



Quality information

Prepared by	Checked by	Approved by
Parthasarathy Lavenya	Wei Deng	Emma Lee
Graduate Urban Designer	Associate	Parish Council

Revision History

Issue no.	Issue date	Details	Issued by	Position
01	30.10.24	Report structure	Wei Deng	Associate
02	15.12.24	First draft	Wei Deng	Associate
03	20.01.25	Second draft	Wei Deng	Associate
04	06.03.25	Final	Wei Deng	Associate

This document has been prepared by AECOM Limited ("AECOM") in accordance with its contract with Locality (the "Client") and in accordance with generally accepted consultancy principles, the budget for fees and the terms of reference agreed between AECOM and the Client. Any information provided by third parties and referred to herein has not been checked or verified by AECOM, unless otherwise expressly stated in the document. AECOM shall have no liability to any third party that makes use of or relies upon this document.

Contents	Page	
1. Introduction	04	
2. Policy and Context Review	10	
3. Area Types Design Guidance and Codes	18	
4. Parish Wide Design Guidance and Codes	48	
5. Next Steps	72	



1. Introduction

Through the Ministry of
Housing, Communities and
Local Government (MHCLG)
Neighbourhood Planning Support
Programme led by Locality,
AECOM was commissioned
to provide design support to
Scraptoft Parish Council.

As the National Planning Policy Framework (NPPF, 2024) (paragraph 131) 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.'

Following an analysis of the Neighbourhood Area (NA), a set of architectural and design qualities were identified. This set of qualities, combined with good design practice, will form the design guidelines that development within Scraptoft should follow in order to comply with this parish-wide design guidance and codes document.

1.1 Purpose of this document

The purpose of the Design Guidance and Codes is to maximise design quality in any new development in the context of the neighbourhood area.

The aims of the document are to:

- Positively influence the character and design of new development within the Neighbourhood Area;
- Set out clear analysis of the local context, focusing on topics where improvement is most needed;
- Benchmark how these opportunities should be delivered, such that they are factored into consideration at site procurement, and the downstream design response.

The report cannot influence the quantum, location or type of development; other tools in the Neighbourhood Plan and Local Plan can cover these.

Consultants AECOM prepared this report between October 2024 and February 2025, in conjunction with key members of the Neighbourhood Plan Steering Group.

What is design coding?

Design coding involves setting out clear and specific guidelines for the determination of planning applications. These codes are intended to ensure that developments contribute positively to their surroundings in terms of aesthetics, functionality, and sustainability.

They can provide greater assurance for communities and clarity for developers about the design of new development.

1.2 Area of study

With a population of approximately 2,968 (2021 Census), Scraptoft is a village located in the county of Leicestershire, about five miles northeast of Leicester's city centre.

The design codes and guidance within this report cover the entire parish of Scraptoft (approximately 530 hectares), an area equivalent to the NA.

Scraptoft has a rich history, with mentions in the Domesday Book of 1086. The village boasts several historic buildings within its historic core at the west of the settlement, including the Grade I listed All Saints Church, and the Grade II listed 18th-century Scraptoft Hall. The village hall is used for various community events, meetings, and social gatherings. The village also offers several local amenities, including a village hall, a few small shops, and a pub.

Scraptoft has seen growth and some modern housing developments in recent years, which has brought new residents and enhanced amenities. However, despite its proximity to Leicester, it retains a semi-rural character.



Figure 01: A photo of converted Scraptoft Hall

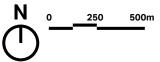




Figure 02: Aerial view of Scraptoft NA. Source: ESRI World Imagery

1.3 How to use this document

This document will be used differently by different people in the planning and development process.

A valuable way codes and guidance can be used is as part of a process of codesign and involvement that seeks to understand and takes account of local preferences for design quality. As such the codes and guidance can help to facilitate conversations to help align expectations, aid understanding, and identify key local issues.

The resulting design guidance and codes can then set out how to adequately respond to these issues in future development.

Design codes and guidance alone will not automatically secure quality design outcomes, but they will help to prevent poor outcomes by creating a rigorous process that establishes expectations for design quality.

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

Potential users	How they will use the design guidance and codes
Applicants, developers, & landowners	As a guide to the community's and the Local Planning Authority's 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 guidance and codes should be discussed with applicants during any pre application discussions.
Scraptoft Parish Council	As a guide when commenting on planning applications, ensuring that the guidance and codes are complied with.
Local community organisations	As a tool to promote community-backed development and to inform comments on planning applications.

Table 01: A list of potential users of this documents and how they will apply the design guidance and codes.

1.4 Reading the guidance and codes

The goal of these guidance and codes is to promote the best possible delivery of residential and public realm development, which will support sustainable and contextually appropriate designs.

If there is variation from the compliance requirements outlined in this document, it must be supported by factual evidence. Under such circumstances, developers and their design teams must show that the plan will produce a final proposal of the greatest quality that is consistent with the main goals of this document and, therefore, the goals of the Scraptoft Neighbourhood Plan.

Submissions that do not adhere to this guidance, and that do not furnish strong rationales, supporting documentation and comprehensive examination of available solutions, may be refused.

The guidance and codes provided in the report are arranged into themes and are supported by relevant analysis. These include detailed mapping, descriptions, diagrams and images taken from the NA and appropriate precedents.

Accompanying the guidances and codes are references to existing policies from Supplementary Planning Documents (SPDs) relevant to the local context. These support a nesting approach to link to relevant policies to ensure that there are no gaps in information and that all guidance and codes are bespoke to the context of Scraptoft.

These nested policies will appear throughout the next section.

Please note:

Both design codes and guidelines are contained within this document, highlighted within boxes as shown here. The difference between codes and guidelines is summarised below:

- Codes: Design codes are mandatory requirements for design issues and are expressed with the word MUST.
- Guidelines: Design guidelines set out aspirations for design that is expected to be delivered and are expressed with one of two words:
 - **SHOULD** reflects design principles that are strongly encouraged.
 - COULD reflects design principles that are suggestions.



2. Policy and Context Review

2.1 The vision and values and relationship to design quality

The vision for Scraptoft is described in the vision statement in the 2015-2028 Neighbourhood Plan and is the overarching aim for the future of Scraptoft. Underneath the vision sits a series of objectives which will need to be achieved in order to realise the overall vision. This design code report intends to support the aspects of those objectives which relate to design. The objectives derived from the vision are as follows:

DESIGN QUALITY VISION

- To protect the identity of Scraptoft
- To enhance use of the Community Hub and the Village Hall
- To protect important open areas
- To ensure good quality new homes provided for local housing needs
- To ensure that traffic flows well and there is good off-street parking in Scraptoft village centre

2.2 Planning policy context The NPPF 2024, paragraph 132 states that:

'Plans should... set out a clear design vision and expectations, so that applicants have as much certainty as possible about what is likely to be acceptable. Design policies should be developed with local communities so they reflect local aspirations, and are grounded in an understanding and evaluation of each area's defining characteristics. Neighbourhood plans can play an important role in identifying the special qualities of each area and explaining how this should be reflected in development...'

The Government is placing significant importance on the development of design guidance in order to set standards for design upfront and provide key principles regarding how sites should be developed.

Therefore this report's main objective is to develop design codes to sit alongside the Neighbourhood Plan to inform design proposals within Scraptoft Parish and ensure that they remain sympathetic to the surrounding character.

Other research, such as for the Government's Commission for Architecture and the Built Environment (now part of the Design Council; see, for example, *The Value of Good Design*¹) has shown that good design of buildings and places can improve health and well-being, increase civic pride and cultural activity, reduce crime and antisocial behaviour and reduce pollution.

Therefore this document seeks to harness an understanding of how quality design can sensitively incorporate the best aspects of Scraptoft's overall character into any future development.

Additionally, these following documents have informed the design guidance and codes within this report to ensure they are best aligned with the needs and opportunities identified for the NA:

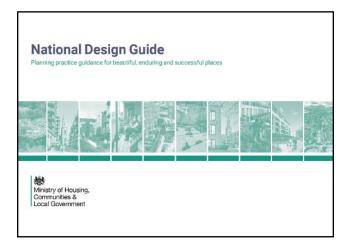
National planning documents



2021 - National Model Design Code MHCLG

The National Model Design Code (NMDC) sets a baseline standard of quality and practice. It provides detailed guidelines on the production of design codes, guides, and policies to promote successful design. It expands on 10 characteristics of good design set out in the NDG.

^{1.} Available at: https://www.gov.uk/government/ publications/national-planning-policy-framework--2







2019 - National Design Guide (updated January 2021) MHCLG

The National Design Guide (NDG) sets out 10 characteristics of a well-designed place and demonstrates what good design is in practice. As a companion document, it supports the ambitions of the NPPF to utilise the planning process in the creation of high-quality places.

2020 - Building for a Healthy Life Homes England

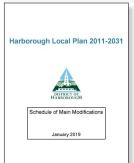
The BHL toolkit sets out principles to help local planning authorities to assess the quality of proposed (and completed) developments but can also provide useful prompts for planning applicants to consider during the different stages of the design process.

2007 - Manual for Streets Department for Transport

Development is expected to respond to the Manual for Streets, the Government's guidelines on how to design, construct, adopt and maintain residential streets. It promotes prioritising the needs of pedestrians and cyclists, whilst avoiding car dominated layouts.

Planning policies at local level:

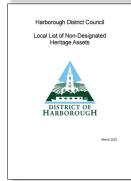
Scraptoft is a civil parish, overseen by the Harborough District Council as the Local Planning Authority (LPA). The following planning and design documents were reviewed to understand the policy context under which this document has been produced. These include key documents such as the area's Local Plan and Supplementary Planning Documents (SPD).





Local planning	Date	
Leicestershire County Council	Leicestershire Highway Design Guide	2022
	Space for Wildlife; Leicester, Leicestershire and Rutland Biodiversity Action Plan (2016-2026)	2016
Harborough District Council	Adopted Harborough Local Plan (2011-2031)	2011
	Planning Obligations SPD	2022
	Development Management SPD	2021
	Provision for Open Space, Sport, and Recreation	
	Local List of Non-Designated Heritage Assets	2023

Table 02: A list of Local planning policies





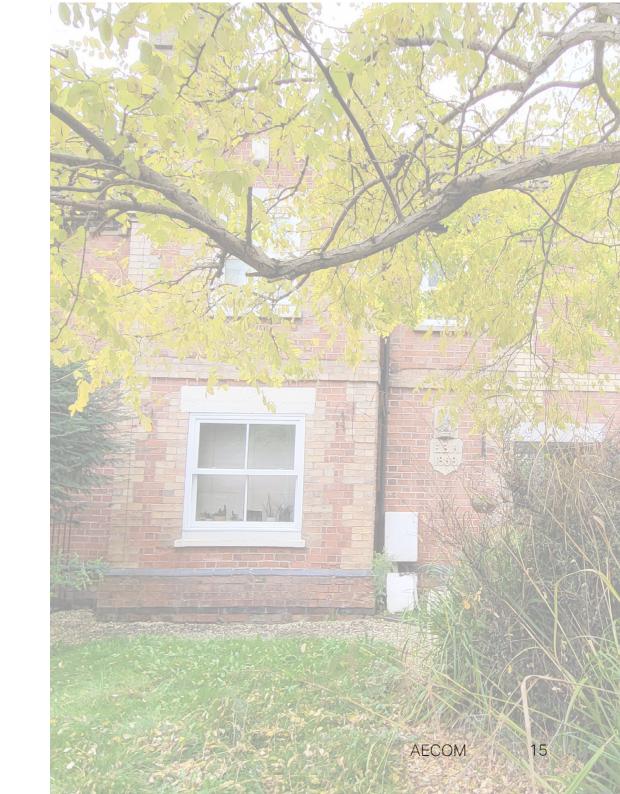


2.3 Targeting design quality issues

The focus of the guidance and coding prepared in this document is based on the elements of design quality and characteristics which were identified based on the diagnostics, the site visit and discussions with the Neighbourhood Plan Steering Group.

A number of themes were identified following the site visit:

- High quality housing
- Local identity
- Movement network
- Natural environment frontage



2.4 Process and engagement

A one-day site visit took place on 16th October 2024, commencing with an in-person meeting between AECOM and representatives of the Scraptoft Neighbourhood Plan Steering Group to explore the group's key aims and objectives and to address any initial concerns.

This was followed by a tour of the parish, via car and on foot. This activity allowed consultants to appraise local character and the features informing its sense of place, such as heritage and landscape features. The exercise also provided valuable local insight into the area's pertinent design issues and opportunities, good and bad practice, as well the overall context for which the evidence-base of the Neighbourhood Plan will reflect.

This document has resulted from a collaborative effort between the Scraptoft Neighbourhood Plan Steering Group and AECOM, reflecting the priorities of local residents. The design coding process includes the following steps:



Figure 03: Parish members walk around the village with AECOM consultants on 16 October 2024



Figure 04: A brief chronological breakdown of the key elements and milestones used throughout the duration of the production of this document.



3. Area Types Design Guidance and Codes

This chapter presents a place analysis of the Scraptoft
Neighbourhood Area, setting out four area types. This helps to inform a series of design guidelines and codes that are both sensitive and responsive to local context, landscape setting, and character.

3.1 Understanding place

Achieving quality development starts with a comprehensive understanding of place. Places have a clear and strong identity and character. They are a combination of their physical form, their activities and their meaning to people. The adjacent diagram shows how these factors come together to create a successful place.

All new development must be informed by its own comprehensive analysis of place to understand a proposals broader context and establish aspirations and place-specific responses to the location, siting and design of new development.

- 1 Physical conditions of existing built development including layout, form, scale, appearance, landscape character, waterways and flood risk.
- 2 Use, vitality and diversity, including community facilities and local services.
- 3 How a place is perceived, including local heritage, views inwards and outwards and social histories.

For the purposes of this document, a series of 'area types' have been identified for Scraptoft, helping to illustrate the variation in character across the NA.

New developments should take note of the area type in which it is located, as each design proposal will require a tailored response based on its specific location.

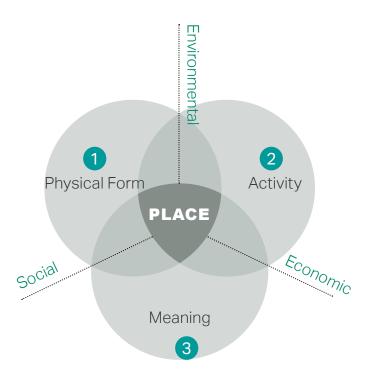
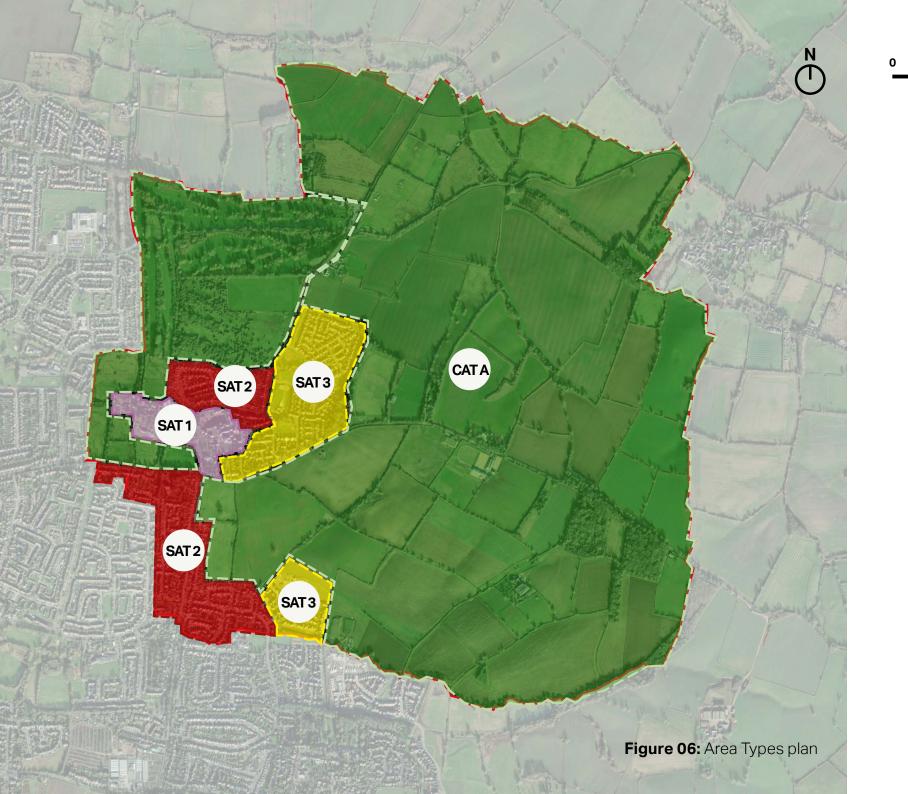


Figure 05: A diagram showing how different factors come together to form a sense of place.



250 500m

Settlement Area Types (SAT)

The neighbourhood area consists of four characterful communities made up from a variety of housing types and architectural styles. Each Area Type will be analysed. This will provide insight into the unique identities that future development should respond to in a respectful way.

Countryside Area Types (CAT)

In most of the neighbourhood area, the countryside is visually stunning, featuring a combination of impressive landscapes, architecturally and historically significant buildings, and ecologically important areas.

SAT 1: Historical Village

The village's historical settlements, established prior to the 20th century, capture the village's original essence.

SAT 2: Planned Village

Post-Second World War, several residential projects emerged around the historical village, delineating its village periphery.

SAT 3: Village Extension

The majority of these residential zones were developed after 2015, within the last decade, or are currently underway.

CAT A: Natural Environment

The open countryside around the village contributes to the rural ambiance of the parish, mitigating the visual effects on the natural surroundings.

3.2 Area Type 1: Historical Village

3.2.1 Introduction

Scraptoft's historic core is protected primarily by the Conservation Area, which contains several buildings of historic significance. The Conservation Area helps preserve the village's rural character, architectural integrity, and layout.

Scraptoft has several Listed Buildings, mostly centred around Church Hill and Main Street. These include the All Saints Church (Grade I), Scraptoft Hall (Grade II*), and other historic structures like cottages and farmhouses. The Listed Buildings contribute to the area's architectural heritage, displaying a mix of medieval, Georgian, and Victorian architectural details

Scraptoft's historic core is intersected by Main Street, a key route connecting different parts of the village. Other smaller routes branch from it, creating a network that allows access. Public rights of way (PRoWs) around the village provide access to greenspaces and surrounding countryside, enhancing its rural feel and encouraging walking and cycling connectivity.

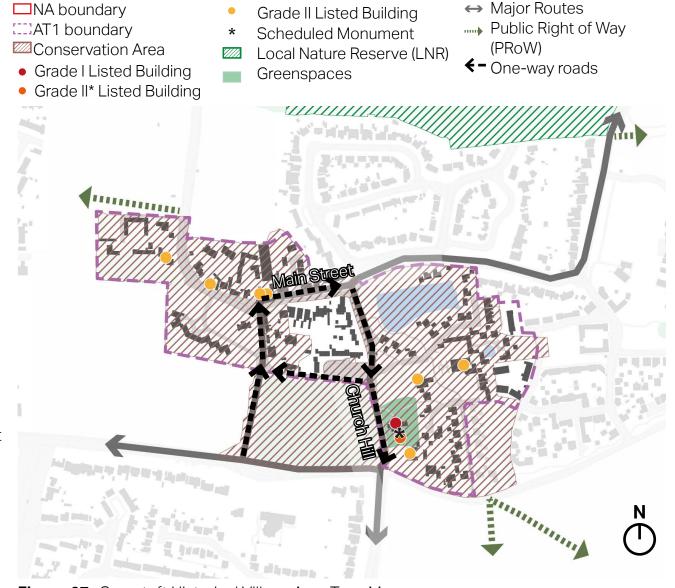


Figure 07: Scraptoft Historical Village Area Type Map

SAT 1: Historical village qualities and features		
CONNECTIONS	Movement networks	One-way system around Main Street, which serves as the primary route through the village, and beyond. Street layout is organic, reflective of the village's gradual growth over centuries. Narrow lanes and informal pathways weave through the village, creating a pedestrian-friendly environment.
Built form	Urban form and density	Low-density, dispersed layout. Arrangement is unplanned, creating an organic feel where buildings are clustered along narrow streets and around the village's primary landmarks. Density remains low, with much of the village surrounded by open farmland and green space.
	Block and plot sizes	Irregular, varying block sizes in shape and size due to the village's organic growth pattern. Plots range from larger parcels of historic farmhouses and cottages to smaller plots. Spacious plot sizes, with many properties featuring front and rear gardens.
	Building lines, boundaries and setbacks	Building lines are typically aligned close to the street, with varying but generally modest setbacks, with some cottages set close to the street and others positioned further back with small front gardens, contributing to a sense of enclosure along narrow lanes. Traditional low stone or brick walls as boundary in the Conservation Area, with hedgerows adding greenery and privacy. Some examples of iron gates or wooden fences are also present.
	Building scale and type	Generally uniform, with most buildings having pitched roofs, gables, and some chimneys, which add visual rhythm. Buildings are typically one to two stories, maintaining a low-rise profile. A mix of housing types, from historic cottages to larger, detached houses.
Nature	Green and blue infrastructure	Consists of green spaces, village greens, and small open areas, which serve as informal gathering spots for the community and provide recreational areas for residents.
	Open spaces and biodiversity	Open green spaces are often planted with trees and native plants, promoting biodiversity and attracting wildlife. The proximity of open fields and countryside helps integrate natural habitats within the village setting.
Activity	Uses and community	Primarily residential, with some community-oriented buildings, such as a church, and open green spaces.

3.2.2 Key Considerations and Good Features

Conservation Area

Scraptoft Conservation Area encompasses its core around Main Street, Hamilton Lane, and Scraptoft Hall areas. Key features include All Saints Church and the Edith Cole Memorial Park. These elements retain the village's agricultural and architectural heritage, enhancing its character.



Figure 08: Previous Scraptoft Hall converted to flats



Figure 09: New buildings reflect historical building features

The new buildings are designed around a well-maintained open space, using high-quality local materials and traditional architectural details to preserve the area's traditional character.



Figure 10: A good example of how to arrange new designs around historical buildings in the village

Well-designed and wellmaintained open spaces are provided around the historical buildings.

The original historic buildings

are preserved and adapted for

features carefully maintained.

modern uses, with most historical

Listed Building

Scraptoft has several listed buildings that show its rich history.

All Saints Church is an important landmark, with a heritage dating back to the 13th century, with typical architectural styles from the 13th to the 15th centuries.

Scraptoft Hall is a country estate listed as Grade II status, which was constructed in 1723 incorporating features from an earlier 17th century building. Nether Hall, another Grade II Listed Building, is an important feature dating back, to 1709 that exemplifies the style of the early 18th century.

Other Grade II Listed Buildings include Rose Cottage, Scraptoft Hill Farmhouse, the Screen and Gate, at Scraptoft Hall, and the Cottage.

These structures reflect Scraptoft's history and the dedication to safeguarding its historical buildings.



Figure 11: All Saints church



Figure 12: The war memorial in the Edith Cole Memorial Park

Design Code 1: Conservation Area and Listed Buildings

- Any development should respect the character of the surrounding built form within the Conservation Area, in terms of design, scale, massing, material and height.
- For new development, in particular, special regard needs to be paid to matters such as scale, height, form, massing, respect for the traditional pattern of frontages, vertical or horizontal emphasis, and detailed design matters, eg. The scale and spacing of window openings, and the nature and quality of materials, in the interests of harmonising the new development with its own building or site-specific context and with its neighbouring buildings and land in the Conservation Area.
- Any development must create areas of positive character by retaining as much historic fabric as possible and responding to prevailing characteristics in terms of street patterns, density and layout, built form, materials and details.

Unlisted Historical Features

The history of village is not only defined by its statutory landmarks but also by undiscovered historical treasures spread across the parish. They represent a time and provide insights, into rural living and enduring community traditions.

The Edith Cole Memorial Ground stands out as a landmark in the village area, a serene expanse enclosed by hedges. Scraptoft Rise stands out as another important feature. It's a road bordered by houses, from the century carefully crafted to complement the villages rich historical character.

Some courtyards behind the traditional buildings indicate the culture of the people before twentieth century. But some of the infill or windfall buildings in this area appear to have been built with little or no regard to the traditional features of the area as shown in figure 13. Such buildings which are without details that could be in harmony with the surrounding may lead to loss of identity.



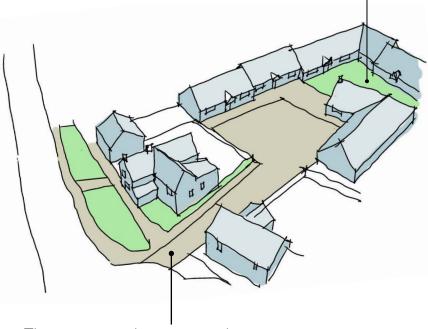
Figure 13: The new building is poorly designed for the Conservation Area because it does not include historical features like the windows and corner stones seen on the neighbouring building.



Figure 14: Some un-Listed Buildings in the village centre, featuring traditional local architecture features, along with the Listed Buildings, contribute to the village's local character.



The original local buildings, designed in a similar style, form a series of open areas or courtyards.



The access to the court yard can be narrow, gated by well design gateway buildings.

Figure 15: Good example of existing local court yard urban design arrangement

Design Code 2: Other historical assets

- New development in the Historical Village, within the curtilage of a traditional building, or in close proximity to, should ensure that the setting is not compromised.
- Development within the setting of a traditional building must give due consideration to its significance and ensure that the setting is protected or enhanced where possible.
- For new development, in particular, special regard must paid to matters such as scale, height, form, massing, respect for the traditional pattern of frontages, vertical or horizontal emphasis, and detailed design matters, eg. The scale and spacing of window openings, and the nature and quality of materials, in the interests of harmonising the new development with its own building or site-specific context and with its neighbouring historic buildings.

3.2.3 Infill development

Infill development is smaller scale development (generally fewer than 10 homes) within an existing village and developed context. This type of development commonly consists of three main types:

- Gap site development within a street frontage;
- Backland development; and
- Site redevelopment (for example, replacement of existing building/s).

The overarching aim of the Design Code is to promote context-sensitive infill housing of a high quality. This should help reinforce local character and create sustainable growth in Scraptoft.

Design Code 3: Infill Development

- Scale and massing: Building scale and massing should be in keeping with the prevailing development pattern and not be overbearing on existing properties or deprive them of light, including overlooking or overshadowing of both windows and amenity space.
- Enclosure: Building scale and position on plot should help to define and enclose the space within the street corridor or square to an appropriate degree based on the existing street section (building to building) and level of enclosure (ratio of street width to building height).
- Fenestration (window pattern):
 The positioning of windows should be in keeping with the predominant positive building character on the street or harmonise with adjacent buildings of good character.

- Access: Building entrances should address the street with a main access and main frontage.
 Corner buildings should address both streets with frontages but the main entrance could be on either subject to access requirements.
- Building heights: Building heights should be guided by the development's character area. A variable eaves line and ridgeline is allowed to create interest but variation between adjacent buildings should be a maximum of 0.5 storeys in general.
- Refuse and cycle storage:
 Access for bin and cycle storage
 should be provided with stores
 being integrated within plot
 boundaries. Snickets / alleyways
 should be considered for
 terraced buildings with four
 or more units in order to allow
 access to the rear of properties
 for cycle and bin storage.

- Parking provision: Parking should be integrated on plot where possible with parking spaces set behind the building line, generally to the side of plot being preferable. For narrow dwellings it is preferred to retain a small front garden with a boundary wall as opposed to an open hard surface parking space. Where parking is required to the front of the plot it should be afforded sufficient space and utilise hedgerows to screen cars from the street.
- Proportionate backland
 development: In the event
 of backland development,
 proposals should ensure that the
 density, scale and appearance
 reflect the immediate context
 (i.e. the original dwelling).
 Backland development should
 not be larger in height, massing
 or scale than the existing
 dwelling. The privacy, integrity
 and amenity of the existing
 dwelling must be protected from
 that proposed on the backland.

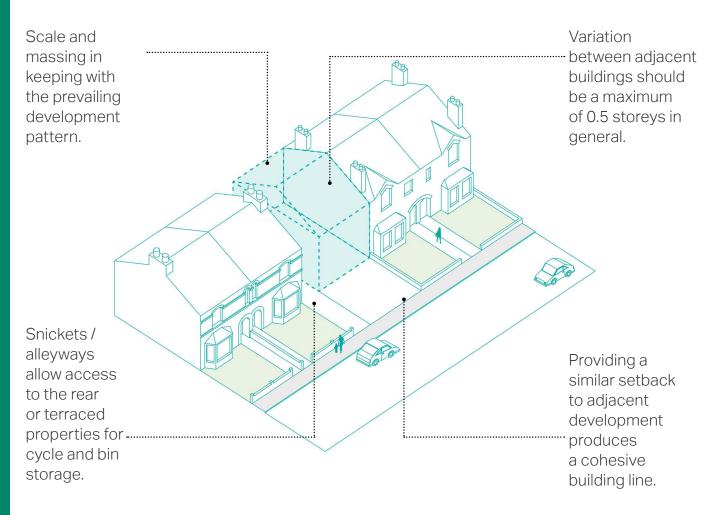


Figure 16: Contextual infill development diagram.

3.2.4 Street Parking in Village Centre

Scraptoft's Village centre experiences parking problems on Main Street, as there is a shortage of allocated parking spaces in the area. It results in traffic congestion and inconvenience for both locals and visitors.

Potential parking plans should harmoniously fit into Scraptoft village while also being mindful of the environment and local charm. The approach should include a selection of parking choices that are seamlessly incorporated into the overall design and arrangement. At present some streets, like Main Street are heavily impacted by randomly parked cars which leads to traffic jams in front of shops.

When deciding on parking arrangements it's important to think about the amount and location. The goal of designs should be to create appealing streets that offer parking while preserving the areas charm and visual beauty. Developments should prioritize having parking spaces for residents and guests.



Figure 17: There are no allocated parking spaces along Main Street



Figure 18: Example of potential allocated parking spaces along streets

Design Code 4: Main Street

- The Main Street forms part of the primary distributor but is arranged into a narrower one-way carriageway in the village centre. Careful monitoring should be considered to ensure it supports safe and efficient traffic flow.
- The Main Street features widened footways and a more intimate character, prioritising pedestrians. Regular reviews should assess how well these features enhance walkability and public space quality.
- The layout naturally slows traffic with clearly designated car parking spaces. How these measures balance traffic management and accessibility should be regularly evaluated.

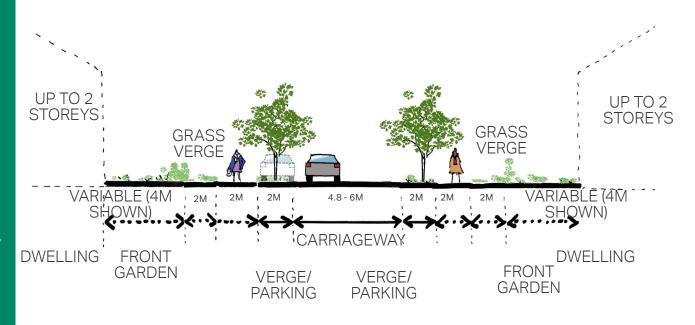


Figure 19: An indicative of potential street section arrangement that can be considered

3.3 Area Type 2: Planned Village

3.3.1 Introduction

The planned village area type forms a transition zone between the village's historic core and the surrounding countryside. This area exemplifies a semi-rural residential landscape, where the dwellings are interfacing with open fields, hedgerows, and occasional farm buildings.

To the western side of Station Lane, close to the village centre, there is a mix of low-density residential development and green spaces, creating a gradual shift from rural farmland to the east of Station Lane to the village settlement. The area north of Beeby Road forms an interface with the Scraptoft Local Nature Reserve (LNR), consisting of habitats including a pond, semi-improved grassland and mature hawthorn scrub.

This area type's village edge character offers both countryside views and a sense of openness, while newer residential pockets integrate with existing rural patterns.

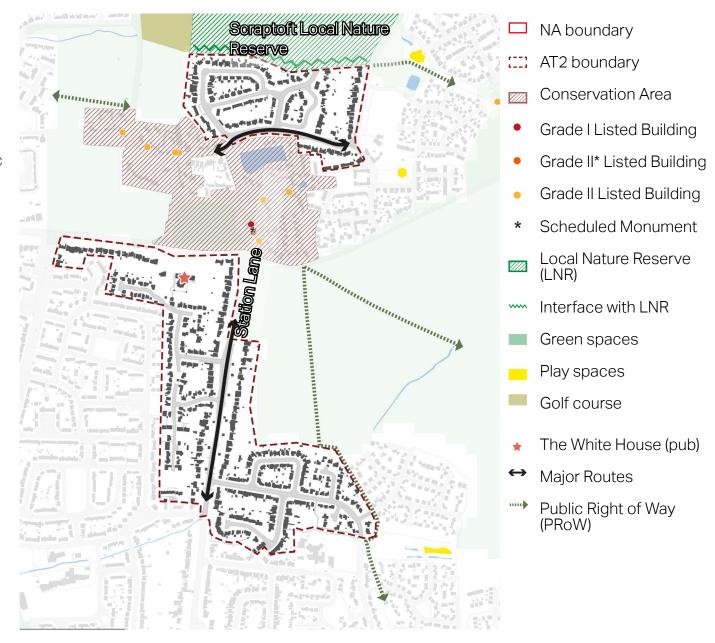


Figure 20: Scraptoft Planned Village Area Type Map

SAT 2: Planned village qualities and features			
CONNECTIONS	Movement networks	Mainly consists of internal streets and pedestrian paths that provide clear connectivity while maintaining a village-like character. Main roads, like Beeby Road and Station Lane, serve as primary access routes.	
BUILT FORM	Urban form and density	The urban form is organised and cohesive, reflecting a more modern layout. This area is generally low- to medium-density with consistent building heights and a layout that balances open spaces with housing.	
	Block and plot sizes	Block sizes are relatively uniform, with organised arrangements of plots that emphasise privacy and defined spaces. Individual plots are medium-sized and suitable for detached and semidetached homes, with ample space for front and rear gardens.	
	Building lines, boundaries and setbacks	Building lines in this area are consistent, with homes typically set back from the road to allow for small front gardens and driveways. Boundary treatments are typically low brick walls, picket fences, or hedgerows. Setbacks are uniform, creating a structured streetscape where houses are positioned in relation to one another, establishing a cohesive village-like appearance.	
	Building scale and type	Most structures are one to two storeys, these modest heights preserve views of the surrounding countryside and ensures the area integrates visually with Scraptoft's historic core. Primarily composed of detached and semi-detached houses, with some terraced homes in select areas providing variety.	
NATURE	Green and blue infrastructure	Green spaces, tree-lined streets, and private gardens contribute to the greenery of the area type. Green buffers between homes and the open countryside promote biodiversity, while retention ponds or drainage channels are used to manage storm water.	
	Open spaces and biodiversity	Dedicated open spaces and landscaped communal areas that provide recreational opportunities and promote biodiversity. Proximity to agricultural fields and countryside further enriches biodiversity, blending the developed area with the surrounding natural landscape.	
ACTIVITY	Uses and community	Predominantly residential, including communal spaces, playgrounds, and walking paths, which encourage interaction among residents and foster a community atmosphere.	

Table 04: Identify the Area Type themes

3.3.2 Key Considerations and Good Features

Lack of local Identity

The core of Scraptoft maintains its character; however the surrounding areas seem to blend into the landscape losing local traditions with the villages rich history and individual identity.

The planned village areas are predominantly filled with the late 20th century residential projects that do not showcase any distinct local character or traditional elements. These modern structures prioritise functionality and consistency featuring brick exteriors and standardized designs reminiscent of areas in the UK.







Figure 21: Simple red brick buildings with pitched roofs can be found in many England towns and villages, lack of local identity

Cars have the potential to dominate the streetscape, given that nearly every home features a long front garden.



Figure 22: Example of existing arrangement of typical residential streets in the Area Type

A typical residential street in the UK often features front gardens measuring 5–7 metres, accompanied by 2-metre-wide footpaths on either side of the road. Such layouts are prevalent across England but often lack a distinctive local character.

Design Code 5: Enhancing Local Identity

- New development should emphasis traditional architectural styles, such as brick facades, pitched slate roofs, windows, and dormers, to seamlessly blend with Scraptoft's traditional village aesthetic.
- New development should preserve original details in Conservation Areas, retain and restore features like timberframed doors, metal railings, and proportions of sash windows using traditional materials, maintaining the historic character of scraptoft.
- Local greenery in landscaping should be reflected: use native plants, gravel or brick pathways, and low stone walls. Natural hedges and rural-style fencing enhance cohesion with Scraptoft's green village environment.

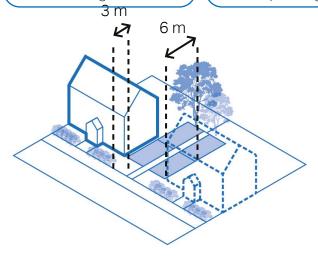
Design Code 6: Car Parking Solutions

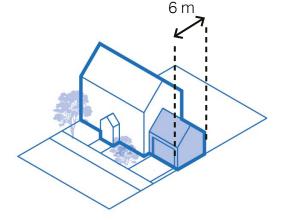
Parking areas are a necessity of modern development. Parking provision should be undertaken as an exercise of placemaking.

- 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;
- When needed, residential car parking can be translated into a mix of on-plot side, front, and, garage, complemented by courtyard parking;
- For family homes, cars should be placed at the side (preferably) or front of the property. For small pockets of housing, a rear courtyard is acceptable;
- 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.

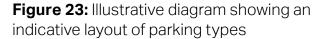
3-metre minimum front garden should be provided in front of any new dwellings. The minimum of 6 metre should be allocated to the length of side parking

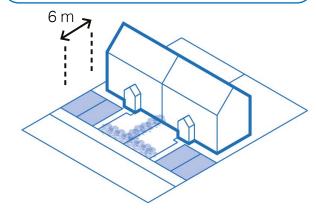
The minimum of 3.6 x 7.2 metre should be allocated to the size of garage





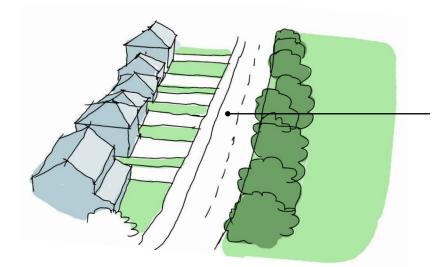
The minimum of 6 metre should be allocated to the length of on-plot parking

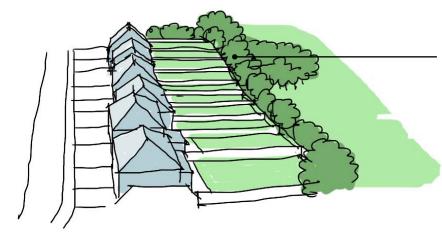




Design Code 7: Frontage to natural environment

- Pathways and green corridors must be planned to link developments, with the neighboring countryside so that the public can easily access spaces without any barriers in the way.
- Materials should be sourced locally for building exteriors to blend in with the surrounding scenery and create a shift, from city to countryside areas.
- New buildings should be arranged in harmony, with the natural land formations to preserve the landscapes integrity and enhance the views of the countryside.





Many houses have large front gardens and a footpath along only one side of the road, while the other side, often facing the countryside or open spaces, lacks a footpath. This setup does not encourage residents to explore or enjoy the natural surroundings..

The rear gardens act as a natural environment frontage but lack proper access to the countryside. They are not inviting and do not encourage residents to engage with the natural surroundings

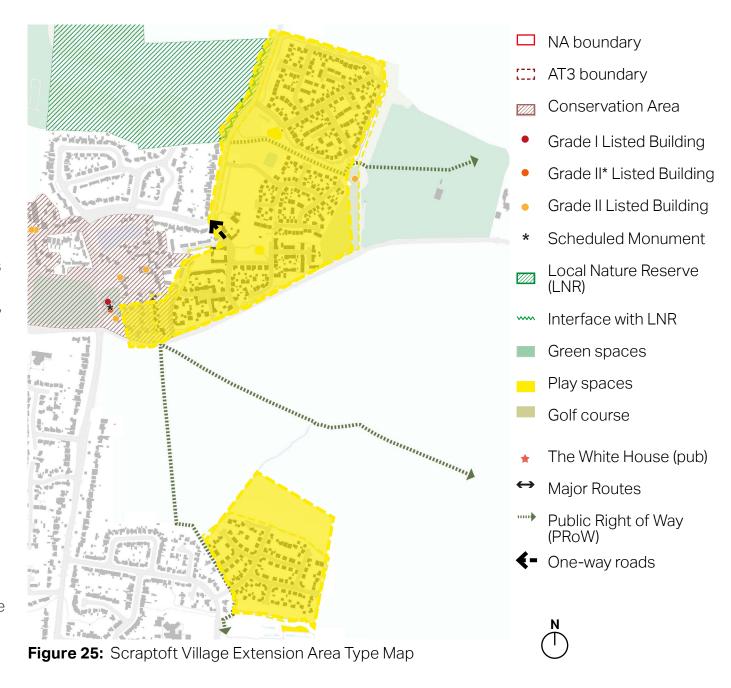
Figure 24: Example of existing arrangements to natural environment frontages, less positive arrangement between communities and natural environment

3.4 Area Type 3: Village Extension

3.4.1 Introduction

The Village Extension area type, located east of Beeby Road and along Spencer Clarke Road, represents a planned expansion of the original village to accommodate new residential development. This area is designed with a blend of modern housing and open spaces that echo the architectural styles and layout principles of the historic village core, fostering continuity between the old and new sections of Scraptoft.

The area emphasises walkability, green spaces, and connectivity to the existing village. Streets are organised to create a neighborhood feel with pedestrian pathways and cycling routes that link back to the village centre, ensuring that new residents have convenient access to local amenities. The area includes a mix of detached and semi-detached homes with green infrastructure, such as landscaped communal areas and natural drainage features, that support both recreational use and biodiversity.



SAT 3: Village extension qualities and features		
CONNECTIONS	Movement networks	Main access points are via Beeby Road and Spencer Clarke Road, which connect this new development with central Scraptoft and surrounding areas. Consists of residential streets with slow-speed limits, promoting pedestrian and cyclist-friendly routes. A short one-way at the community hub.
Built form	Urban form and density	Medium-density, balancing residential needs with green space and ensuring a cohesive appearance with the original village layout. Buildings are arranged to create distinct neighborhood clusters, which help maintain a village-like scale and character while accommodating a larger number of residences.
	Block and plot sizes	Block sizes are relatively uniform and compact, supporting the medium-density layout. Plot sizes are moderate, with each residence having a defined plot that includes a front and rear garden space. Detached and semi-detached homes dominate, with larger corner plots for certain properties.
	Building lines, boundaries and setbacks	Building lines are consistent and follow a setback that allows for front gardens or driveways. These setbacks provides sense of structure and rhythm. Boundary treatments include low hedgerows, wooden or metal fences, and occasional brick walls.
	Building scale and type	Generally two stories high and medium-sized dwellings, which aligns with the scale of Scraptoft's traditional residential areas. Primarily detached and semi-detached houses, with a few terraced rows in select spots to offer housing variety.
Nature	Green and blue infrastructure	Integrates green infrastructure such as tree-lined streets, landscaped public areas, and private garden spaces. Green corridors run along certain routes, enhancing aesthetic appeal and supporting biodiversity by providing habitats for local wildlife.
	Open spaces and biodiversity	Small parks, communal gardens, and grassy areas dispersed throughout to provide accessible recreational spaces. Landscaping often includes native plants, hedges, and small trees, promoting biodiversity by creating habitats.
Activity	Uses and community	Primarily residential land-use, while also offering community spaces, such as playgrounds, small green areas, and shared paths. The area's design encourages community building through neighborhood clusters and access to both private and shared green spaces.

3.4.2 Key Considerations and Good Features

Cycle routes

The cycle routes in Scraptoft are deficient in terms of visibility and demarcation. There is a pressing necessity for these pathways to be distinctly segregated from vehicular lanes to ensure the safety and security of cyclists. It is encouraged to enhance all existing cycle routes incorporating segregated footpaths and cycle lanes along streets. This will not only bolster the use of eco-friendly transport modes but also enhance the accessibility and connectivity of the local transport network.

Based on best practice and Leicestershire Highway Design Guide(2021), following design codes are suggested:

Design Code 9: Cycle Routes

- Connectivity: Cycle routes should integrate seamlessly with pedestrian and vehicular networks, ensuring access to key destinations within 5 km.
 Shared paths must be at least 3 metres wide, with clear markings to avoid conflicts.
- Safety: Routes should ensure visibility of 25 metres at junctions, feature lighting for night use, and maintain gradients below 1:20 for accessibility.
 Priority crossings must enhance cyclist safety.
- Sustainability: Use permeable surfaces for drainage, incorporate green buffers for separation, and align designs with Scraptoft's landscape.
 Native vegetation and aesthetic integration should reflect local character while supporting ecological balance.



Figure 27: Concept of segregated cycle route



Figure 26: Short sections of cycle routs are marked in the area, without continuity

Relatively informal arranged buildings with short front garden, 1-2 metres deep, along roads with footpath on both sides, sometimes with 2m side green verge; Road users are separated from pedestrians.

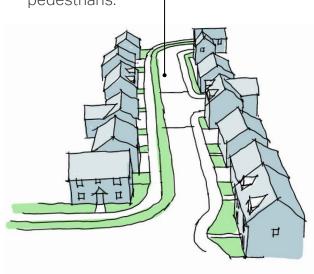


Figure 28: Example of arrangement of streets in Village Extension; cycle routes could be cooperated where possible for future development based on such design



Figure 29: Photo of existing non-vehicular routes in the area



Countryside and open space frontage

Scraptoft village has a coherent structure in the sense that the built-up area is connected with green areas as well as countryside. Among such exemplary streets there are Lady Jane Walk and Corah Close where houses were built in line with the plots so that they would face the green spaces. Next to Mitchell Grove, there is a play ground provides convenience for people to engage in physical activities and recreation, at the same time enhancing the rural character of the place. These arrangements are good examples of effective urban design that enhances the beauty and increase quality of life in Scraptoft.



Figure 30: A view of good example of arrangement of natural environment frontages

The buildings are arranged in a relaxed, informal manner, allowing for views of open spaces that help maintain the rural character. Front gardens and roads, including shared surfaces, are well-defined with clear boundary treatments.



Well-kept open spaces with footpaths create a welcoming atmosphere and serve as a natural buffer between the countryside and the village.

Figure 31: Good example of arrangement of natural environment frontages





Figure 33: A view of good example of arrangement of open spaces frontages

The area is defined by well-organized buildings that face open spaces, creating a central feature of its character.

Figure 32: Good example of arrangement of open spaces frontages

Design Code 10: Natural environment frontage:

- New development should maintain low-density layouts, using traditional materials and designs that reflect Scraptoft's rural heritage. Preserve existing hedgerows and mature trees to blend development with the countryside.
- Integration with Nature: New developments should include green buffers, such as treelined streets and open spaces, connecting seamlessly to the surrounding countryside. Incorporate native planting and sustainable drainage systems.
- Safety and Quality: Design welllit, pedestrian-friendly streets like Lady Jane Walk, with traffic calming measures. Provide safe, accessible links to parks and natural areas, enhancing community well-being and local biodiversity.

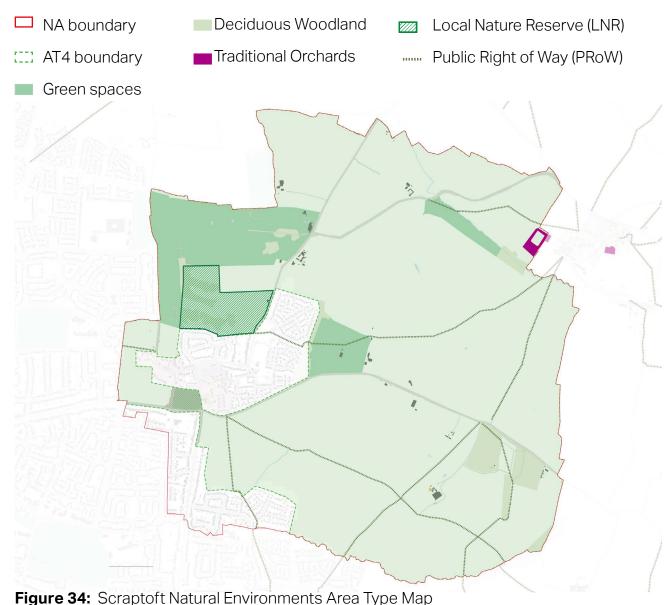
3.5 Area Type 4: Natural Environment

3.5.1 Introduction

The Natural Environment area type is characterised by a mosaic of greenspaces, agricultural fields, woodlands, traditional orchards, and a local nature reserve, offering both scenic landscapes and valuable ecological diversity.

The greenspaces surrounding Scraptoft play a vital role in maintaining the area's rural identity and creating a natural buffer that preserves the village's sense of enclosure and tranquility. Woodlands within the countryside, though scattered, provide critical habitats for native bird species, small mammals, and a variety of plant life, fostering local biodiversity. The area is well-connected through a network of Public Rights of Way (PRoWs) allowing residents and visitors to explore the countryside on foot or by bike.

A notable feature of the open countryside is the Scraptoft Local Nature Reserve, which offers a protected environment for flora and fauna while providing residents and visitors with a tranquil space for recreation and nature observation.



rigure 34. Scraptort Natural Environments Area Type Ma



Figure 35: Scraptoft's open countryside area is a picturesque and ecologically rich landscape that surrounds the village, reinforcing its rural character and providing important habitats for wildlife.

3.5.2 Key Considerations and Good Features

The Neighbourhood Area is host to both statutory and non-statutory environmental designations. This comprises the network of green spaces, water bodies, biodiversity habitats and other natural elements. All of these spaces need to be well maintained to ensure they continue to meet the needs of the local people, as well as the animal and plant species within its ecosystem.

The open countryside around the village is a defining feature of its landscape character, making it all the more important to preserve such areas where possible.



Figure 36: A view of good example of well maintained open spaces



Design Code 11: Environmental Designations

- Any development should enhance biodiversity and landscape characteristics. This will involve restoring and increasing the total area of natural habitats and landscape features, and provision of a clear landscaping scheme to demonstrate how new development will create positive green linkages and contribute to these assets.
- New development proposals must aim to create new habitats and wildlife corridors. Gardens and boundary treatments should be designed to allow the movement of wildlife and provide habitat for local species. Signs and safe crossing points for wildlife such as amphibians, ducks and hedgehogs should be considered as part of proposals.



Figure 37: A view of countryside

Design Code 12: Areas of Separation

- Green Wedges: New development must sustain and improve on green wedges to ensure that they continue to serve the purpose of dividing settlements, protecting the environment and providing areas for recreation. The developments should not compromise these areas in any way and must be kept open and undeveloped.
- Separation Gaps: New development must ensure that there is a clear physical distance between Scraptoft and other existing settlements in order to check village growth. New development should also contribute towards the enhancement of these gaps thus maintaining the individual identity of each settlement.
- Integration with Nature: New development adjacent to the green wedges should have green buffers and incorporate landscaping to ensure compatibility with the rural environment.



4. Parish Wide Design Guidance and Codes

This section supports decision-makers and designers when producing or reviewing planning applications in the NA. This applies to development in allocated sites, infill development and windfall development that may come forward, with a focus on proposed residential development. The guidance and codes do not apply to the Strategic Development Area.

It is acknowledged that there is not always agreement on aesthetic issues and opinions may vary. The following guidance and codes therefore allows for flexibility and design innovation, whilst ensuring that any new development is appropriate and complementary to the surrounding context.

To enable a clear design process, new development proposals must use the this section to ensure that development proposals enhance the setting and sustainability of Scraptoft, while not detracting from its context, local character and sense of place.

4.1 Guidance and code themes

The guidelines outlined in this chapter aim to apply to the whole of the NA, apart from the Strategic Development Area. These have been derived from current urban design best practice and are considered essential for a successful development.

These guidelines advocate the use of context for design cues. In this sense it is expected that a design proposal will make reference to different design elements such as layout of buildings, building envelope, materials, building forms, colours, roofs and fenestrations.

These guidance and codes were decided based on meeting with the Neighbourhood Plan Steering Group as well as the results complied through the engagement events. Each of these themes will be accompanied by relevant supported analysis completed through a desktop study.

Codes and guidance are arranged under the following pages.

4.2 Village structure and forms

Block Structure and Building Line

Building lines play a key role in defining the layout and the character of an area. There is a mix of semi-detached and detached housing typologies in Scraptoft. These lower density housing typologies contribute to the variety of building lines in the neighbourhood area.

Any development should ensure buildings are aligned along the street with their main facade and entrance facing it, where this is in keeping with local character. Building ancillary to domestic properties such as garages may be placed gable end to the road in keeping with historic outbuildings seen throughout the area. In Scraptoft there are two types of building lines that can be found throughout the area:

Design Code 13: Formal building lines

- Uniform building lines could be applied in the areas where higher density can be encouraged.
- 2 storey buildings with the same roof height could form the uniform roofline.
- Roofing materials and other features visible above the ridge line should be carefully considered to create uniform roofline that reflects the surrounding context of the site.

Figure 38: Linked building lines examples within Scraptoft

Design Code 14: Informal building lines

- Developments with informal building lines are usually characterised by larger plots, generously-sized gardens, or with greater provision of open space.
- The alignment of new building lines should respond to the context of surrounding landscape; provide gardens in the front and rear.
- This type of building line can be suitably applied where the development faces the open countryside, or open space or the edge of development.



Figure 39: Informal building lines examples within Scraptoft

Building Heights and Roofline

A comfortable variation in the size and scale of buildings - from single storey bungalows to 2.5-storey properties - can enhance local character. It provides variety and difference, as opposed to homogeneity. Houses within Scraptoft are mainly 1-2.5 storeys high, with a majority of 2 storey family houses. New development should be sympathetic in height and scale to its surrounding context. There are two types of building rooflines throughout Scraptoft that can be identified:

Type 1 (Uniform roofline)

Buildings with uniform skyline can be found in the village centre, due to general street types, building heights and minimal building articulation.

Type 2 (Varied roofline)

Buildings of various heights can be found throughout the parish. Such variety positively contributes to the character of Scraptoft.

Design Code 15: Uniform Roofline

- 3 or 4 buildings with the same roof height can form the uniform roofline.
- Uniform roofline can be applied in the areas where higher density can be encouraged.

Design Code 16: Building Height

- Within the village, buildings should not exceed 2 storeys in height, with a limited exception for some buildings in the village centre, which may be up to 3 storeys.
- Flat roofs on all new development should be avoided and on new buildings in the Conservation Area not permitted.

Design Code 17: Varied Roofline

- Buildings with various heights can be found in most Scraptoft areas.
 Such variety positively contributes to the character of Scraptoft.
- This roofline can be applied in the area where the development meets the countryside's edge to retain its rural character.
- Roofing materials, eaves, pitch, verge details, chimney stacks, or other features visible above the ridge line should be carefully considered. These features may be diverse to create a varied roofline, while still respecting local character.

Building Typology

A variety of approaches to housing typologies and layout of buildings should be explored to make the best use of land and create high quality, comfortable and attractive homes.

New development should enhance Scraptoft's character by achieving more interesting, varied and high-quality design and built form.

Depending on the housing needs, terraced, semi-detached and detached are acceptable. Design Code and precedents for each type are provided in this section.



Figure 40: Typical design styles of terraces.



Figure 41: Traditional styles of terraces

Design Code 18: Terraced Building

- Mainly 2 storeys for prominent or identified key buildings. Street scale needs to be considered. Wider primary routes should have larger scale buildings.
- Typically simple pitched roof volumes. Projecting elements should be considered on key buildings to help demarcate corners.
- Consistent setbacks should be used to provide well defined street compositions.
- Consistent ridge and eaves lines could be applied.

Design Code 19: Semi-detached Building

- Mainly 2 storeys, with 2.5 storey for key building locations.
- Typically simple traditional forms with the occasional projecting elements. Projecting elements should be considered on key buildings to help provide corner articulation.
- Consistent setbacks should be considered, with only a small variation between buildings to provide a more formal street composition.
- Buildings should strongly relate to the street, although a varied frontage is acceptable.



Figure 42: Typical style of detached houses



Figure 43: Typical style of semi-detached houses

Design Code 20: Detached Building

- Variable frontages could be achieved through more informal building placements between plots. Building massing to be more varied with greater use of hipped roof styles and projecting gables to create varied streetscapes.
- Building orientation is not required to conform to joint relationship with adjacent properties; however frontages should positively address the street.
- Variation permitted to the ridge and roof lines. Individual buildings should accommodate any topographical changes between units.

Building Density

This aspect is key to the neighbourhood area's sense of place. Consider how the density and housing layout, orientation of streets, blocks, terraces, buildings facades and roofscapes help to read or reinforce the sense of traditional building patterns and density in the local area.

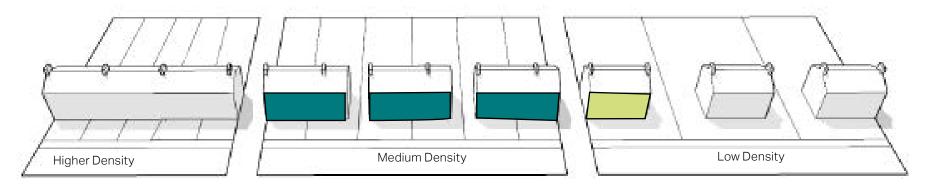
New development should draw upon high quality precedents for inspiration as to what can be delivered in terms of materiality, layout and design. Proposed density should reflect the varied context across Scraptoft, and appropriately respond to the existing topography and landscaping. This mixture will help to create variety which is responsive to the local area needs and surroundings.

Design Code 21: Density

- Appropriate housing density should be considered by site basis, with decisions informed by local context of the area. This might include design considerations, historic or environmental integration, local character or identified local need.
- The density of development should be sympathetic to the area to which it will extend.
- Low density units should be located to the edges of the settlement while higher density development should occur in the core and along primary routes.

New developments should recognise landscapes that have been deteriorated over decades. Recovery of lost landscaping and the improvement of existing green infrastructure should be a priority for every new development to meet the demands of providing net gains for biodiversity as per the NPPF.

Figure 44: Achieving density diversity across the village



Below are the different density types which could be adopted by developments:

- Higher Density includes terraced dwellings, town houses and apartments. Dwellings should be orientated to create overlooked streets, with a strong, active frontage and incorporate a formal arrangement of buildings with strong linearity which is softened by surrounding landscaping.
- Medium Density includes semi-detached dwellings are encouraged. Houses should be positioned and orientated to overlook the streets and town boundaries, whilst frontages along the internal primary roads should be active. A mixture of a formal and informally arranged dwellings will be required.
- Lower Density includes detached dwellings or bungalows, which is reduced in scale and proximity of adjacent dwellings.

4.3 Flood Resilience

There is no property in Scraptoft which falls within Flood Zone 3 which is area with high chance of flooding. New constructions should try to steer clear of Flood Zone 3 as much as possible. The surface water management should ensure that the design reduces the probability of flooding at the site and other properties further down the stream.

Due to the floodable zone of the area, it is recommended that developments should keep surface water discharge rates to below the greenfield. Where this is not possible this rate should be considered as the maximum.

Where possible, developments should incorporate Sustainable Urban Drainage Systems (SuDS). These systems employ natural processes and create areas for residents to engage in recreational activities that promote interaction with plants and animals.

Design Code 22: Water and Drainage

- Drainage should be considered early in the development planning and design process, along with other key considerations.
- Existing watercourses, existing surface water flow routes across the site, and existing drainage systems, must be taken into consideration and the drainage strategy should mimic natural drainage patterns as closely as possible.
- Adoption of permeable paving solutions instead of tarmac is encouraged. Gardens and soft landscaping should be maximised to reduce the overall area of impermeable hard surfacing that might increase surface water volumes and increase local flood risk. Further, green space can be used for natural flood protection e.g. permeable landscaping, swales etc.

- The installation of water butts within new residential developments is encouraged to collect rainwater from roofs and reduce the overall rainwater runoff impact of any development.
- Buildings should incorporate domestic water saving measures such as aerated taps, thermostatic mixer valves, low-flow showers, dual flush WCs and water-efficient white goods.

4.4 Treatment of Natural Environment

Woodland, trees and hedgerows have a significant contribution to both the built and rural environment of the Neighbourhood area. Their visual amenity helps define the rural and natural character of the wider Neighbourhood area. Development should therefore seek to enhance and protect groups of high quality trees, hedgerow and woodland.

Development should also aim to preserve and enhance trees and tree groups where appropriate. Selected existing trees along the parcel edges are to be retained to create a maturity of the place and define boundaries. Planting of trees is encouraged to help strengthen borders and to help maintain the strong edges of any development.

This Design Code acknowledges that many residents value the woodlands around the neighbourhood area as well as its Local Wildlife Sites and other open areas. The Design Code stresses the importance of green areas and aims to support the ways and means by which local residents can connect more with the natural environment, even within the cores of each of the settlements.

Design Code 23: Woodland, Trees and Hedgerows

- Developments should be designed to retain trees, particularly those of landscape and biodiversity importance, with a view to increasing tree cover.
- The spacing of development should reflect the rural character and allow for long distance views of the countryside from the public realm. Trees and landscaping should be incorporated in the design.
- In outer neighbourhood area, the rural character should be preserved and enhanced through the retention of grass verges, hedgerows and trees and new plantings to improve biodiversity.

- Species choice should be predominantly native but not completely; a 2:1 ratio would be appropriate to help build a tree population that supports UK wildlife but is also capable of responding to new disease and climate threats.
- Provision of parks, allotments, green links, open green spaces and any proposals by which local residents can connect more with the natural environment, even in the village centre, are encouraged by any potential development.

4.5 Open Spaces

Scraptoft has a number of environmental designations, open spaces and playing fields. Informal open spaces within defined settlement boundaries often play an essential role in the character of that particular settlement, with regard to setting and local amenity. It is important that these areas are identified, and development is resisted, in order to conserve settlement character.

Any development should consider these open spaces as an integral aspect of the development's layout. Where possible, any existing open spaces should be retained and enhanced, and developments should contribute to the enhancement of Scraptoft's open spaces. Any new development needs to provide a complement and appropriate level and quality of natural spaces.



Figure 45: Example of open spaces



Figure 46: Example of a pond and open spaces

Design Code 24: Open Spaces

- Development must not result in a net loss of biodiversity and should aim to achieve net gains. If exceptional and unavoidable circumstances lead to habitat loss or damage, mitigation and compensation must occur within the parish. The baseline for assessment will be the condition of the site at the time it was first allocated for development.
- Proposals should contribute to green infrastructure and support biodiversity by incorporating new wildlife habitats. Existing landscape features and historic vegetation should be preserved, with new provisions included wherever possible.











Design Code 25: Environmental Designations

- New developments should strengthen biodiversity and the natural environment. Biodiversity Net Gain (BNG) should be adopted as a requirement for all relevant development.
- This will involve restoring and increasing the total area of natural habitats and landscape features, and provision of a clear landscaping scheme to demonstrate how new development will create positive green linkages and contribute to these assets.
- Gardens and boundary treatments should be designed to allow the movement of wildlife and provide habitat for local species. Signs and safe crossing points for wildlife such as amphibians, ducks and hedgehogs should be considered as part of proposals.

4.6 Resilience to Climate Change

The Local Plan encourages creating buildings and spaces with reduced environmental impact, offering people opportunities to live lower carbon lifestyles. Buildings should be suitable for future adaptation, conversion or expansion. The sustainable design and construction of new buildings and extensions to existing buildings have an essential role in reducing running costs, improving energy efficiency, and reducing greenhouse gas emissions.

Integration of sustainability should be considered from the concept stage, considering passive solar heating, cooling and energy-efficient strategies. The energy hierarchy should be adopted through the implementation of passive environmental design principles (considering how the site layout can optimise beneficial solar gain

and reduce energy demands, e.g. insulation while reducing the risk of overheating), then specification of energy-efficient building services before the incorporation of renewable energy sources. The climate emergency has created the need to decrease our carbon footprint to netzero by providing innovative solutions to transportation (electrification) and the energy use of buildings.

Sustainable design incorporates innovative practices at all scales of design to achieve less impactful development footprints, whilst future proofing homes, settlements and natural environments.

Reducing the use of limited natural resources whilst increasing utilisation of local resources and sustainable natural resources can help to achieve this.

Design Code 26: Resilience to the Climate Emergency

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

- Avoid siting homes in high risk flood areas and mitigate increased risk of storms and flooding with sustainable drainage systems (SuDS). These reduce the amount and rate at which surface water reaches sewers and watercourses. This reduces pressure on valuable water sources.
- Eco-systems cannot adapt as
 fast as the climate is changing,
 leading to loss of biodiversity.
 Protecting and enhancing
 woodlands, watercourses
 and green infrastructure can
 combat this. Use street trees
 and planting to moderate and
 improve micro-climates for
 streets and spaces.

Street tree planting: SuDS designed into highway provision can provide dual-use benefits when integrated with street tree provision. Green roofs and walls: Provide capacity to hold and attenuate water run-off as well as ecological and leisure benefits.

Soakaways and filter drains: Shallow ditches and trenches filled with gravel or stones.

Rain capture: Water butts and other rainwater harvesting systems collect rainwater for use in gardens or for nonpotable uses reducing water consumption.

Basins and ponds: Attenuation ponds that are normally dry but fill during a rain event and then either store or gradually discharge water to the system.



Swales: Shallow channels that provide attenuation while also channeling water to other features such as ponds.

Retention tanks: In high density schemes water can be attenuated in underground structures.

Reed beds and wetlands:
Topography can be used to create
wetlands that provide attenuation
capacity as well as filtering out
pollutants and providing habitat
for wildlife.

Permeable surfacing:
Surfaces that allow
water to percolate into
the ground including
natural surfaces,
gravel and low traffic
volume engineered
road surfaces and
hard-standings in front
gardens.

Figure 48: Example of arrangement for resilience to the climate change

4.7 Sustainable Design

The Local Plan encourages creating buildings and spaces with reduced environmental impact, offering people opportunities to live lower carbon lifestyles. Buildings should be suitable for future adaptation, conversion or expansion. The sustainable design and construction of new buildings and extensions to existing buildings have an essential role in reducing running costs, improving energy efficiency, and reducing greenhouse gas emissions.

Buildings must be designed to facilitate future adaption integration of sustainability from the concept stage, with consideration of passive solar heating, cooling and energy efficient strategies. The energy hierarchy should be adopted through implementation of passive environmental design principles (considering how the site layout can optimise beneficial solar gain and reduce energy demands e.g. insulation, while reducing the risk of overheating), then specification of energy efficient building services before the incorporation of renewable energy sources. All new buildings must have integrated roof mounted PV panels or tiles.

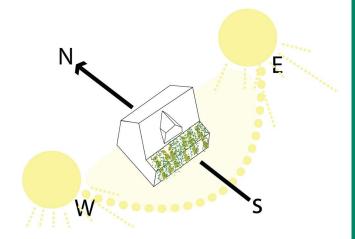




Figure 49: Precedent images - Examples of energy efficiency design

Design Code 27: Energy Saving

- The design of buildings for energy efficiency should be consistent with the Government's current zero carbon buildings policy as outlined in the NPPF and the Code for "Sustainable Homes and Energy Performance of Buildings" (MHCLG publication) or any replacement, with the aim to achieve the highest viable level of energy conservation.
- The measures taken towards a zero carbon development must be identified in a Design Statement.
- Where an energy performance certificate is required for a building the target SAP rating aimed for in the design must be shown in a Design Statement.
- Where buildings are designed to the standards in the "Code for Sustainable Homes and Energy Performance of Buildings", the anticipated star rating to be achieved under the initiative must be included in a Design Statement.

By default, new development should adopt a fabric first approach in line with the governments emerging Future Homes Standard, to attain higher standards of insulation and energy conservation.

- Reducing energy demand further by employing passive design guidelines for homes is desirable and can make some forms of development more acceptable to the community (window orientation, solar gain, solar shading, increased insulation, ventilation with heat-recovery).
- Maximise on-site renewable energy generation (solar, ground source, air source and wind driven).
- Consider building form and thermal efficiency: point-block/ terraced / semi-detached / detached all have different energy efficiency profiles. This must be balanced with local design preference and character considerations to ease acceptance for development.



Figure 52: Air source heat pump unit located to the rear / side elevation of a dwelling, so to avoid its visual impact on the dwellings frontage and wider streetscape



Figure 50: Precedent image - example of energy efficiency design

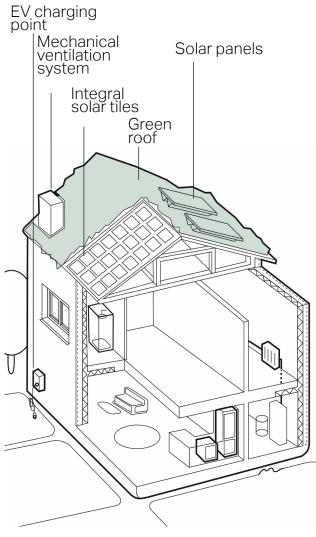


Figure 51: Cut-through diagram of an energy efficient home and its features

4.8 Design Quality: General guidelines when presented with a development proposal

As the design guidelines in this document cannot cover all design eventualities, this section provides a number of guidelines 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 guidelines 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.

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, the incorporation of renewable energy sources.

Street grid and layout:

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

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?
- Can any new views be created?
- Is there adequate amenity space for the development?
- Does the new development respect and enhance existing amenity space?

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)?

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?

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 (Continues

6

7

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 the 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?

Buildings heights and roofline:

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

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?

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?
- 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?

Building materials and surface treatment:

- What is the distinctive material in the area?
- Does the proposed material harmonise with the local materials?
- Does the proposal use high-quality materials?
- Have the details of the windows, doors, eaves and roof details been addressed in the context of the overall design?
- Do the new proposed materials respect or enhance the existing area or adversely change its character?
- Are recycled materials, or those with high recycled content proposed?

9_(Continues)

Building materials and surface treatment:

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

10

Car parking:

- What parking solutions have been considered?
- Are the car spaces located and arranged in a way that is not dominant or detrimental to the sense of place?
- Has planting been considered to soften the presence of cars?
- Does the proposed car parking compromise the amenity of adjoining properties?
- Have the needs of wheelchair users been considered?
- Can electric vehicle charging points be provided?

- Can secure cycle storage be provided at an individual building level or through a central/ communal facility where appropriate?
- If covered car ports or cycle storage is included, can it incorporate roof mounted photovoltaic panels or a biodiverse roof in its design?

11

Architectural details and design:

- If the proposal is within a Conservation Area, how are the characteristics reflected in the design?
- Does the proposal harmonise with the adjacent properties? This means that it follows the height, massing and general proportions of adjacent buildings and how it takes cues from materials and other physical characteristics.
- Does the proposal maintain or enhance the existing landscape features?
- Has the local architectural character and precedent been demonstrated in the proposals?
- If the proposal is a contemporary design, are the details and materials of a sufficiently high enough quality and does it relate specifically to the architectural characteristics and scale of the site?

- Is it possible to incorporate passive environmental design features such as larger roof overhangs, deeper window reveals and/or external louvres/ shutters to provide shading in hotter months?
- Can the building designs utilise thermal mass to minimise heat transfer and provide free cooling?
- Can any external structures such as balconies be fixed to the outside of the building, as opposed to cantilevering through the building fabric to reduce thermal bridge?



5. Next Steps

This document provides a series of design guidelines, design codes and recommendations for the Scraptoft neighbourhood area. The document is based on high-level reviews regarding the context, constraints, history, and characteristics of the village and surrounding countryside areas. The reviews suggest that any future development should be in line with the local characteristics and the existing context. The design codes provided within the document will guide future developments across the whole neighbourhood area to respect, conserve and improve the existing character, heritage, links, and villagescape features.

Scraptoft Parish Council is recommended to use this document to embed design policies within the Neighbourhood Plan to achieve the objectives set out in this document. Developers should also observe this document to understand the design quality they are expected to accomplish within the neighbourhood area.

We would like to thank the Scraptoft Neighbourhood Plan Steering Group for their efforts in assisting with the content of this report.

About AECOM

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