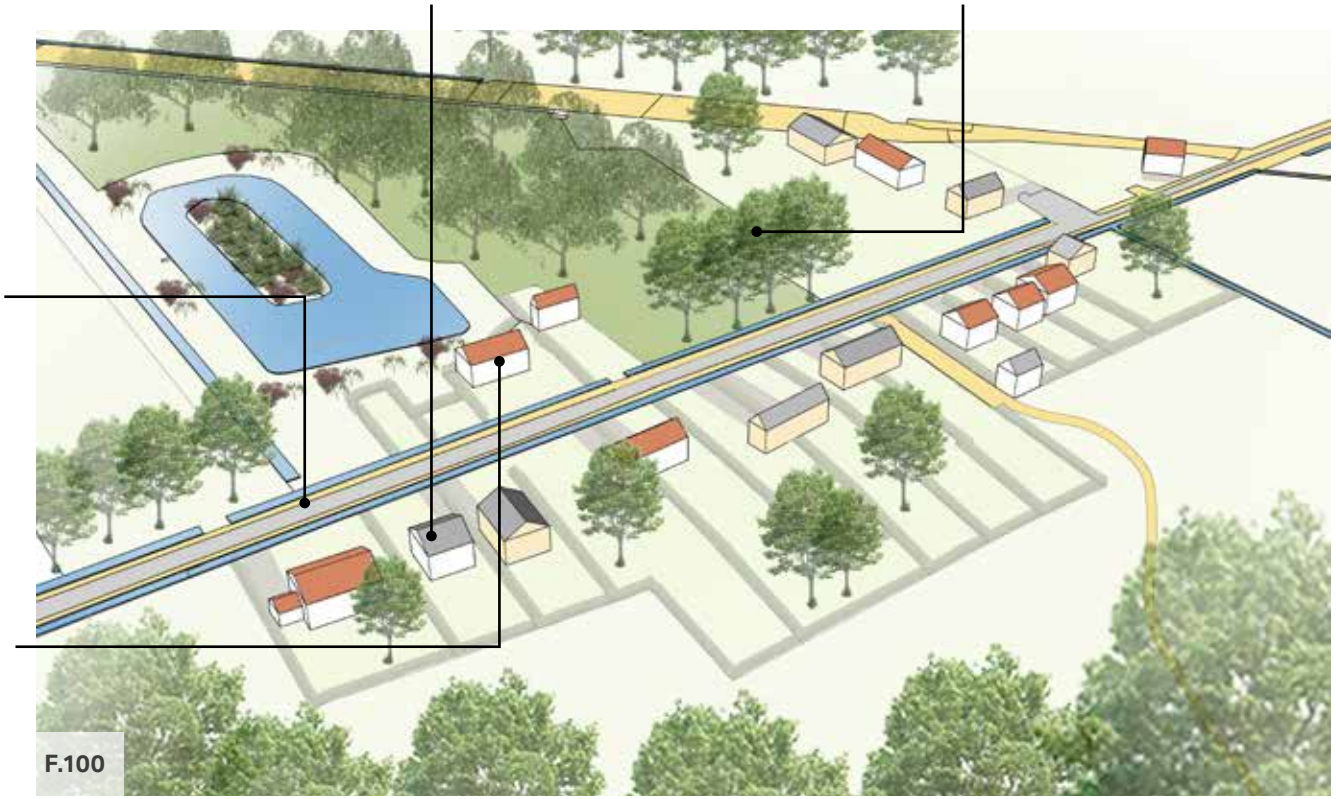


Figure 100: Diagram showing the 3D view of Edge of Settlement Character Area and street codes from an axonometric view

EDGE OF SETTLEMENT BUILT FORM CODES

These built form codes relate to Edge of Settlement within the village.

BF 01 **Overlook public space**

Buildings facing the street and sense of gradual transition moving towards the countryside.

BF 02 **Define front and back gardens**

Ample front and back gardens should be proposed for this character area with tall mature trees, green verges and hedges forming the natural boundary treatments.

BF 03 **Maintain a consistent building line**

The buildings set well back from the roads and align along them to respond to the landscape context and the more open character area.

BF 04 **Desired height profile**

The building heights should be designed in accordance with the settlement character of 1 storey dwellings. The edge of settlement presents very low density due to the size of plots and height profile.

EE 05 **Wildlife friendly features**

Comprehensive landscape buffering should be encouraged along the boundary of the development to define the edge.

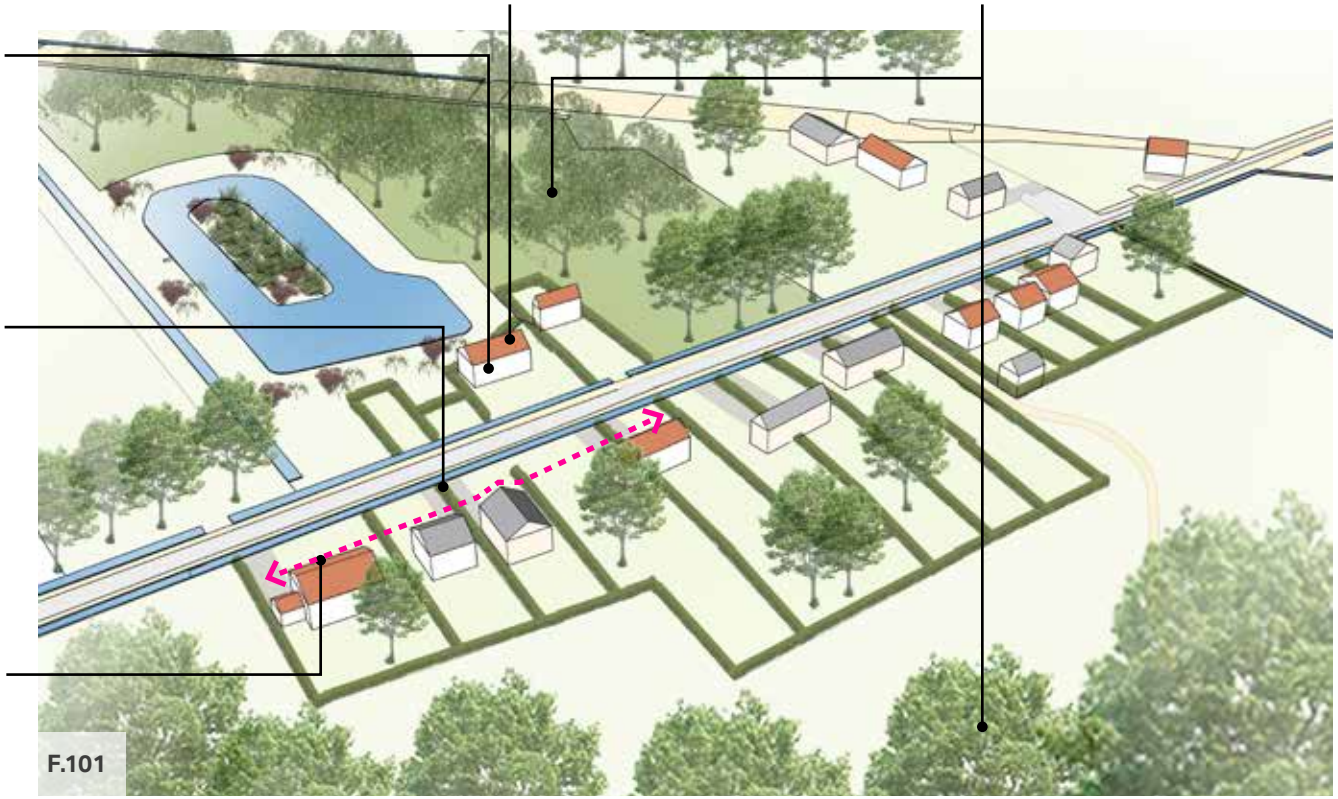


Figure 101: Diagram showing a typical area in Edge of Settlement Character Area and built form codes from an axonometric view

4.3 Checklists

Because 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, greens, and other spaces;
- Harmonise and enhance existing settlement in terms of physical form, architecture and land use;
- Relate well to local topography and landscape features, including prominent ridge lines and long-distance views;
- Reflect, respect, and reinforce local architecture and historic distinctiveness;
- Retain and incorporate important existing features into the development;
- Respect surrounding buildings in terms of scale, height, form and massing;
- Adopt contextually appropriate materials and details;
- Provide adequate open space for the development in terms of both quantity and quality;
- Incorporate necessary services and drainage infrastructure without causing unacceptable harm to retained features;
- Ensure all components e.g. buildings, landscapes, access routes, parking and open space are well related to each other;
- 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?
- In rural locations, has the impact of the development on the tranquillity of the area been fully considered?
- How does the proposal impact on existing views which are important to the area and how are these views incorporated in the design?
- 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 this will be used by the new owners and how will it be managed?
- Is there opportunity to increase the local area biodiversity?
- Can green space be used for natural flood prevention e.g. permeable landscaping, swales etc.?
- Can water bodies be used to provide evaporative cooling?
- Is there space to consider a ground source heat pump array, either horizontal ground loop or borehole (if excavation is required)?

4

Gateway and access features:

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

5 (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

Building line and boundary treatment:

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

7

Buildings layout and grouping:

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

8

Household extensions:

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

Building materials and surface treatment:

- 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?

9 (continues)

Building materials and surface treatment:

- Are recycled materials, or those with high recycled content proposed?
- Has the embodied carbon of the materials been considered and are there options which can reduce the embodied carbon of the design?For example, wood structures and concrete alternatives.
- Can the proposed materials be locally and/or responsibly sourced? E.g. FSC timber, or certified under BES 6001, ISO 14001 Environmental Management Systems?

10

Car parking:

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

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

This section sets out the different actors and how they can use this design guidelines.

5.1 How to use this guide

The Design Guidelines will be a valuable tool in securing context-driven, high quality development within the Neighbourhood Area of Marshland St James. 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, 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

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