Breckland Design Guide

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Contents

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Introduction, Vision and Key Themes

Introduction, Vision and Key Themes

0.1 Raising standards of design

Breckland's communities and places face a series of challenges. The district needs to accommodate new homes to meet housing demand and needs, together with the workplaces, facilities, services and infrastructure that help to make places thrive. It needs to ensure that social infrastructure is in place to support everyday life and the health and wellbeing of communities. It also needs to make sure that new development and existing places meet the challenges of climate change and contribute towards addressing biodiversity loss.

To successfully address these challenges the district needs to change – to grow and evolve through new development and landscapes and through the evolution of existing ones. However, much of the district's rapid growth since the mid-twentieth century has contributed little to the identity of Breckland's places.

It is important to Breckland's communities to now raise standards of design so that future development is recognisably of its place, and contributes to its character and distinctiveness as it evolves over time.

High standards are expected of the design and implementation of new development, including their masterplanning, architecture, landscapes and ecology, infrastructure and sustainability.

0.2 Vision and key themes

This design guide sets out six priorities for the design of new development in Breckland. They target the key issues that were identified through the consultation process with a wide range of stakeholders who are interested in the quality of design and development in the district – see 0.5 for more detail.

The vision and priorities are derived from the National Design Guide and its ten characteristics. However, they are locally based, reflecting the issues that stakeholders feel to be most important, and emphasising the characteristics which are considered most critical to a rural district like Breckland.

The design guidance in the following chapters is based on this vision and these priorities. It addresses specific local issues and concerns, highlights instances where there is variation between the towns and rural settlements, and identifies specific local aspirations. The six priorities are explained on the following pages.

In Breckland, new development must create attractive, thriving and engaging places to live that contribute to local communities' quality of life, by expecting high standards of design that:

1 Complements and enhances its context

2 Follows inclusive processes of engagement

3 Helps to deliver better integration with nature

4 Encourages active travel and mitigates the impacts of vehicles

5 Creates beautiful places with distinctive local identity

6 Embeds climate-responsive design

Neighbourhood Planning Design Guides/Codes Checklist

Neighbourhood Design Guides/Codes should:

- Set out a vision for their area
- Build on the Vision in the Breckland Design Guide and apply to Neighbourhood area
- Engage with local community in visioning exercise: group walks, workshops, roundtable discussion.
- Consider how new development should be designed in the future in the area
- Identify key development issues in the area
- Identify other potential stakeholders to engage with, e.g. adjoining parishes, expert stakeholders
- Engage hard to reach members e.g., the young

1 Complementing and enhancing the context

Breckland has a rich heritage and distinctive landscapes. Development must take up the opportunities and address the constraints offered by each specific site and local context.

It should be inspired by the quality and character of the architecture, townscapes and landscapes of the district, which have been shaped over time.

It must relate positively and be well-integrated into its local context, drawing on positive examples from the surrounding area not poor quality ones. And it should be future-proofed so that new places and buildings will continue to contribute to the distinctive identity of places in the future as well as today.

2 Inclusive processes

Breckland's communities are vital to the success of its towns and villages, and they want to be involved in shaping the future. They know their areas intimately and their involvement can help development to knit well into a place.

Collaborative and open engagement helps to achieve good outcomes for everyone. That includes housebuilders, developers, design teams, communities, the Council and other agencies cooperating to deliver the vision for design quality.

Developers should engage with the local community at an early stage of proposals. Early pre-application discussions with the Council are another key ingredient for successful development.

Neighbourhood Planning Design Guides/Codes Checklist

Design Guides/Codes should start with a character analysis of the village/town

- Understanding of its character and design issues
- Key features of the area, which make it memorable e.g. Landscape features, particular buildings, street design- building line & set back and materials.
- Use the Breckland Landscape and Settlement Character Assessment to help you
- Site visits by a specialist or community led groups depending or resources and complexity
- The Character Analysis forms the basis of the design guide/code as it will identify different areas of the town/ village that are likely to have different priorities and Issues

3 Integration with nature

The gentle, lowland landscapes of Breckland contribute to the district's identity and create attractive settings for its settlements. Alongside their agricultural role, they hold significant ecological and community amenity value.

Priority habitat areas include reed bed, chalk rivers, heathland, lowland wood-pasture and ancient hedgerows that must be protected.

New development must integrate sensitively into the landscape, incorporating and celebrating existing mature landscape features. It must enhance wellbeing by providing better access to nature and lead to better outcomes for nature.

4 Encouraging active travel

Movement networks have shaped Breckland over history, and should continue to inform the layout and patterns of contemporary development.

Movement strategies should be influenced by the context, so that new development creates and maintains links to existing places. Even small developments can play a role in improving connectivity within, and to, nearby settlement.

Walking and cycling should be prioritised, whilst enabling the safe movement of vehicles.

Accessible and well-connected developments that are sited close to existing services and facilities will make for healthier, more characterful, more enjoyable places.

Neighbourhood Planning Design Guides/Codes Checklist

Guidance and requirements on landscape, nature and movement in neighbourhood codes can include

- front and back garden sizes and boundary treatments
- nature-friendly solutions such as bird boxes
- planting species
- soft landscaping requirements
- active travel routes that are in character with the area (e.g. on or off-road)

The requirements should be evidence-based, and therefore be developed after the analysis of the character of the local area.

5 Distinctive local identity

Responding appropriately to local identity and contributing to local character are key to raising design standards and creating attractive additions to places that look and feel part of Breckland.

The design of development should be inspired by the distinctive qualities of the place where it is situated. A different design response may be appropriate depending upon the qualities and sensitivities of each location – the aim may be to reflect, evolve or innovate local identity.

In all cases, new built development must be well-designed and built so that it functions well for all users and is attractive in the long-term and becomes part of the district's heritage in future.

6 Climate-responsive design

Breckland District Council has declared a climate emergency and is committed to ensuring that development in the district adopts more sustainable building practices. This has brought into sharp focus the need to rapidly reduce carbon emissions associated with the construction industry, and the operational energy required by buildings.

Climate-responsive design includes siting development in more sustainable locations, sustainable design of the built form and associated landscapes, and encouraging behavioural change in occupants. The Council will encourage aspirational sustainable design, including targeting Passivhaus standards, promoting greening, and on-site renewable energy generation.

© Robert Smith

Neighbourhood Planning Design Guides/Codes Checklist

When analysing the built form of the neighbourhood, it is helpful to have the following in mind:

- Is there a consistent building line and set back from the street?
- Are the buildings continuous (e.g. terraced or joined up shops) or are they detached?
- Are the buildings oriented to face the street or at an angle?
- Do views between the buildings create a memorable character?
- Are there building heights typical to the area?

How to use the Design Guide

3.6 Encoura 1 biodiversity

3.6: New development must demonstrate a bio sity net gain, and should integrate 2 s to encourage wildlife to visit, in and comfortably move through it.

Breckland is a rural area with an important agricultural sector as well as a fledging ecosystem services sector, both of which support the ambitions of the Environment Act 2021. All new development will need to provide a Biodiversity Net Gain Plan and demonstrate a mandatory 10% Biodiversity Net Gain through the Statutory Biodiversity Net Gain Metric.

The location of stra offsite Biodiversity Net Gain will be id by the Norfolk Local Nature Reco ategy and Breckland BNG local policies. 7

Proposals should consider biodiversity at the beginning of the design process to ensure it is prioritised alongside the needs of people in the new development

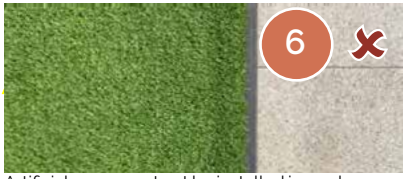
Enhancing biodiversity should be achieved by considering measures at a neighbourhood, street and individual home scale. Multi-functional green and blue infrastructure (for example wetlands and SuDS features) can be used to extend and enhance valuable existing ecosystems at a neighbourhood and street scale.

Innovative measures can be used to encourage insects and wildlife to use natural spaces.

Islands of planting in streets are a way of increasing biodiversity and also reduce surface water flooding, while still accommodating onstreet parking.

Streets should be planted to encourage biodiversity.

Planted corridors provide routes for wildlife.



Artificial grass must not be installed in gardens or communal open space in place of soft landscaping.

3.6 Enco ing biodive 3

Checklist:

How will the proposals maximise soft landscaping that is biodiverse?

How will the development encoura nature a e develop rom gardens to streets and open spaces? 8

Application Documentation:

- Biodiversity Net Gain Plan
- Biodi Metric Calcu 9
- Ecology reports and Habitat Assessments

1. Design topic heading
2. Design principle
3. Design principle number
4. Document chapters that are relevant
5. Positive examples
6. Issues to avoid
7. Guidance on how to achieve this design principle
8. Checklist for applicants, planning officers and committee members to help identify if proposals are achieving the design principles
9. Documentation where you might expect to find evidence in a planning application

NOTE: In the introduction, the right hand side boxes contain tips for preparing neighbourhood design codes, not checklists for applicants/planning officers.

Useful references and other guidance is included for each of the chapters in appendix 1.

Applications are required to comply with this guidance unless there is a strong justification, which must be set out in the planning application.

0.3 Purpose of the Design Guide

This guide aims to raise the standard of design quality in Breckland so that new development creates places that people enjoy using and feel pride in. It provides design guidance that supplements the policies in the Local Plan.

It also aims to give everyone involved in the development process more clarity and certainty about the planning process in Breckland.

It provides officers with a Supplementary Planning Document (SPD) for assessing the design of application proposals.

It gives developers and their design teams more clarity about what is meant by good design and how to achieve it, including when to engage with planning officers and communities.

It supports councillors with a way to assess whether application proposals achieve the key priorities for design in Breckland.

It informs communities about what to expect from development, and when they will be engaged in the process.

And it also sets a framework for parish/ town councils to prepare neighbourhood plan design codes.

0.4 Its scope

The guide provides design guidance for applicants making development proposals in Breckland district.

The introduction provides background and context for the guidance in terms of planning policy context, and the character assessment for the district. It sets out the vision and aspirations and the key priorities for good design locally.

Based on these priorities, Chapters 1-6 set out the key principles for good design in Breckland.

The Appendices provide supplementary detail for various topics.

The scope and detail required for a planning application submission varies depending on the scale of development proposed and the design stage of the project. In this design guide the different scales are defined as:

- Small – less than 10 homes (minor)
- Medium – 10-99 homes (major)
- Large – 100+ homes (major).

The guidance is relevant to all planning applications that come forward in Breckland, although it focuses primarily on residential-led development proposals as they are the most common; those in the market towns and village settlements rather than in rural areas outside settlements; and medium-scale rather than large-scale proposals that will be built out over a long period of time.

Guidance in this document should be complied with unless there is a strong justification for it not applying, in which case the reasons should be set out clearly in the planning application.

0.5 The evidence base

This design guide is based on evidence-based documents that have already been prepared, primarily the Breckland Landscape and Settlement Character Assessment (2022).

It is also based on desk-based reviews of research and other publications, to inform initial identification of design issues commonly facing local authorities. This included the NPPF Climate Change Review and the Future Breckland project.

A review of design issues encountered by planning officers also informed the contents of this guide.

Engagement with stakeholders in Breckland via a variety of methods also helped to shape it. This included an online questionnaire distributed to all town and parish councillors, and other stakeholders. Four online workshops were held with representatives of key stakeholder organisations. An in-person drop-in day session with two in-person workshops helped develop the vision statement and shape the guide's scope and contents.

Neighbourhood Planning Design Guides/Codes Checklist

Neighbourhood codes are part of the development plan, so need to be evidenced. Guidance for gathering this evidence has been included on previous pages.

Parish / town councils, through their assessment of key design issues in the area, will define which types of development they want a code to apply to.

They could for example provide guidance on non-residential uses like the design of shop frontages.

0.6 Who benefits from raising design quality?

Design quality is strongly influenced by four key influences:

- Planning policy and guidance;
- The site and its context;
- The client and design team's brief; and
- Community engagement.

A good practice design and planning process, underpinned by these four influences, is a strong foundation for achieving well-designed and beautiful places. A successful process is likely to be iterative rather than linear, with emerging proposals evolving in response to review and feedback.

It benefits both the community and the client/ design team by reflecting planning policy and guidance, which increases certainty about what development proposals will be acceptable. By incorporating meaningful community engagement, it also offers opportunities to build consensus and avoid potential conflict over proposals.

However, design quality is more than a good practice design process – more importantly, it is the end result of that design process – it is 'well-designed' places and buildings that are beautiful, that work well and that last.

Raising design quality benefits clients and design teams, who want to build the best that is economically viable for their target market and it also appeals to potential occupants.

It benefits local communities, who want their places to be attractive and distinctive into the future.

It benefits new occupants, who want to spend their lives somewhere that is attractive.

And it benefits the Council, whose aim is for the district to be a thriving and attractive place for people as residents, employers, employees, and visitors, both for now and in the future.

The design and construction of every development will affect some people directly and others indirectly. However, cumulatively, new development affects everyone in Breckland so raising design quality will benefit everyone.

0.7 How the guidance relates to the design process

The RIBA Plan of Work sets out the work stages for architects. This interacts with the planning process at several different points. The table on the following page shows how the design process interacts with the planning process, how this relates to the four key influences on design quality and it signposts the sections of the design guide that are relevant.

Breckland's communities will be key beneficiaries
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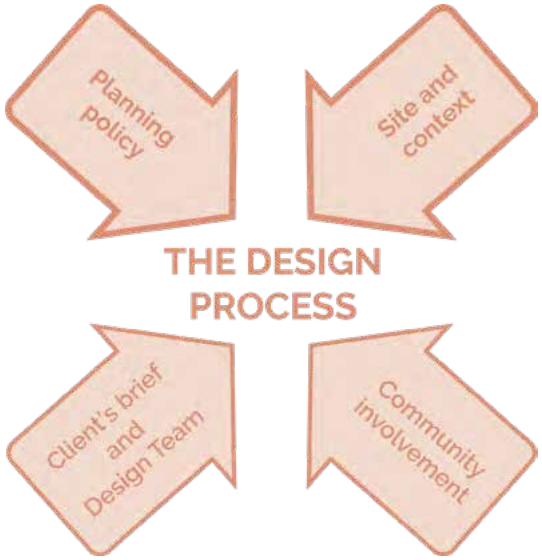


Neighbourhood Planning Design Guides/Codes Checklist

Neighbourhood design codes could include elements such as a 'beginner's guide' to the planning process, to help both applicants and parish and town councillors understand how it works and where they have the potential to influence outcomes.

How the guidance relates to the design and planning processes

Stage	Understanding influences	Concept / emerging proposals	Application proposals
Planning policy and guidance	Understand relevant planning policy including adopted design codes Understand vision for design quality (see 0.2). Pre-app meeting as appropriate (see 2.1).	Pre-app meeting(s) depending on scale of proposal (see 2.1).	Record of pre-application design process, and how planning policies/ guidance have been addressed, as part of the Design and Access Statement (DAS).
Understanding site and context	Analyse site in context (see 1.1). Appraise specific character (see 1.2). What is the aspiration for this area type? Are there any adopted design codes for it? Understand Character Assessment area-type the site falls into or adjoins (see 0.9)	Identify design concept. Use design guide principles to identify design concept, and shape/ refine emerging design proposals in relation to design brief.	Record how proposals have evolved in relation to site and context analysis as part of DAS.
Client and design team brief	Formulate and refine brief for development proposal. What is it aiming to deliver? Feasibility testing. Identify whether aim is to reflect, reinterpret or innovate local character. Engage with planning authority and community accordingly.		Detailed application drawings and record of how application proposals have evolved to be appropriate in form of DAS.
Community engagement	Speak to neighbours or involve wider community as appropriate (see 2.2).	Engage with neighbours and/or local community depending on scale of proposed development (see 2.2).	Record of community engagement findings as part of DAS (see 2.5).
Output	**Developed design brief** **(RIBA Stage 1)**	**Scheme concept design or scheme masterplan (RIBA Stage 2)**	**Detailed planning application (RIBA Stage 3) or** **Outline planning application (RIBA Stage 2)**

0.8 Achieving well-designed places through the planning system

The government's planning policies for good design are set out in the National Planning Policy Framework Section 12 (NPPF, 2021) and elaborated in the National Design Guide (NDG, 2021) and National Model Design Code (NMDC, 2021). The National Design Guide makes it clear that good design outcomes are the result of an integrated design process that takes into account a broad range of considerations.

The NMDC sets out a process for preparing detailed and specific design codes to control future change and development at the level of individual sites, areas or neighbourhoods, and/or districts.

Local planning policies are set out in Local Plans, which must be in accordance with national policy and guidance. They may be supported by design guides or codes, currently given status through being adopted as Supplementary Planning Documents (SPDs). The NPPF strongly encourages LPAs to prepare design guides or codes at an area- (district-) wide, neighbourhood- or site-specific scale.

Breckland's design policies are set out in the current Breckland Local Plan.

A number of policies in the current local plan make reference to design or design issues (see appendix 1 for resources, including a link to the local plan). The Design Guide has been prepared in the context of national policy and guidance and Local Plan Policies and it will be adopted as a Supplementary Planning Document.

The vision for good design that underpins the guidance was formulated through engaging with local authority officers and councillors, parish and town councils, other stakeholders and members of the community as outlined in 0.5.

Currently the Council is not preparing design codes to govern the process of change in any of the area types identified in Breckland through the Landscape and Settlement Character Assessment (see next page, and a link to the full document in appendix 1). However, in future, these may be produced and adopted as policy to manage new development in some or all area-types.

This guide is a key resource relating to design for all proposals in Breckland. However, it is also important to check other planning policy requirements that may apply to a specific site or area.

Thompson Village Hall won a Norwich and Norfolk Design and Craftsmanship Award
© Lucas Hickman & Smith

Community spaces can offer a range of benefits, such as a book swap here.

Neighbourhood Planning Design Guides/Codes Checklist

Neighbourhood design codes must comply with national and local planning policy.

They should refer to design policies in the current Breckland Local Plan.

They may explain what the design policies mean in the local area covered by the neighbourhood plan.

0.9 Breckland Landscape and Settlement Character Assessment

This section provides an overview of the findings of the 2022 Character Assessment, which provides a starting point for understanding the character of a site and its context. For more detail on each topic below, see appendix 1 for a link to the full Character Assessment.

Every settlement in Breckland has its own unique and distinctive identity, which is cherished by its residents and of value locally, across the district, or more widely. However different settlements also have many characteristics in common, shared by many areas of the market towns, or by different villages. The purpose of the Character Assessment is to identify these shared characteristics rather than those which are unique and distinctive to a particular settlement.

Overarching architectural and landscape character

Many settlements and buildings in Breckland are of historic and architectural interest, and display many of the characteristics of the local vernacular for that area in terms of materials, building forms and methods of construction. In some settlements, local identity has been diluted by 20th century and more recent development, which lack any local identity and could be from anywhere.

Within Breckland, local building materials vary according to the landscape, underlying soils and geology. In different places common materials may include red and gault brickwork, some with decorative features; knapped or unworked flint, sometimes in panels; timber post and truss frames and plaster; weatherboarding; with clay tiles and slate commonly used on roofs.

Local building forms vary too, depending upon construction methods. The characteristics of traditional timber framed buildings are generally different to traditional masonry buildings.

There is a variety of landscape types, including river valleys (including chalk river valleys), farmlands, and Brecks heathland/ plantations, each having its own characteristic landscape features and native planting species.

For most places in Breckland, their distinctive local identity mainly derives from their historic and vernacular development rather than their development post-WW2.

Timber frame with thatched roof, Garboldisham.

Red brick with pantiled roof, Mattishall.

Neighbourhood Planning Design Guides / Codes Checklist

When developing a local character assessment, parish / town councils should include both elements that are unique to their neighbourhood and typical elements.

Atypical elements can include churches, village greens, town halls and market squares. These are elements are memorable in a neighbourhood and are likely to be historic buildings or spaces.

Market Towns

The five market towns each have their own unique identities. However, there are also many common characteristics that are shared across all five towns. The Character Assessment has categorised these into eleven different area-types.

It analyses each area-type to identify its key characteristic features and qualities of its townscape, built form, landscape character and vegetation, hard landscape and boundary treatments. Refer to the Character Assessment for more detail.

In the market towns, some area-types contribute strongly to their distinctive identities and others have the potential to do so, depending upon their location and quality. The current and potential contribution of other area-types is more limited. There are examples of each existing area-type that work well and others that are less successful.

Radial route area-type example, Dereham.

Radial route area-type example, Attleborough.

Town centre area-type example, Thetford.

Town centre area-type example, Swaffham.

Formal suburban area-type example, Attleborough.

Neighbourhood Planning Design Guides/Codes Checklist

Parish and town councils can choose to categorise their neighbourhood into a series of 'area-types'. These can be based on the Landscape and Settlement Character Assessment area-types or develop a locally-specific set.

Identifying common characteristics, as well as positive and less successful examples within area-types can be a helpful way of identifying design issues to include in the code.

For example if there is an area of formal suburban housing that is particularly successful, elements such as the boundary treatments or planting could be used to develop requirements elsewhere.

Rural settlements

Every rural settlement in Breckland is different and has its own identity.

The Character Assessment has categorised these into different settlement types in three ways, depending firstly upon their origin, secondly their current morphology (or settlement pattern) and lastly their landscape traits. Refer to the Character Assessment for more detail.

The origins of most rural settlements are agricultural, so based around farmsteads, although with some examples based around grain- or water-mills, or turnpikes. Some villages grew up around their markets, while others were planned – either by estates or for other historical reasons. In many cases, the settlement forms and the character of villages today still varies according to these origins.

The current morphology (settlement pattern) of rural settlements includes nucleated single focus villages, with their core being based around a single focus, and nucleated polyfocal villages, which have multiple cores each based on a different point of focus.

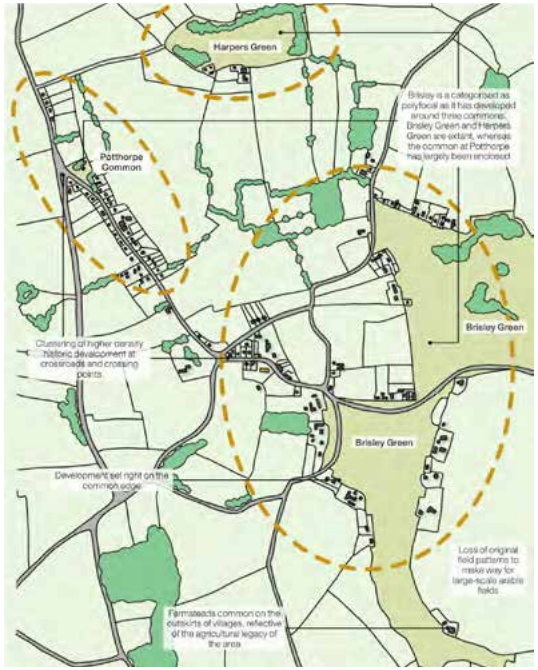
Rural row continuous villages have a core that is continuous and linear whereas rural row interrupted villages have a linear core that is broken up with gaps between built development.

Dispersed villages have no core and the settlement is spread out.

The landscape traits that influence the form of rural settlement are where the settlement is arranged around the edges of a green or a common.

The current morphology (settlement patterns) of villages is a strong influence upon their identity.

To identify the features that contribute to the character of each village settlement, a detailed character assessment may be carried out. This may identify its distinctive (or atypical) features, and also its shared (or typical) characteristics, using similar area-types to those identified for the market towns (adapted or extended as appropriate).



Example of a nucleated polyfocal village, Brisley.


Rural village character, as seen in Great Hockham.

Neighbourhood Planning Design Guides/Codes Checklist

After the analysis of area-types within the town / parish, it will be helpful to think about changes that might impact these area-types.

For example, if there is a development of a significant size within a village that is currently arranged around a single focal point (such as a village green or market square), is it preferable that new development creates a new focal point (such as a school or shop),therefore evolving the village into a new polyfocal settlement?

Or should the village remain as a place with only one focal point or centre?

0.10 Client and design team's brief

Design quality is heavily influenced by the client's aspirations and expectations (including financial), so it is important to embed aspiration from the very start.

The design team is usually responsible for developing and refining the client's initial brief although all of the project team need to be aware of it.

The design team should be carefully chosen to include someone with design expertise and relevant experience. Depending on the scale of development this would usually include an architect, masterplanner or urban designer with appropriate skills and experience.

The design team should also include sustainability expertise, to advise on energy and carbon emission reduction strategies and to carry out pre-application sustainability assessments.

Depending on the scale and location of the project, ecological expertise is also required to assess biodiversity and to design landscapes for net gain.

For larger projects, the team will need to include a full range of skills, for instance transport or heritage specialists.

0.11 Community involvement

Breckland's communities, through District Councillors, Parish and Town Councils, amenity societies and directly through individuals, are very interested in being involved in the development of the district, from early involvement in larger schemes down to the details of planning applications or conditions.

Local people may express their views about development proposals, but they are also an important source of local information about how a place works, based on their lived experience.

In some parts of the district, town or parish councils have taken on the management of open spaces and have developed specific requirements for doing so.

Guidance on how to involve communities in the design and planning process is set out in Chapter 2.

The contents of the client brief should include, as a minimum:

- the site, with details about its location, ownership, constraints. A map and land registry details if available;
- the type of development, size and capacity, use and range of functions it should accommodate;
- the quality and image of the development;
- sustainability and energy performance aspirations ; and
- budget and timescale.

Involving local communities during the design development of a project can help to raise design standards and de-risk the planning process.

Neighbourhood Planning Design Guides/Codes Checklist

Neighbourhood codes should encourage positive change, for example around sustainability and where design of the neighbourhood should work better.

1 Complementing and enhancing the context

Breckland has a rich heritage and distinctive landscapes. Development must take up the opportunities and address the constraints offered by each specific site and local context.

It should be inspired by the quality and character of the architecture, townscapes and landscapes of the district, which have been shaped over time.

It must relate positively and be well-integrated into its local context, drawing on positive examples from the surrounding area not poor quality ones. And it should be future-proofed so that new places and buildings will continue to contribute to the distinctive identity of places in the future as well as today.

1.1 Responding positively to the site and its context

1.1: Development proposals must demonstrate a positive response to the site and its context, based on a thorough understanding of the site and local area, and an analysis of opportunities and constraints. This should be carried out early in the project.

Well-designed homes and neighbourhoods respond positively to existing features and conditions, which requires an understanding of their site and context. This begins with thorough site analysis and identifying opportunities and constraints.

Site analysis forms a key basis for the Design & Access Statement (DAS) and therefore the planning application for a development. Understanding the site should start with visits to the site and surrounding area, as well as desktop research.

A suggested checklist of topics to include is below, but there may be other site-specific areas of analysis required. The extent of analysis and the findings should be discussed with the planning officer early in the process for applications that require a pre-app (refer to 2.1) and should be illustrated by diagrams and photos.

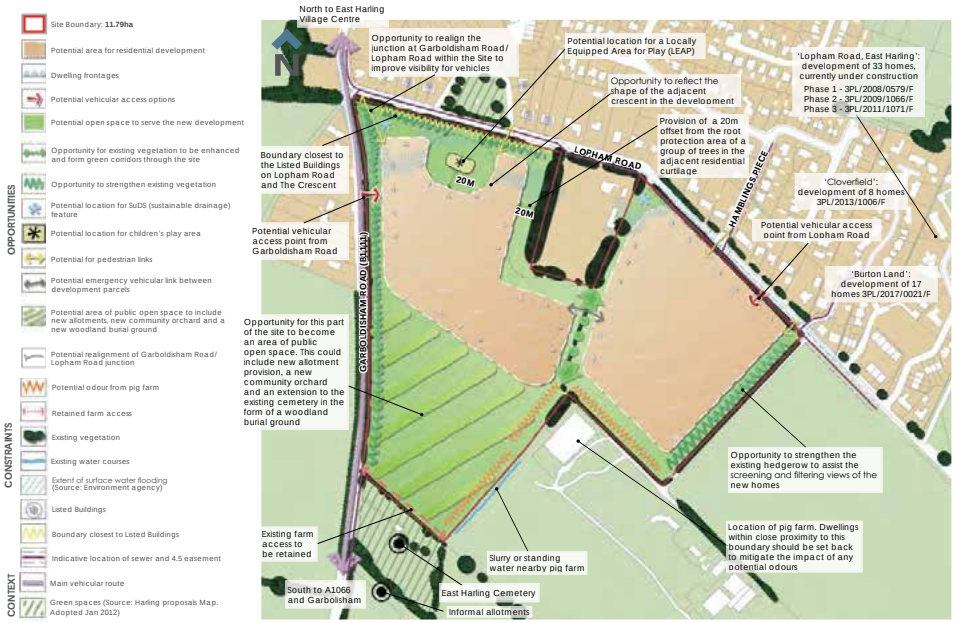
Where surrounding heritage assets will be impacted by development, applicants should analyse their significance and demonstrate how their development will respond appropriately.

Development must also address the constraints of a site. These may include noise, air pollution and flood risk, and the design should be developed to mitigate issues for the development's end users and the wider area. Where noise is a constraint to development adverse impacts on residential amenity should be avoided by siting dwellings away from the noise source.

Talking to local people is another important way of understanding the site and wider area. This is covered in **chapter 2**.

Site analysis checklist

- Surrounding built environment and amenities (including heritage)
- Local character
- Services / utilities
- Landscape
- Environmental factors such as noise or air quality
- Ecology / biodiversity
- Access / movement
- Planning policy
- Ground conditions / topography



Analysis plan showing site opportunities and constraints (rural context - East Harling).

1.1 Responding positively to the site and its context

Checklist

How do the proposals respond well to site features such as existing topography, landscape features (including water courses), wildlife habitats, existing buildings, site orientation and microclimates?

How have proposals mitigated constraints, such as water resources (quantity and quality), flooding, noise and air pollution?

Application Documentation:

- Site analysis - photos and plans
- Site concept plans

1.2 Contributing to local character

1.2: All development proposals in Breckland must demonstrate how they respond to positive aspects of local character. The first step is developing an understanding of local character and identifying the important positive features for the design of the development to respond to.

Applicants should start with an appraisal of the site and surrounding area. The Breckland Landscape and Settlement Character Assessment should be used as a reference for further information on important character attributes.

The Landscape and Settlement Character Assessment can be accessed from a link in Appendix 2. It is summarised in the introduction, and introduces a number of area-types such as 'town centre', 'formal suburban' and 'leafy detached' for the market towns, and a number of village types for the rural settlements, such as 'nucleated' or 'dispersed'. These area-types draw out common characteristics of similar areas across the district. However there are local variations within each area-type, so it is important to also understand the specific local character in relation to each site.

Most places have some positive features that are valued by local communities and make them feel pleasant. New development must respond to positive aspects of local character to maximise its potential to integrate well into existing settlements, both rural and urban. It must not respond to least good examples in the area.

Furthermore, it is not enough to say that 'local character is not positive, so any new development will be an improvement'. Instead, proposals must look to positive aspects of the area that can be drawn upon, for example its landscape character as well as architectural and townscape features, and respond to these.

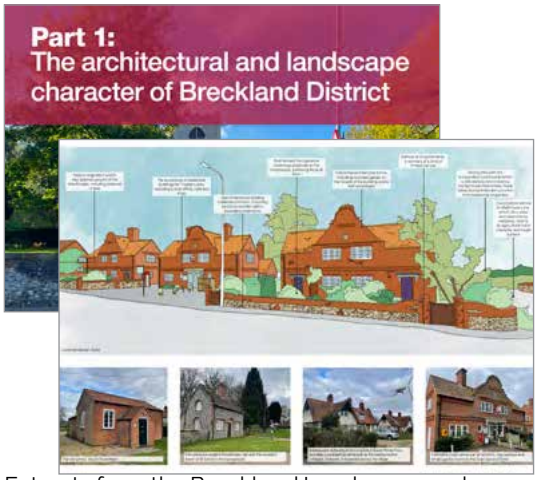
Positive elements of character may include one or more of elements from the following: townscape relationships, built form, landscape character and vegetation, hard landscape, and boundary treatments.

In the market towns, different area-types make different contributions to their distinctive identities.

The town centre area-types contribute the most strongly at present. Some other area-types have potential to make a strong contribution include town centre fringe areas, radial routes, leafy detached suburbs and the river valley in Thetford. Other area types contribute in a more limited way, although they have the potential to contribute more positively. These are formal suburb, informal suburb, inconsistent suburb, suburban bungalow, experimental suburb and out-of-town industrial/retail area-types.

In the rural settlements, both the traces of origin character and the current settlement pattern (morphology) contribute strongly to the character, there is potential to enhance the contribution made by all area-types through high design standards of new development. See Chapter 5.

New development can reflect local distinctiveness of an area, such as this addition to the village centre in East Harling.



Extracts from the Breckland Landscape and Settlement Character Assessment (2022).

1.2 Contributing to local character

Checklist

How do the proposals respond to positive local character?

How will the proposals create a place with a locally inspired or otherwise distinctive character?

Application Documentation:

- Assessment of local character

1.3 Integrating development into its surroundings

1.3: Development must be well-integrated into its surroundings so that it contributes to the wider area and helps to create successful new communities.

This is about making the most of the site opportunities and is key to the success of new development. A well-integrated development will feel like an established part of the settlement whether it is within a town or village. It should allow residents and the wider community to come and go easily, meaning that local services and facilities are easy to reach, in so doing the development becomes an asset to the wider area.

The principal ways to achieve this are through:

- landscaping which integrates with the surrounding area and enhances local wildlife and nature. This helps new development to blend in and not stand out in a negative way - more in Chapter 3.
- ensuring the development is physically well-connected to the surrounding area, with good pedestrian and cycling connections as well as for cars so that residents and visitors can reach local services and destinations easily - more in Chapter 4.
- siting, densities and buildings that complement and enhance local character. This may include traditional and contemporary buildings and can be achieved in a number of ways including building proportions, layout and materials - more in Chapter 5.

A contemporary build reflects the form and materials unique to the local area, as seen in this example in Thetford.

Denbury Estate Mattishall

Characterful development, Saham Toney.

Development responds the character of the surrounding area. The Gatherings in Great Hockham. © Ingleton Wood

1.3 Integrating development into its surroundings

Checklist

How do the proposals include landscape features that complement the site context?

How are the proposals well-connected to the surrounding area?

How does the siting, density and building design complement and enhance local character?

Application Documentation:

- Landscape strategy
- Access and movement
- Site layout, density and massing

1.4 Future-proofing development

1.4: The design of new development should ensure it is future-proofed. This means embedding inclusive design and sustainable principles into projects, so that new places and buildings are resilient and attractive for all users into the future.

All development must look forward to the next 30 years. This starts with analysis to help identify the most effective strategies for a design that is climate-responsive and nature-friendly, for instance in designing:

- Comfortable buildings that are warm in winter and do not overheat in summer– more in Chapter 5;
- Nature-friendly development that encourages biodiversity and provides habitats for wildlife. Breckland has many locally and nationally important species and habitats, which development needs to help protect – more in Chapter 3;
- Buildings and neighbourhoods that manage water responsibly. Parts of Breckland suffer from flooding and drought issues, and new development should minimise water consumption and be flood resilient with well-designed drainage systems, including natural features where possible – more in Chapters 3 and 6.

To be effective, planning for a changing climate and building in resilience begins at the earliest stages of design and is not an afterthought. Addressing climate resilience early in the design process will also help make sure development can meet future standards for energy efficiency and carbon emissions without the need for retrofitting.

Today what people value about the built character of Breckland tends to be the district's historic buildings. New buildings and places need to be built to last and designed beautifully so they contribute to the district and are valued in the future.

Future-proofing development also means designing for all users over their lifespan. Inclusive design principles should be embedded from the outset of the project to

Chapter 6 focuses on climate responsive design. See appendix 1 for further resources and references relating to this chapter.

New development must manage water consumption and surface water drainage responsibly. Photo © Graeme Taplin

Example of eco house integrated into its natural surroundings, Breckland
Photo © Richard Hanson for Jeremy Stacey Architects

1.4 Future-proofing development

Checklist

How are the proposals high quality and designed to last?

How do the proposals demonstrate inclusive design principles?

How is the development nature-friendly?

How do the proposals demonstrate responsible use of resources?

Application Documentation:

- Sustainability strategy
- Flood assessment
- Drainage strategy
- Inclusive design and access for all users

2 Inclusive engagement processes

Breckland's communities are vital to the success of its towns and villages, and they want to be involved in shaping the future. They know their areas intimately and their involvement can help development to knit well into a place.

Collaborative and open engagement helps to achieve good outcomes for everyone. That includes housebuilders, developers, design teams, communities, the Council and other agencies cooperating to deliver the vision for design quality.

Developers should engage with the local community at an early stage of proposals. Early pre-application discussions with the Council are another key ingredient for successful development.

2.1 Relating design and pre-application processes

2.1: Applicants are expected to meet with the planning authority at pre-application stage for certain types of applications, to seek feedback on their emerging proposals for development.

Pre-application advice would not be required for householder applications. It should be sought for all major applications, any applications contrary to policy, applications in Conservation Area or setting of Listed Building, applications under NPPF paragraph for isolated homes in the countryside, and for any innovative design projects or uses.

The number of pre-application meetings required will depend upon the scale and sensitivity of the proposed development and will range from a minimum of one meeting for small developments, to a sequence of meetings planned out in a Planning Performance Agreement for large developments.

Applicants should meet with the planning authority to organise pre-application meetings early on in the design process of a project.

The pre-application process will help applicants understand relevant planning policies and material considerations relating to their site.

It is an opportunity for the applicant to communicate their design process and decisions, and to have a constructive conversation with the planning authority.

A comprehensive pre-app service will save time and resources for a project overall as it also helps to ensure that all interested parties are clear about the key issues that will need to be resolved by the application process.

It is also an important opportunity to identify potential impacts of the development that need to be mitigated through the design of the proposals and / or planning conditions.

Developers should be responsive to this process and use it constructively.

Initial design sketches to illustrate the evolution of a design and design progression © Atelier 63

The pre-application process is an opportunity to identify key issues that need to be resolved by the applicant.

2.1 Relating design and pre-application processes – activities and checklists

Checklist:

How have the proposals responded to feedback received during the pre-application process?

Application Documentation:

- Design evolution - sketches and diagrams

2.2 Engaging local communities

2.2: Applicants are advised to engage with local communities at the pre-application state for the development proposals.

New development most affects communities that are local to it. Applicants should engage with the local Town or Parish and with neighbours who may be affected by a development.

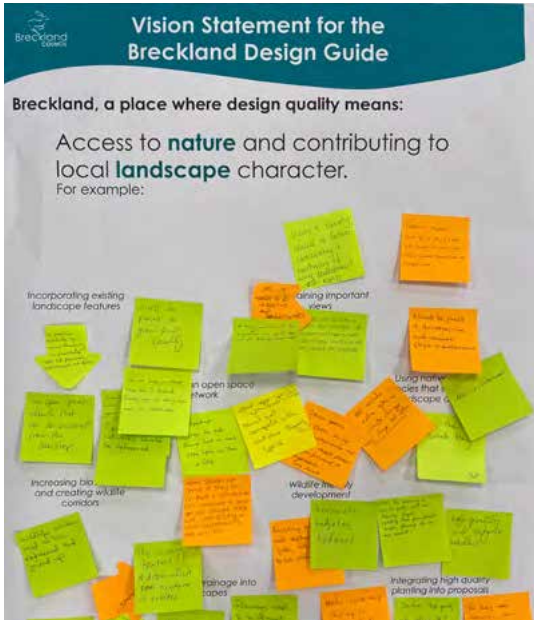
Engaging early in the design process is important to developing a good relationship between applicants and communities. It is also beneficial for both parties to be clear about priorities for the project and the potential for influence over proposals.

Local residents often have the best knowledge of their neighbourhoods – and can be a valuable source of intelligence for designers, including identifying likely issues at an early stage.

Public engagement should be proportional to the scale of development to the scale of development, with small developments being expected to follow different engagement to medium or large developments.

To the applicant, the benefits of positively engaging local communities include a smoother and less uncertain planning application process. To the community, the benefits include reassurance that proposals address local issues and impacts, so that development isn't simply being 'done to them'.

Applicants should demonstrate what engagement they have organised and demonstrate how they have responded to it.



Meaningful engagement with the local community should be at a stage where people can meaningfully input and influence proposals.

Breckland Lodge Norfolk. A community hub rebuilt after a fire and commended by Norwich and Norfolk Design and Craftsmanship Awards © CAM Architects

This can result in development that benefits both the applicant, local community, and occupiers of the new homes as seen in this development in Mattishall. The community wood, allotments and community orchard will be signed over to Mattishall Parish Council for stewardship.

2.2 Engaging local communities

Checklist:

Has the applicant engaged with local communities?

Do the proposals demonstrate how elements of the design (e.g. layout, landscaping strategy, materials) have been designed following feedback from communities or stakeholders?

Application Documentation:

- Statement of community involvement

2.3 Masterplans for multi-phase developments

2.3: Multi-phase developments require a comprehensive masterplan for the whole site to ensure that the built development creates a beautiful, enduring and successful place.

An overall site masterplan should set out a clear placemaking vision that demonstrates how the development will create a place.

It should define where different uses – including non-residential uses - and open spaces will be located. It should also set out a legible and well-connected network of streets and connections. It should be supported by integrated strategies for transport, open space, landscape and biodiversity, drainage and sustainability.

It should be prepared through a multi-disciplinary masterplanning process that involves technical specialists in e.g., landscape design, transport planning, sustainability and environmental appraisals and ecology.

It must be based on a detailed understanding of the baseline conditions.

Where an environmental assessment is required the assessment process should be used to inform the evolution of the masterplan.

Masterplans should also plan for how the development will be phased and work over time, as it may take many years or decades for some major developments to be built out.

The masterplanning process must involve Breckland Council and the local community to ensure that local priorities and planning requirements are reflected throughout the design process.

The masterplan process must identify the desired character and qualities for the new place. A design code will be required to demonstrate how this character and quality will be achieved through delivery.

A masterplan is likely to include as a minimum, where appropriate:

- A landscape strategy
- The amount and location of open space
- The number of homes
- Green infrastructure,
- SuDS strategy,
- Biodiversity Net Gain Plan,
- Constraints Summary,
- Nutrient Mitigation Strategy Plan (if within a Nutrient Sensitive Zone),
- Density,
- Heights,
- Character Areas,
- Public Transport Nodes/Interchanges
- Other uses – e.g. schools and employment
- Location of the local centre
- Points of access to the wider area (pedestrian / cycle / vehicular)
- Broad position of the primary and secondary street network

2.3 Masterplans for multi-phase developments

Checklist:

Does the masterplan include the elements in the box to the left?

Is it accompanied by a design code?

Application Documentation:

- Masterplan document and supporting technical strategies
- Design code

2.4 Neighbourhood Design Codes

2.4: Parish and Town Councils may choose to produce a design guidance and codes that defines a set of requirements for future development of the area.

Producing a design code at the neighbourhood planning scale allows for a community to capture specific locally distinctive characteristics and priorities and tie them into requirements for future development in the area.

The design guide will be used by the planning authority when assessing future planning applications, and by the Parish and Town Councils when commenting on them.

The purpose of design codes is to set measurable requirements that can be used to assess planning applications. At a the neighbourhood scale they can highlight locally specific elements relating to, for example, building heights or set-backs, roof shapes or use of dormers, use of materials or boundary treatments .

The requirements should be unambiguous so there are no doubts about whether they are complied with or not.

Design codes should be highly illustrated and expressed mainly through diagrams, drawings and photos, with which it is clear what is expected.

The National Model Design Code is the starting point for neighbourhood codes. It provides a full overview of the expected process and steps necessary for creating an effective code.

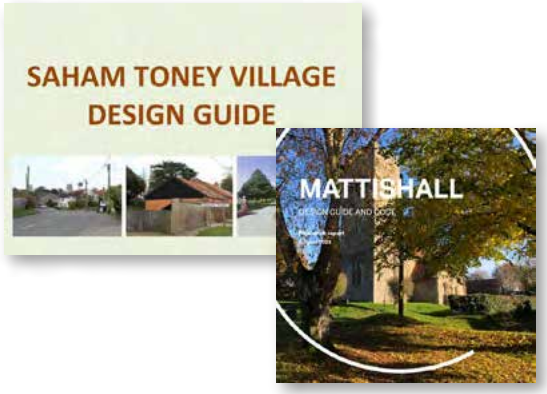
Involving the local community from the beginning of the process is key to a successful design code.

Neighbourhood planning groups should engage with Breckland Council (the Local Planning Authority) and may wish to consider involving specialists in the preparation of their code to ensure that it is effective as a tool for assessing future planning applications.

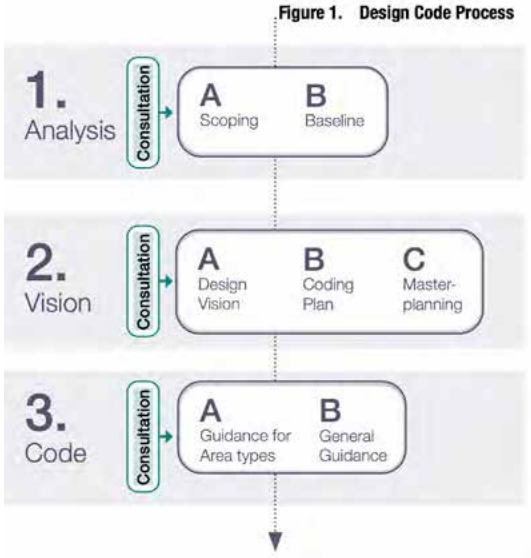
A detailed character assessment to identify the distinctive and shared characteristics of villages provides a basis for preparing design codes.

Where a significant scale of development is proposed to extend a rural settlement, careful consideration needs to be given to how it may change its settlement pattern (morphology). For instance whether a nucleated village should become a polyfocal nucleated village or a rural row interrupted village should become a rural row continuous village.

The sidebar (orange boxes on the right hand side) in the introduction has useful tips for preparing neighbourhood design codes.



Examples of Neighbourhood Plan Design Guides, Saham Toney Village Design Guide (left) and Mattishall Design Guide (right).



Design Code Process, extract from National Model Design Code.

2.4 Neighbourhood Design Codes

Checklist:

Do the proposals comply with specific and measurable requirements set out in any applicable codes?

Application Documentation:

- Design code compliance check list

2.5 Preparing Design and Access Statements

2.5: Design and Access Statements are a key part of the planning process for an applicant to demonstrate understanding of the site and an appropriate design response.

Design and Access Statements (DAS) will be required for all development except small scale employment applications. It will also include householder applications in conservation areas.

A good DAS will:

- Be concise and specific to the application and proportionate to the scale and complexity of the project.
- Outline clearly the factors shaping the design proposals (in the form of accurate diagrams and photos where appropriate).
- Outline the design development of the scheme, from early sketches or concept ideas to developed proposals and full design drawings. This should include demonstrating how the proposals are influenced by and are a positive response to the site and local context.
- Present illustrations of the site analysis (refer to 1.1) and accompanying concise summaries.
- Outline the engagement undertaken with planning officers, the local community and other stakeholders.
- Define targets and strategies that can be tied into the planning permission as necessary or appropriate, through conditions.

Suggested contents for DAS

Introduction / Executive summary

Project brief

- Client brief
- Site analysis (see 1.1)
- Local character appraisal
- Climate response

Proposal

- Mix of uses (in content of local area)
- Density of development (demonstrating appropriateness)
- Layout
- Scale and massing
- Appearance and materials
- Landscape strategy
- Drainage strategy
- Materials strategy (if not provided in detail as part of the application)

This should include 3D visuals, modelling of proposals, elevations, sections and plans, as well as the name and extent of involvement of the designer.

It should also describe how the design has evolved including how it has responded to any feedback from pre-application meetings and public engagement.

Access and movement

- Access to local area and links (pedestrian, cycle, vehicular)
- Movement throughout the site for all users (including emergency services and refuse vehicles)
- Walking and cycling provision
- Access to buildings
- Inclusive design and access for all users

Sustainability

- Energy strategy (energy efficiency, use of renewable energy, onsite energy provision)
- Water use strategy (minimising waste and potable water consumption, surface water management – drainage)
- Minimising waste – both construction and in use including recycling and food waste
- Maintenance and management of the development going forward

Technical summaries

(Where appropriate depending on the scale of the project).

Non-technical summaries of any technical documents that support the application.

2.5 Preparing Design and Access Statements

Checklist:

Does the DAS include at least the elements listed in this box?

Application Documentation:

- Design and Access Statement

3 Integration with nature

The gentle, lowland landscapes of Breckland contribute to the district's identity and create attractive settings for its settlements. Alongside their agricultural role, they hold significant ecological and community amenity value.

Priority habitat areas include reed bed, chalk rivers, heathland, lowland wood-pasture and ancient hedgerows that must be protected.

New development must integrate sensitively into the landscape, incorporating and celebrating existing mature landscape features. It must enhance wellbeing by providing better access to nature and lead to better outcomes for nature.

Along with their Biodiversity Net Gain plan, all applications need to provide a landscape strategy. The landscape strategy needs to be developed alongside the built scheme not as an afterthought.

3.1 Retaining and enhancing existing landscape features and biodiversity

3.1: Development proposals should be designed around the existing high-quality landscape features on the site, particularly those that support local character, existing biodiversity and protected species.

Existing positive landscape features and ecological features (for example mature trees, existing hedgerows, ponds and streams, built or archaeological heritage) should be identified early in every project and be retained and integrated within public (or private) areas of a development. Important landscape features may be identified in Landscape Strategies or Conservation Area Appraisals and assessed through site surveys.

Applicants should demonstrate a creative relationship between homes and the landscape. Landscape features should be seen as positive opportunities to inform the site strategy and layout, rather than as constraints to be overcome. For example, a public open space could be designed around an existing mature tree so that it becomes a valuable community asset, point of interest, or meeting place.

Existing mature trees on the site should be retained and integrated into the development. Tree surveys should be carried out by suitably qualified professional to ensure that appropriate consideration is given to root protection and engineering at the design stage. Further guidance can be found in appendix 1.

Development needs to be located considering its proximity to landscape features, ensuring that buildings are not located too close to existing trees to avoid them having to be removed in future due to growth.

Existing hedgerows should be retained and enhanced onsite. They should form part of the landscape strategy for a proposal, for example defining a plot or the edge of a pedestrian or cycling green corridor.

They should be part of public open space where possible rather than part of private gardens to ensure they are retained longer term.

Also refer to Chapter 1 Responding Positively to Context, and Section 5 Built Form.

Retention of mature tree as part of a new development at the edge of Bridgeham village.

Mature landscape features should be retained, and can add to the setting of development.

A mature tree becomes a focal point of open space within this development in Watton.

3.1 Retaining and enhancing existing landscape features and biodiversity

Checklist:

How do the proposals retain and enhance existing landscape and water features on the site?

How has the site layout and landscape strategy celebrated these features?

Are there trees / how do proposals retain and protect them?

Has the application provided a landscape strategy?

Application Documentation:

- Site analysis
- Landscape strategy
- Site layout / masterplan

3.2 Maintaining green 'gaps', 'backdrops' and 'edges'

3.2: Development proposals should look beyond the site boundary to consider notable nearby landscape features which contribute to an area's sense of openness or greenness.

Particular attention should be paid in edge-of-settlement or rural, locations and in area-types where landscape may contribute more strongly to local character.

Where there are important views or existing mature landscape features exist, they should generally be retained. This could include mature forest or treelines, local valued open spaces, green buffers, or established planting.

Where existing rural villages are 'interrupted'' or 'dispersed', with existing 'gaps' between areas of settlement, some form of 'gap' should generally be retained to preserve the character of the settlement. Green buffers, tree-lined backdrops, or gaps may be most visible on approach into a village, and new development should consider the visual prominence it may have in this context.

New development should enhance the relationships with these natural features through careful orientation, appropriate separation, and the creation (or retention) of views towards them. Building materials should be chosen to complement these views.

Existing green 'gaps' and 'backdrops' may provide a green setting for buildings that contributes to the character of an area, and new development should be sensitive to this. For example, landscape at a rural edge may be more natural and informal to respond to the adjacent countryside; or separation distances between detached houses at a rural edge might be expanded so these views can be retained.

Where development is at a rural or agricultural edge planting should soften this edge, using native species where appropriate and avoiding tall fences.

Also refer to Section 1 Responding Positively to Context, and Section 5 Built Form.

Important views out of villages should be retained, as shown here in Weeting.

Farmstead converted to residential retains its position on the village edge, Bridgham.

Material choice impacts views - here the choice of bright roofing materials negatively impacts views towards Mattishall.

3.2 Maintaining green 'gaps', 'backdrops' and 'edges'

Checklist:

How do proposals respond sensitively to important views?

How have nearby landscape features such as trees, views and green gaps been designed as part of the scheme?

If the development is at the edge of a settlement how has the landscaping been designed to soften the edge?

Application Documentation:

- Site layout
- Local character assessment
- Landscape strategy
- Landscape and Visual Impact Assessment

3.3 Providing usable open space for play and social activity

3.3: Safe, green, high-quality public open spaces must be integrated into new development proposals.

An appropriate quantum of open space must be provided as part of new residential development. The role and primary function of each proposed open space should be well defined, and it should be designed to an appropriate size and location. Parish / town councils can provide advice.

Open space should incorporate formal and informal elements of planting, play and recreation areas. It should not just be areas of grass.

New open space should be designed into the proposals from the outset, preferably with input from a landscape specialist, and should not consist of 'leftover' space that is delivered in small pieces as an afterthought.

Where possible, open space should be provided at first occupation of new development. It should be maintained and managed appropriately once the development is built out.

New open space should be publicly accessible to residents and visitors. The open space should also be welcoming to existing communities, through its location within the proposal or good connections.

Open space should be well-defined and benefit from passive surveillance, from dwellings, other buildings or a street. This could form the central focal point of a development, around which development is situated. Direct pedestrian connections should be made to the open space, as well as clear pedestrian desire lines across them. This will help make it more safe and attractive for all ages and abilities.

The open space itself should be well-landscaped and attractive with a variety of planting species, appropriate to their context and for biodiversity. There should be a richness of landscape, not just open areas of grass.

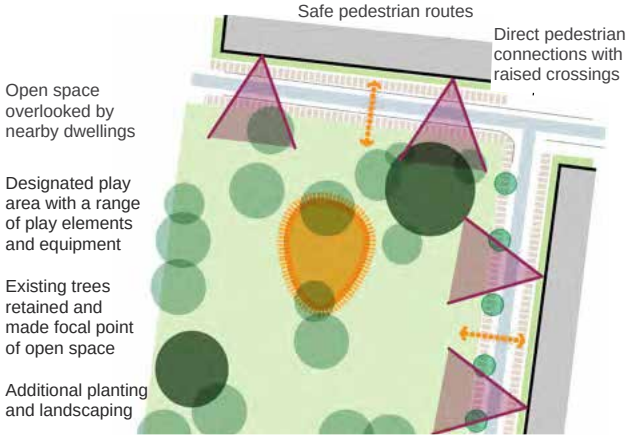
Open spaces should include areas to sit and gather, with seating areas also located by play spaces for supervising adults.

Design of spaces should consider all users- of different ages, genders and abilities and consider their comfort and enjoyment of the space. This includes disabled access as outlined in Sensory Trust guidance and appropriated lighting strategies to ensure safety of people if spaces are used after dark.

It should also include food growing opportunities where appropriate, such as community gardens, fruit trees and allotments.

Open space is well defined and overlooked by adjacent dwellings. Attleborough.

Open space here includes varied planting and a considerable sized space for a variety of activities including outdoor games, Mattishall.



Houses are designed to front onto recreational open space to ensure passive surveillance and an attractive outlook.

3.3 Providing usable open space for play and social activity

Checklist:

How is the open space designed to encourage residents and visitors to use it?

Application Documentation:

- Site layout
- Landscape strategy

3.3.1 Play

Play should be considered at different scales: from the home and street; to medium scale in local parks; and through to providing safe, direct access to larger play areas and outdoor games including sports pitches and the countryside.

In larger developments, a variety of play facilities should be integrated into the open space, offering opportunities for all ages and abilities to explore, learn and enjoy.

Play provision should be inventive and well thought out. The type of play equipment should be appropriate to the landscape setting, which may differ for market towns and rural settlements. Spaces should include a mixture of informal and formal play elements and space for outdoor games. Informal play areas are integrated into open space and use features such as tree trunks and boulders.

A variety of materials, including steel play equipment should be used for longevity.

A play strategy should be provided with all proposals for play areas outlining the design, types of equipment and materials as well as indicating how all ages, abilities have been catered for. Included in the strategy should be how the facilities will be maintained and managed in perpetuity.

Play space should be designed to be inclusive and accessible and adopt the three inclusive design pillars of Accessibility, Multi-Sensory and Supporting Infrastructure so that everyone feels comfortable using them.

Doorstep play areas should be overlooked by neighbouring homes, and arranged so that planting, play, servicing, and parking can all take place safely at the same time.

Management of the play area going forward should be considered early in the design and applicants should engage with these groups during the design development.

Play areas should meet EN1176 and EN1177 standards to support play value, reduce severity of injury from falls and promote access to all.

See appendix 1 for further resources and references on designing for play.

Open space with a variety of play equipment encourages a range of activities. East Harling.

Informal play features can be incorporated into the landscape, and should reflect the, for example, rural character of the area, Watton

Play features do not have to be formal equipment, and could be natural playable landscape elements instead.

A variety of play equipment for all ages, including outdoor gym. Thetford.

Play spaces should be inviting and engaging, and not disadvantage certain users.

3.3 Providing usable open space for play and social activity

3.3.1 Play

Checklist:

How will the proposals deliver play that is fun, accessible and engaging for different age groups and abilities?

Do proposals include a variety of types of play and space for outdoor games?

How are play areas well integrated into the site layout and open space network?

Application Documentation:

- Landscape strategy
- Play strategy

3.4 Integrating open spaces into an attractive network of green infrastructure

3.4: New open space should be multifunctional - able to perform a variety of functions, enhancing the environment for residents and wildlife alike. It should connect into, and integrate with other green and blue infrastructure nearby, where possible, both on and off site.

The UK is one of the most nature-depleted countries in the world. Built environment professionals hold a responsibility protect existing green and blue infrastructure, and ensure new multifunctional green infrastructure is provided at every opportunity. This should connect to the wider landscape where possible, including through wildlife corridors. Wildlife-friendly principles should be integrated from the outset, which will also help de-risk the planning process in the long run.

Connected corridors for wildlife are important for biodiversity and ensuring that new development is wildlife friendly and allows for the movement of species between larger open spaces.

Multifunctional green infrastructure might combine informal natural play elements set in landscaping, which also functions as a permeable surface for rainwater, and a corridor for wildlife. However, sufficient space must be provided for all of these functions to occur simultaneously i.e. it would not be appropriate for an attenuation pond to double as recreation space if this should be filled with water on a regular basis. Primary functions for the space should be identified and the design should ensure this is achieved successfully.

Open space provision should be provided on-site where possible, be well designed and multifunctional. This should consider amenity value for residents, biodiversity value for wildlife, play value for children, and flood resilience for the local area.

It should also connect to surrounding green spaces through green corridors or connections that enable the movement of people and wildlife across a connected network.

Refer to the Norfolk Local Nature Recovery Strategy and Breckland's Local Plan Environment Policies, particularly on biodiversity. Further resources and references can be found in appendix 1.

Attractive and varied planting creates visual interest and wildlife habitat.

Green space can serve a variety of functions both aesthetic and functional. Dereham Cemetery. Photo © Robert Smith on behalf of Jeremy Stacey Architects

Community gardens are a versatile form of green infrastructure, delivering biodiversity and community benefits, as seen in this example in East Harling.

An integrated network of new landscaping and existing mature boundaries create a positive edge of this development in Mattishall.

3.4 Integrating open spaces into an attractive network of green infrastructure

Checklist:

How is the open space designed to be multifunctional?

How does the development connect to nearby open spaces?

Does the development create green corridors for the movement of wildlife and people?

Are the primary function(s) of the open space(s) identified?

Application Documentation:

- Landscape strategy
- Site layout

3.4.1 SuDS

The threat of flooding is of significant concern to some Breckland residents, and new development proposals should not cumulatively increase flood risk across an area. Residents also feel that localised flooding should not be made worse by new development. Sustainable drainage solutions (SuDS) must be incorporated to reduce the risk of surface water flooding.

SuDS, which are frequently used to deal with excess surface water and stormwater exceedances, should not double as play areas, in order to reduce exposure to water pollutants and pathogens.

Breckland's low lying topography means that surface water management and drainage should influence the design and layout of new development.

Drainage systems should:

- **Be attractive:** designed as positive natural features that people can appreciate and enjoy. Design should minimise the use of railings where possible.
- **Be contextual:** the appropriate system should reflect the character and scale of development. For smaller development, this might include rain gardens or permeable paving. On larger developments this might include swales or wetlands.
- **Be multifunctional:** in larger developments SuDS should hold multiple functions. This might include promoting biodiversity, and creating positive elements for leisure, or incorporating recreational routes for walking and cycling. They should contribute to the quality of the open space.
- **Be connected:** appropriately integrating into the existing water network.
- **Be sustainable:** prioritising natural drainage features rather than large underground attenuation features; and minimising water consumption where possible through rainwater collection for example .
- **Be robust:** SuDS must be accompanied by a long-term strategy for maintenance and monitoring in perpetuity. The system should be designed to filter pollutants and deal with them appropriately through this maintenance system.

Applicants should refer to the latest Lead Local Flood Authority Guidance for developers. The LLFA here is Norfolk County Council.

Also refer to **Chapter 6 Climate Responsive Design** and see Appendix 1 for additional SuDS resources.

Traditional example of a wet ditch in Sporle.

Parking and forecourts can create unattractive and impermeable surfaces. Where parking is needed, permeable paving and planting should be introduced.

Green space should support a variety of functions including SuDS. Planting should be drought resistant and tolerant of waterlogging.
Great Hockham © Ingleton Wood

3.4 Integrating open spaces into an attractive network of green infrastructure

3.4.1 SuDS

Checklist:

How are the drainage features designed to multi-functional and attractive?

How will the drainage features be managed going forward?

Application Documentation:

- Drainage strategy
- Landscape strategy
- Water use strategy
- CIRIA SuDS Manual C753 (2015)
- CIRIA Guidance on the construction of SuDS (2017)

3.5 Planting on street frontages

3.5: New planting should be incorporated into street frontages to help improve the character, visual identity and appeal of these spaces. Planting may also be used to mark the thresholds between public and private spaces. Dependent on the market town or rural context, different planting styles may be appropriate.

Where new streets are created, on-street planting and SuDS should be designed-in from the outset. Where new development fronts onto an existing street, planting should be introduced at the boundaries and on-plot (in front gardens).

New Development should ensure new streets are tree lined and introduce where possible planting of diverse grass verges, hedging, native shrub areas and wildlife linkages,

Planting on street frontages successfully contributes to local character in much of Breckland district, particularly in village and rural locations, but also in 'Leafy Detached' market town area-types.

3.5.1 Shading

New tree planting creates natural shading for wildlife and humans, protecting against the adverse effects of overheating in summer and helping to make streets and adjoining buildings feel more comfortable.

Trees should not be planted too close to buildings, in order to minimise the risk of their needing felling in future due to growth.

Dwelling edges can be a place for planting and encourage neighbourhood interactions.

Boundaries should be generously planted, and reduce hard-standing, unlike this example.

Structured planting creates a formal character for this open space. Norwich

Generous space is provided for planting at dwelling frontage, creating permeable surfaces for drainage as well as an attractive frontage.

3.5 Planting on street frontages

3.5.1 Shading

Checklist:

How will the street or front garden planting complement the character of the local area?

Do the proposals include street trees that will provide shading for people and wildlife?

Application Documentation:

- Planting strategy
- Landscape strategy

3.6 Encouraging biodiversity

3.6: New development must demonstrate a biodiversity net gain, and should integrate features to encourage wildlife to visit, inhabit, and comfortably move through it.

Breckland is a rural area with an important agricultural sector as well as a fledging ecosystem services sector, both of which support the ambitions of the Environment Act 2021. All new development will need to provide a Biodiversity Net Gain Plan and demonstrate a mandatory 10% Biodiversity Net Gain through the Statutory Biodiversity Net Gain Metric.

The location of strategic offsite Biodiversity Net Gain will be identified by the Norfolk Local Nature Recover Strategy and Breckland BNG local policies.

Proposals should consider biodiversity at the beginning of the design process to ensure it is prioritised alongside the needs of people in the new development

Enhancing biodiversity should be achieved by considering measures at a neighbourhood, street and individual home scale. Multi-functional green and blue infrastructure (for example wetlands and SuDS features) can be used to extend and enhance valuable existing ecosystems at a neighbourhood and street scale.

Innovative measures can be used to encourage insects and wildlife to use natural spaces.


Islands of planting in streets are a way of increasing biodiversity and also reduce surface water flooding, while still accommodating onstreet parking.


Streets should be planted to encourage biodiversity.


Planted corridors provide routes for wildlife.


Artificial grass must not be installed in gardens or communal open space in place of soft landscaping.

3.6 Encouraging biodiversity

Checklist:

How will the proposals maximise soft landscaping that is biodiverse?

How will the development encourage nature across the development from gardens to streets and open spaces?

Application Documentation:

- Biodiversity Net Gain Plan
- Biodiversity Metric Calculation
- Ecology reports and Habitat Assessments

In general developments should maximise soft landscaping that is diversely planted (rather than e.g. grass verges) to provide shade and safe spaces for the movement of wildlife. A range of planting species should be used that encourage pollinators and are appropriate for the context. Planting for different habitats should be considered depending on the context.

New homes and gardens should be arranged and designed to encourage wildlife to cohabit the space. This can contribute to residents' enjoyment as well as contributing to local wildlife habitat.

Appropriate features should be incorporated into the fabric of new houses, for instance bat bricks, swift ledges, and bee bricks.

Avoid walls and high fences between gardens, and instead use planting, hedgerows and open-rail fences to create permeable thresholds between gardens to allow wildlife movement. Alternatively, small holes can be made at the base of fences to create 'wildlife highways', for hedgehogs for example.

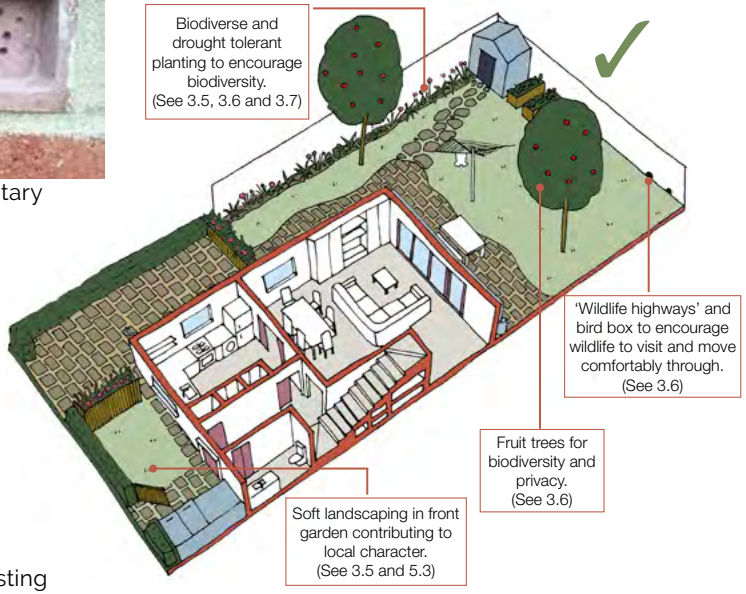
Biodiverse green roofs or green walls offer wildlife habitats, and can be installed in more urban contexts, and on smaller roof spaces. Green roofs and walls in particular should have management arrangements in place after development is complete.

Densely planted front gardens provide biodiversity gains and reduce surface water flooding risks.

Bees bricks create nesting places for solitary bee species.

Buildings /back gardens too close to existing trees create considerable shade and potential issues that could require mature trees to be felled.

Rear gardens should be planted to encourage biodiversity and wildlife. Alternatives to 1.8m panel fencing for smaller gardens should be considered.



3.6 Encouraging biodiversity

Checklist:

What features of wildlife-friendly design do gardens and open spaces include?

Application Documentation:

- Biodiversity Net Gain Plan
- Biodiversity Metric Calculation
- Ecology reports and Habitat Assessments

3.7 Planting species

3.7: New planting must be incorporated into all new development. Planting species should be carefully selected so they are attractive, functional, resilient, nature-friendly, biodiverse and appropriate to local character.

Proposals for new development and open space should be accompanied by landscape details or a planting strategy and must be planted in accordance with the agreed strategy.

Planting design should respond to local landscape character and underlying soils, using species that promote biodiversity, for instance encouraging pollinators.

Native species should be prioritised, but planting should be chosen with resilience to climate change in mind. Invasive non-native species should be avoided.

A mixture of deciduous and evergreen, non-native and native trees, plants and shrubs will provide habitats and food for wildlife year-round.

Planting should create a coherent landscape and character. It should not include so many different species that it creates a haphazard or messy-looking environment.

Landscaping should be considered at the beginning of the design process alongside the built environment and not as an afterthought. Proposals for new development and open space should include a landscaping scheme with the planning application including a planting strategy.

Also refer to **Chapter 6 Climate Responsive Design.** See appendix 1 for further resources and references relating to this chapter.

Wildflower meadows can replace grass verges in areas of less formal landscape character, such as many village types. This also promotes biodiversity.

Flowers and planting encourage biodiversity in Thetford town centre.

Planting can be innovative, and should not be confined to just residential gardens.

The community garden in East Harling explores a range of planting species through a seed exchange.

3.7 Planting species

Checklist:

How will the planting in the development encourage wildlife throughout the year?

How has the planting strategy been designed to be robust and resilient into the future, considering climate change?

Application Documentation:

- Planting strategy
- Landscape strategy

4 Encouraging active travel and mitigating the impacts of vehicles

Movement networks have shaped Breckland over history, and should continue to inform the layout and patterns of contemporary development.

Movement strategies should be influenced by the context, so that new development creates and maintains links to existing places. Even small developments can play a role in improving connectivity within, and to, nearby settlement.

Walking and cycling should be prioritised, whilst enabling the safe movement of vehicles.

Accessible and well-connected developments that are sited close to existing services and facilities will make for healthier, more characterful, more enjoyable places.

4.1 Improving local walking, wheeling and cycling links

4.1: New development should prioritise the movement of people, not only cars. Safe, designated, continuous active travel routes should be introduced within all developments, and connections made to existing route networks.

Market Towns

The size of any proposed development will indicate what opportunities, and what type of interventions may be appropriate. For medium and large developments, new pedestrian, wheeling (wheelchair users and scooters) and cycle connections should be identified, including within the site for example to an open space, to neighbouring developments, and links to existing route networks. See Chapter 5 Built Form for details on site layout.

In small developments, there may be fewer opportunities to introduce new pedestrian/cycle connections, but development should connect to existing routes, such as footways or footpaths.

New residential and mixed-use development should give priority to pedestrians and wheelchair users, creating safe, designated footways and footpaths.

Movement by bicycle should be designed into the movement network from the outset. Cycle lanes should be segregated from the road carriageway wherever possible, and junctions should be designed with the movement, safety and comfort of all cyclists of varying abilities in mind.

New cycling/walking routes should be accessible, safe and where possible well-overlooked e.g. by dwelling frontages.

Some developments on the outskirts of market town could be overlooked by the road, the same as play spaces.

They should be made of an appropriate surface for cycling and where possible well-lit, with good forward visibility and not interrupted by long runs of crossovers for parking spaces. Walking and cycling routes should encourage functional trips (e.g. to get to the shop), but should also encourage recreational trips (e.g. dog walking).

Villages

New active travel routes should acknowledge the specific character of the village, and the features that make it unique.

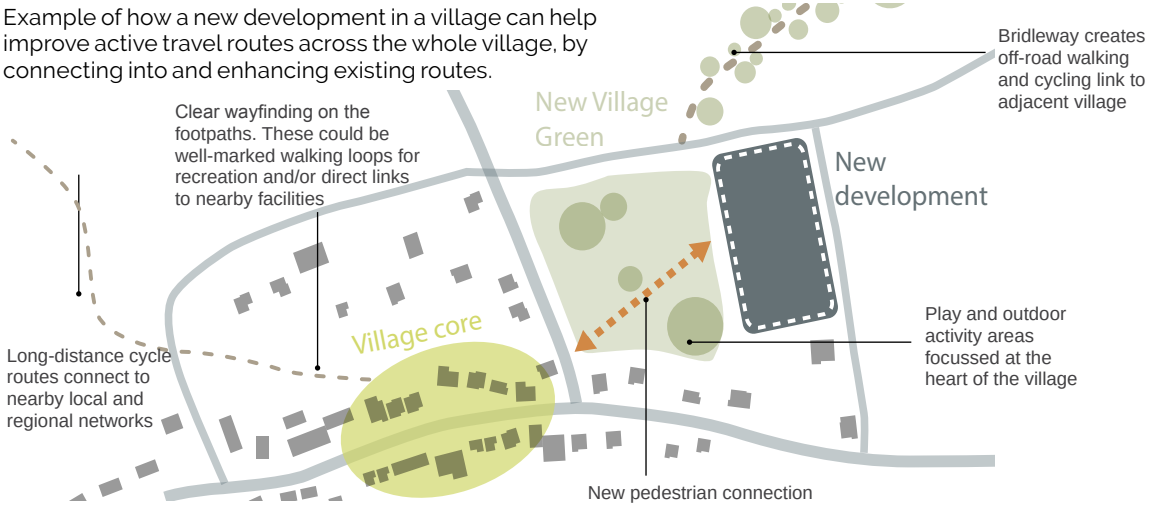
Cycle and walking connections should respond to existing landscape features. For example, where a new footpath or cycleway outside the development will be introduced and the character is rural, it could be provided behind a hedgerow rather than as a pavement if it is the best solution.

If only one or two new streets are to be provided as part of a small/medium rural development, the street layout should still aim to achieve the principles within this 'Village' section.

In some rural locations, footpaths may not exist, but opportunities to improve pedestrian and cyclist movement should always be identified and taken. Where it is not possible to create active travel routes to connect the development to the wider area, traffic calming measures to reduce the speed of vehicles outside the development will help to improve the safety of pedestrians (see 4.3).

Applicants should engage with the Local Highways Authority on Highways Design. SUSTRANS is useful for designing cycling and walking routes and Dept. of Transport's Inclusive Mobility Guide and Paths For All are useful guidance for designing accessible paths.

Example of how a new development in a village can help improve active travel routes across the whole village, by connecting into and enhancing existing routes.



4.1 Improving walking and cycling links

Checklist:

How are the proposals designed to make it easy to find your way around?

Are the foot and cycleways continuous and designed along desire lines to be safe and convenient for all users?

Have functional and recreational cycle and pedestrian routes been identified?

Application Documentation:

- Site analysis
- Access and movement strategy

4.2 Connecting to key local destinations and facilities

4.2: All development proposals should identify key routes for walking, wheeling and cycling to local facilities and services to reduce reliance on the private vehicle where possible. Depending on the scale of the development, proposals should either introduce direct walking, wheeling and cycling connections to these, or contribute to improving these routes.

New development holds a responsibility to help reduce private vehicle journeys by providing direct connections to the facilities required to meet residents' everyday needs where possible. In villages this means enabling people to walk and cycle to school, village shops and bus stops to connect to other destinations rather than having to rely on cars for all journeys.

Walking and cycling routes in towns should generally be on streets, lanes, or through open space, connecting to existing movement networks and a larger range of facilities and public transport connections.

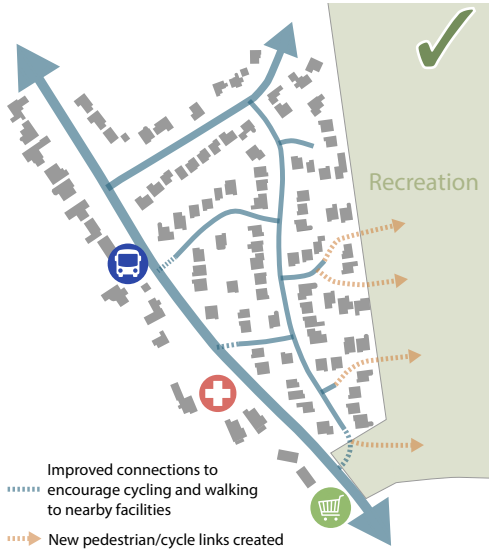
Larger development in market towns should create an integrated network of direct routes for all active travel and public transport routes. These routes should provide connections to destinations in the town, and should be attractive, safe, ideally well lit and accessible for all abilities of cyclist.

Breckland's rural nature means that public transport infrastructure outside of the main settlements can be infrequent and loosely connected. Where possible, new development should be located near existing public transport networks and maximise access to it, or make financial contributions to improve existing services. Where development would generate new bus services this should serve wider

Weybourne off-street footpath.

Poor example of cycle route transition to highway, Dereham.

Cul-de-sacs and dead-end roads discourage pedestrian movement..



Pedestrian and cycle network allows permeability and access to local facilities.

4.2 Connecting to key local destinations, facilities and public transport nodes

Checklist:

How will the development connect well to local facilities?

How will these routes be designed to integrate into the existing movement network of footways, paths or cycleways?

Have the route destinations i.e. purpose of the route been identified?

Application Documentation:

- Site analysis
- Walking and cycling provision
- Application Documents include Site Analysis and cycle/pedestrian route analysis

4.3 Mitigating traffic through calming measures

4.3: To help encourage walking and cycling, high vehicle speeds should be designed-out with appropriate road layout, highway design, and traffic calming measures.

Medium and large developments should create a hierarchy of connected streets, all designed for different functions with vehicular through-movement restricted to main routes, and access-only on quieter residential streets.

The default vehicle speed should be restricted to 20mph for residential streets, in line with Manual for Streets.

Traffic calming measures should be integrated into the street design from the outset, respond to the character of the surrounding area and create an attractive environment for people to walk or cycle. Measures could include: rain gardens and SuDS; speed bumps; and raised crossings.

In villages, busy roads can be successfully calmed through the narrowing of carriageways to create village 'gates' with signs and planting, particularly where there are no footways. This can help encourage people to travel to destinations within their village such as the shop, school and pub on foot or by cycling.

Mitigating traffic and encouraging active travel also has a positive impact on air quality, which is an issue in towns and villages in Breckland.

Carriageway narrowing example, Attleborough.

Traffic calming measures should be used to reduce speed of vehicles, as seen in this example from Quidenham.

Wide, straight roads with few defining features often encourage vehicles to speed, and should be designed out of new development as seen in this example in Attleborough.

Materials and street surfaces can be used to mark different uses, users and street types, here demarcating parking spaces, pedestrian-only routes and shared surfaces in Swaffham. Non-standard materials need to be discussed with the highways authority, Norfolk County Council.

4.3 Mitigating traffic through calming measure

Checklist:

How is the development designed to encourage low speed vehicles?

Application Documentation:

- Access and movement
- Transport assessment

4.4 Creating attractively designed streets and spaces

4.4: All new streets should be safe, equitable, green, attractive, and functional.

All streets should be for everyone. Roads are for cars, but streets are for people. Where a development is providing new streets, they should become a high-quality part of the public realm for social and environmental benefit. As well as performing a movement function, they should also be well-planted, safe, social spaces that encourage nature to thrive, and neighbours to meet.

Streets should be considered according to their function, in line with the street hierarchy set out in the Built Form Chapter 5.

Where possible, streets should:

- Incorporate break-out spaces designated for play, seating, and planting, to break up the continuous roadspace
- Open up views towards green 'gaps', 'backdrops', 'edges' and the countryside,
- Make boundaries green through dense planting, hedgerows, or railings with planting adjacent. This will be especially important in some area types such as villages and 'leafy detached'.
- Be well defined and overlooked by attractive building frontages
- Integrate parking using green features so parking does not dominate the street scene (see Principle 4.5)
- Integrate street design with the SuDS strategy by incorporating rain gardens and swales
- Have clear, direct, level and clutter-free pavements and paths. A robust and simple strategy for parking and bins will be sought to ensure pavements are kept clear and do not inhibit the movement of others.
- Enable level access to all open spaces and publicly accessible buildings. This should include access to facilities and play areas that will cater to less-able bodied individuals.
- Include regular resting places on main walking routes so that older residents and those less mobile are able to pause and rest. Benches should be located away from the main walking desire line, but be well overlooked and robust.
- Where appropriate to the character of the area type, have quality low energy street lighting on key active travel routes to help everyone to feel safer at night. Further guidance on lighting strategies for rural areas can be found in Towards a Dark Sky Standard by the Broads Authority.
- Establish a clear management and maintenance strategy for planting, cleaning and repairs.
- Development should aim to achieve the above in a manner that is appropriate to local character.

Streets should have buildings fronting onto them, with appropriate pedestrian and cycle accessibility.

Applicants should engage with the highways authority regarding street design for an agreed strategy, for example on tree planting.

Street is well proportioned, with residential entrances accessed straight from the street. Planting is used to soften the street, and create buffers around car parking as seen in this example in Swaffham.

4.4 Creating attractively designed streets and spaces

Checklist:

Are streets designed in a way that encourages low vehicle speeds and allows them to function as social spaces?

How will any new streets complement the local area and integrate the development into it?

Application Documentation:

- Street sections
- Site layout
- Lighting strategy where necessary

4.5 Well-designed parking areas

4.5: Parking must be carefully designed so that it is well-integrated within the curtilage of a dwelling and/or the public realm and does not dominate the streetscape

Car parking should be functional and safe. It should not dominate the streetscape or inhibit pedestrian/cycle movement. It should be as equally easy for residents to access as a vehicle.

Many streets in Breckland are currently dominated by parked cars, creating an unattractive environment that can be hazardous for people on foot, especially those with mobility issues,and discourages active travel. To ensure that parking in new developments does not cause the same issues, successful areas of parking should:

- Be well-overlooked from dwellings, particularly where parking is located at the rear of dwellings in parking courts. Direct pedestrian routes should be provided, including appropriate space around the cars, particularly for those with mobility issues.
- Parking should be limited in front of dwellings.
- Planting and trees must be integrated to diminish the visual effects of parked cars and hard surfaces.
- Avoid having too many car parking spaces in a row. Planting should be used to break up rows of cars.
- Limit the use of tarmac and yellow parking lines to avoid a typical 'highway' dominated street scene.
- Be surfaced with permeable paving wherever possible to reduce the risks of surface water flooding (see drainage and SuDS advice in Chapter 3).
- Design parking spaces to be flexible and adaptable to be converted if usage declines.
- Use an appropriate variety of parking types to prevent a monotonous visual appearance and feel to the street scene. This could include: side of house; integral within curtilage; parallel or perpendicular on-street parking with planting; or small parking courts where they are attractively designed and easy to use.

Parking should be designed so that it does not dominate the street and footways.

- Avoid locating parking spaces in prominent locations such as street corners or along important vistas.
- Use appropriate street furniture such as planters and benches, landscape and boundary treatments to discourage antisocial parking on pavements and verges
- Include a buffer in front of houses so that cars are not parked directly abutting houses. Allow for at least an equal amount of the house frontage to be allocated as a landscaped front garden to reduce visual vehicle dominance.

Extensive areas of hardstanding should be avoided, particularly at the front of homes.

Checklist:

Is resident and visitor parking sufficient and well integrated so that it does not dominate the street?

Application Documentation:

- Parking strategy
- Site layout

Garages in front of dwellings will generally not be accepted due to visual prominence. Where garages are provided, they should be located to the side and either recessed from the building line or integrated into the massing.

New development should provide electric vehicle charging points for residents as well as off-plot recharging for visitors for larger developments.

All homes must provide secure and convenient cycle storage within the curtilage of the building, ideally near the front door. For houses with garages, these must be designed to a sufficient width if intended to accommodate both cycles and parked cars. Where this is not possible, in terraced housing for example, cycle space should be provided in front gardens or on the street, in secure, lockable shelters. Cycle parking should also be provided as part of any nearby facilities, including open spaces.

See appendix 1 for further resources and references relating to this chapter.

Parking can be integrated within the curtilage of the dwelling, as seen in this example in Shipdham. © Clayland Estates

When attractively designed, bike storage can positively contribute to the street frontage.

Spaces within parking courts should be broken up, and overlooked by dwellings.

Parking is integrated into the curtilage of the dwelling and does not dominate the street.

Cycles should have dedicated storage and not have to compete for space, e.g. with bins.

Off-street parking in Mattishall is screened with planting.

4.5 Well-designed parking areas

Checklist:

Are garages designed to be visually discreet?

How is cycle parking designed to be convenient to use and secure?

Are the garages of sufficient size to accommodate a family car and bicycle?

Application Documentation:

- Parking strategy
- Site layout

5 Distinctive local identity

Responding appropriately to local identity and contributing to creating local character are key to raising design standards and creating attractive additions to places that look and feel part of Breckland.

The design of development should be inspired by the distinctive qualities of the place where it is situated. A different design response may be appropriate depending upon the qualities and sensitivities of each location – the aim may be to reflect, evolve or innovate local identity.

In all cases, new built development must be well-designed and built so that it functions well for all users and is attractive in the long-term and becomes a valued part of the district's heritage in future.

5.1 Responding and contributing to local character

5.1: New development should relate well to positive local character and enhance it. It should create a distinctive character that reflects, evolves or innovates the existing local character in a way that is appropriate to local circumstances. Proposals should retain existing building and landscape features on site and incorporate them positively into the development.

Retaining and enhancing existing built features

Development proposals should demonstrate how they incorporate positive features of the site and surrounding area, based on analysis - covered in Chapter 1.

Where existing built features contribute to local character or have heritage value, they can make a significant contribution to the distinctive character of a development. They should provide design inspiration for new development and be retained, enhanced and incorporated into proposals.

In all cases, the potential for re-purposing or upgrading existing built features should be considered, before proposing redevelopment. Retrofitting and re-using existing buildings or components is important for reducing carbon emissions.

This may include:

- re-using former agricultural or industrial buildings for workspaces or new homes;
- retaining and recladding the structure of a building rather than complete redevelopment, or
- reclaiming bricks or natural slates for re-use on another project.

English Heritage have useful guidance on reuse and adaptation of historic buildings, and see appendix 1 for further resources and references.

Simple wooden house integrates well with surrounding rural landscape. Aylesham, Norfolk

This house is bisected by a kitchen garden wall. It retains and integrates the wall's historic fabric into building that reflects the character of a traditional lean-to gardener's cottage, with a 'turret' that is a more contemporary interpretation.
The Walled Garden, Garboldisham.

Existing buildings of heritage value that contribute to local character, converted from industrial to housing. Dereham Maltings conversion.

Contemporary extension in East Harling complements existing character by evolving rather than reflecting it.

Re-used or re-claimed setts add richness to the character of the street in a new development.
Norwich

Checklist:

How do the proposals relate positively to the character of the surrounding area?

Application Documentation:

- Site analysis
- Local character assessment
- Density, layout, scale and massing
- Appearance and materials
- Heritage Assessment

Create character that avoids pastiche

Proposals for development should demonstrate how it relates to positive aspects of the character of the local area – refer to Chapter 1. They should respond to those aspects with the most value, rather than to aspects that have no value.

Depending on the context it might be possible for development to respond in different ways:

- To reflect local character with a sympathetic design approach that is faithful to the character and quality of existing buildings and places;
- To evolve its character with a contemporary interpretation of existing buildings that enhances local character; or
- To innovate with an original design that will help to transform the area in a positive manner.

Development should respond genuinely to local character, and not introduce surface details that provide only superficial variation to a standardised specification that can be found anywhere in England.

Proposals must not create poor quality copies or pastiches of the characteristic architecture of an area.

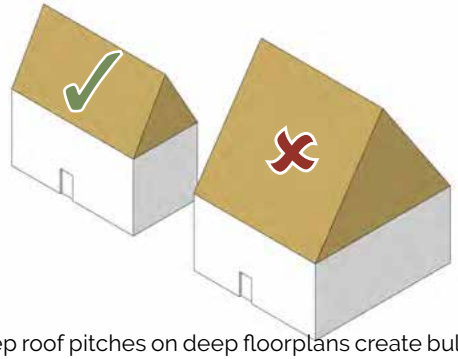
A sympathetic design approach to reflect the best of local character and quality Norwich (© ADAM Architecture / photographer John Critchley).

A contemporary interpretation of terraced housing. Goldsmith Street Norwich © Mikhail Riches & Cathy Hawley

Innovative new development, with a contemporary design. Hunsett Mill, Norfolk. © ACME Architects

Large buildings set too close together, lacking any hierarchy of scale or proportions across the façade, standardised fake sash windows without reveals, or clumsy porch and roof details, all create a poor pastiche of historic character.

Contemporary primary school extension. Aylesham



Steep roof pitches on deep floorplans create bulky buildings and roofs that are intrusive in the street scene and a poor reflection of local character.

5.1 Responding and contributing to local character

Checklist:

How have the proposals been designed to enhance local character?

Application Documentation:

- Site analysis
- Local character assessment
- Density, layout, scale and massing
- Appearance and materials
- Heritage Assessment

Character and quality

A place's distinctive character is usually made up of elements that are typical (such as housing types or forms), together with elements that are atypical (landscape features such as a village green or architectural landmarks such as a village church, town hall or watermill). The atypical elements of a place help to create its identity.

The standard of design is important for all new development, but particularly for atypical elements, which are likely to draw people to use them and also to attract attention by their uniqueness. They must enhance the character and quality of a place and be carefully designed to add richness to people's experience of a place.

Local landmarks are atypical elements either because of their height or design qualities and must be designed with care. They mark important points in the townscape and help people find their way around.

Accommodating community-related uses or activities in atypical buildings or landscapes helps to raise their profile and make them more memorable. Community buildings such as village halls or schools are important to the character of a place, particularly in a village.

Market places are atypical spaces and may have both typical and atypical buildings around them. Der

Old School and village green - atypical open space and building. Great Hockham

5.1 Responding and contributing to local character

Checklist:

Are landmarks or atypical buildings sited in appropriate places?

How have landmark or atypical buildings been designed to be memorable?

Application Documentation:

- Site analysis
- Local character assessment
- Density, layout, scale and massing
- Appearance and materials
- Heritage Assessment

Creating new distinctive character for larger development

Larger developments must be designed to be distinctive neighbourhoods or groups of neighbourhoods, not 'anywhere places'.

It can be challenging to reflect the character of a small settlement where the density or scale of proposed buildings differs from those in the existing place, or where the scale of development is significantly larger. In these cases, the new development should adopt a design approach of contemporary interpretation or innovation rather than trying to reflect its existing character.

The interface between a new development and an existing settlement needs to be designed with care to create a positive transition between the character of both. It should help to link them together rather than keeping them apart.

Large-scale new developments should be designed as a collection of new neighbourhoods, each with their own character. The character of a place or neighbourhood is created through a combination of:

- typical elements – streets and new homes, which should include some consistency and some variation, so that each street and homes can be recognised within a wider sense of place for the neighbourhood; and
- atypical elements such as primary schools, local centres, village halls, open spaces or play areas, which should create focal points or destinations for one or more neighbourhoods. They present an opportunity to create somewhere special that enhances local character through evolving it or innovation.

To create a sense of place and identity, there should be more variation in character between different streets than within a street. It is important to get the right balance between consistency and variety – too much variation appears random, whereas too much consistency feels regimented. In both cases the effect is to make everywhere look the same. The character of a street is influenced by the choice of plot sizes, building types and forms, building line setbacks, treatment of front gardens and boundaries and street planting, as well as by the building design and its detailing. In each street, some elements should be consistent so it feels like a coherent place.

Character can also be retained and enhanced by using existing landscape or other site features as a basis, such as trees, hedges, or watercourses (see chapter 5).

Primary schools, local centres, open spaces or play areas may be sited at the heart of the development to establish a sense of identity for a new community, or at its edge, to encourage existing and new communities to integrate together. The focus of their design should be on simple, bold forms with good proportions and materials, with detail being focused on the areas close to people, to give the building a sense of quality and make it feel open and welcoming. Buildings and spaces should be designed together to create a setting that is easily accessible, not dominated by car parking, and feels like part of the wider place.

An atypical community building - a simple, well-detailed building form with good proportions and generous windows that look out onto a well-used garden area. Lyng Community Hall. © Photo Darren Leader for Charles Emberson Architect

Too much variety of building forms, materials and details within streets makes them difficult to recognise.

5.1 Responding and contributing to local character

Checklist:

How do proposals create a memorable character for new neighbourhoods?

How will the development complement the character of the surrounding area if it is not reflecting it?

How will the development create a coherent new place, while introducing variety?

Application Documentation:

- Local character assessment
- Density, layout, scale and massing
- Appearance and materials
- Landscape strategy

Creating innovative character for sustainable homes

Climate responsive design, covered in more detail in Chapter 6, is essential for new development to be future-proofed and help contribute to reduced carbon emissions and resilient buildings that are comfortable for residents and users.

For exemplary sustainable homes, contemporary interpretations and innovative and original design approaches using contemporary forms, materials and details will be encouraged, provided they demonstrate high standards of design, respond to the site and its context and have no negative impacts on the existing character of the area.

A simple building form is employed in this eco home, which reflects a traditional barn typology © Photo Ricard Hanson for Jeremy Stacey Architects

Design of sustainable features such as photovoltaics, heat pumps, green roofs and natural drainage features should be carefully considered to ensure they are attractive and integrated well into proposals, and not simply 'bolted-on' additions.

Climate responsive design is covered in further detail in Chapter 6. See appendix 1 for further resources and references.

Passivhaus principles should be combined with innovative design quality to reduce overall energy consumption in new development - Yaxham.

An original design approach for eco-homes that uses its sustainable features to create innovative character (© Tom Bright).

5.1 Responding and contributing to local character

Checklist:

How do the proposals integrate sustainable features to enhance the character of the development?

Application Documentation:

- Density, layout, scale and massing
- Appearance and materials

5.2 Street hierarchy

5.2: Development should create or reinforce a connected and legible street network with a clear street hierarchy that differentiates between main and subsidiary routes.

Connected, legible streets

Development should create a connected network of streets, with connections into existing and new streets, so that it is well integrated into the surrounding area. Cul-de-sacs should be avoided and should be limited to short lengths of residential access street only.

The street and route network should also create clear and legible connections within a site, so that it is easy for people to find their way around. Routes should follow the 'desire lines' where people naturally want to walk, so that walking and cycling is intuitive and convenient. The alignment of established footpath or cycle routes to and from the surrounding area should also be incorporated into new development where possible.

The orientation of the street network is an important factor that influences opportunities for climate-responsive design as well as character. It should be carefully selected to align with the strategy for climate-responsive design of buildings.

Proposals for large-scale development should be based on a hierarchy of streets, with differing widths to define each street's role and character and help make places easy to understand. Streets should be designed to be safe and comfortable for all users, prioritising vulnerable users (pedestrians and cyclists) over vehicles and should promote active travel and public transport use.

The design of a street hierarchy should depend upon

- the scale of the development,
- its location, in a market town or village;
- the character of that place, whether it is urban, suburban or rural; and
- the amount of movement that is anticipated along each street.

In market towns, streets should generally be designed with at least one pavement, the only exceptions being residential access streets. Bus routes and cycleways should be identified and designed into the streets where appropriate and bus stops should be provided with shelters. . They should contribute towards creating a wider cycle and bus network in the town.

In villages, the design of streets should relate to the local character. Safe routes for local walking and cycling should be provided either on- or off-street, depending on local character. See Chapter 4: Active travel. Bus routes should serve the wider village as well as new development.

Street design should depend upon its place in the street hierarchy. A primary route through the town centre is likely to have a continuous building line and set back and taller building heights, Attleborough.

A primary route through a new development might have taller buildings, more regular planting and a more formal character.

Local streets serving small numbers of houses only can have shared surfaces, and a more varied building line might be more appropriate, for example in this village location.

5.2 Street hierarchy

Checklist:

How are the development's streets designed differently to introduce a street hierarchy?

How are buildings designed and positioned with landscaping to define and enhance streets and spaces?

Application Documentation:

- Street sections
- Site layout
- Density, scale and massing

Development blocks

The street network defines a pattern of development blocks and open spaces, which provide a starting point for creating a distinctive identity for a new place.

The pattern and sizing of development blocks should create well-defined streets and open spaces wherever possible. It should be based on perimeter blocks, with

- buildings fronting onto streets and open spaces;
- a distinction between their fronts and backs; and
- clear separation between public and private space.

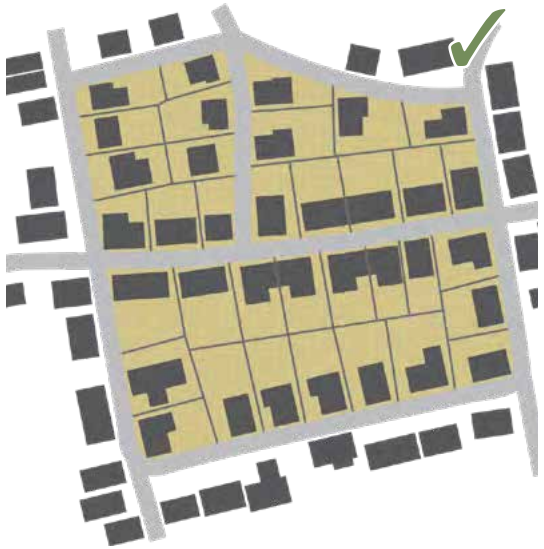
Building fronts should relate to fronts and backs to backs unless a different approach is justified in terms of responding to local character.

The shape and orientation of development blocks also influences the opportunities and challenges for achieving environmental performance – see 5.4. Proposals should find a balance that is sensitive to the site and context, and not simply apply a standardised solution.

Open spaces should be sited so they provide focal points for a development or help to bring existing and new communities together.

New infill development should generally conform to the existing block structure where possible. Where a different design approach is proposed, it should be justified in terms of the character of the development proposed.

Experimental suburb with unclear distinction between the fronts and backs of buildings here showing garages sticking out on the frontage.



Blocks with perimeter development create well defined frontages to public streets and open spaces, and private.

5.2 Street hierarchy

Checklist:

Has the development been designed to create perimeter blocks with buildings generally fronting onto streets?

How have the development blocks been orientated optimally to maximise environmental performance and complement local character?

Application Documentation:

- Site layout

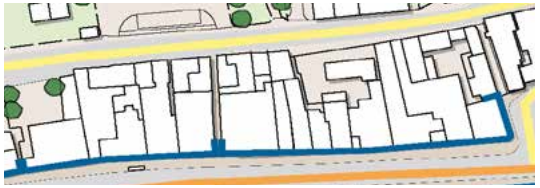
Plots

Development blocks should be sub-divided into a series of plots, either for different buildings to be developed or to create a regular pattern and rhythm of buildings that breaks down a larger-scale development. Plot size influences the character of a development so plot shapes and sizes should relate well to their context and the surrounding character. The arrangement of plots and of buildings on plots may vary more in villages than in market towns.

On larger developments, plot size should vary depending on location within the development, Smaller plots should be clustered around focal points or in centres or cores to help create a variety of character and densities that help to support services such as buses or local facilities such as shops. Proposals should also reflect different aspirations for garden sizes – some people want an outdoor room whereas others are interested in gardening.

For all development, plots should be of a size and shape that allows amenity space, parking, servicing and waste to be accommodated in a way that is attractive and appropriate to the building type, density and local character.

As density increases, different building types and groupings are needed to create a sense of place with positive character. It cannot be achieved by putting detached houses very close together on small plots with poor amenity.

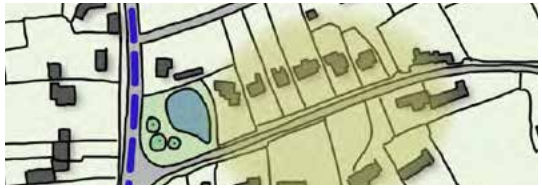


Town Centre - Smaller, narrower plots, with relatively large building footprint.

Inconsistent suburb - larger, wider plots, with smaller building footprint.

Radial route – Large plots, both wide and deep, with relatively small building footprint.

In market towns, generally town centre plots are smaller and narrower and more intensively developed than in suburban areas, where they are larger and wider and with a smaller building footprint. On radial routes, plots are often large, and both wide and deep, but with a relatively small building footprint. In villages, plot sizes and building footprints are generally more variable depending on the village type and location within the village and they may be less regular and more varied in shape. New development should respond to these local characteristics.



Continuous rural row village – Varied size and shape of plots, generally larger.

Dispersed village – Varied size and shape of plots, generally very large.

Checklist:

How have plot sizes been designed to create and reinforce positive character for the development?

Do plot sizes on larger developments vary to create character?

Do plot sizes allow for variation in garden sizes?

Application Documentation:

- Site layout
- Landscape Character Analysis

5.3 Street frontages

5.3: New development should be designed as streetscenes. Decisions about focal points, corners and landmarks, building lines and set-backs, whether buildings join, and boundary treatments all contribute to creating well-designed street frontages that respond to local character and help to integrate new development into the existing context.

Designed as streetscene

Development proposals should provide street elevations to demonstrate that they have considered the new development in relation to the composition and characteristics of the streetscene as a whole, and not focused only on the design of individual buildings.

Where a development proposal creates new streets, then:

- In market towns, the design of buildings on either side of the street should relate to one another in terms of the placing of buildings, whether they join and their boundary treatments.
- In villages, the design of the streetscenes should take into account local character, so as not to increase uniformity where it is uncharacteristic of the existing pattern of development.

Infill development should relate to the streetscene into which it will fit.

Generally, the fronts of buildings should address the street and should relate to the fronts on the other side of the street and buildings should be accessed from the street frontage.

A sense of rhythm can be created along the street frontage through repetition of elements. A regular rhythm is more likely to be appropriate in market towns than in villages, where irregularity may be a local characteristic.

It may be achieved through repetition of:

- **building forms** - such as repeated semi-detached villas or terraced houses, see 5.4;
- **built elements –** at roof level such as gables, dormers or chimneys, or on façades such as repeated patterns of window and door openings, see 5.5; or
- **landscape elements** - such as street trees, or boundary treatments such as hedges or railings and front gates.

The relationship between the width of a street and the design of buildings along it should reinforce its level in the street hierarchy and should take into account the space needed for movement, the enclosure of the space by buildings, soft landscape including sustainable drainage features, on-street parking provision, front gardens or forecourts, and the privacy of residents.

Modern development creates a rhythm along the street that complements the historic streetscene in Norwich.
© Art Architecture

5.3 Street frontages

Checklist:

How will the development create a positive streetscene that is coherent?

How has the streetscene been designed to complement the character of the surrounding area?

Are buildings designed to turn street corners well?

Application Documentation:

- Building elevations
- 3D visuals
- Local character assessment

The placing of buildings – building line and set-back

The position of buildings in relation to the street space establishes a building line for the street. The set-back is the distance between the building and the street edge. The building line and the set-back from the edge of the street should be designed in relation to the street as a whole.

A consistent building line helps to create a coherent character for a street and it may contribute to the formality of a layout. If the local character includes consistent building lines, then new development should reflect a similar approach.

In some cases, a varied building line along the street is characteristic and it may contributes to an informal layout. Generally a more informal building line is more appropriate in suburban or rural settings.

Infill development should generally follow an area's existing building line and set-back, except in an inconsistent area, where it might be appropriate to introduce more consistency to the building line.

Where an area does not have a consistent building line and set-back, proposals for infill development should analyse the surrounding area and demonstrate the appropriateness of their design approach.

Garages should not be sited in front of the building line.

Whether buildings join

This must be appropriate to the local context. A more continuous frontage typically creates a more urban feel, whereas less continuous frontage is more appropriate in more suburban or rural settings.

In some places, such as leafy detached areas, views through the gaps between buildings provide a green backdrop and setting that is important to local character.

In others, such as in town centres, the continuity of the building frontage is a vital component of their success.

In the cores of villages, buildings often join together to form short informal terraces, rather than being detached.

Formal Suburb - Consistent building lines. Buildings join to create regular groups.

Leafy Detached - Building lines and set-backs vary and buildings rarely join.

Town Centre - Building lines usually set on the street edge with no set-back, although with some historic forecourts, now paved. Buildings join to create continuous street frontages.

Single focus nucleated village - Village core with building lines set on the street edge with no set back or buildings joined to create short informal groups.

Continuous rural row village - Building lines and set-backs vary. Small group of building may join, often irregularly.

Checklist:

How have building lines and setbacks been designed to create or reinforce a positive and coherent character for the development?

Are buildings designed as detached or joined together in a way that complements the character area?

Application Documentation:

- Site layout
- Plans and elevations
- Local character assessment

Boundary treatments

Development proposals should demonstrate that front gardens will be:

- well-defined so they are clearly semi-private spaces;
- rational in size and shape, so residents are motivated to look after them; and
- designed to incorporate bins / storage / parking/ cycle parking as necessary.

They should relate to the street hierarchy and the proposed character of each street.

In new development, front gardens should generally be enclosed with a boundary treatment such as a hedge, wall, fence or railings that increases privacy while allowing some overlooking from the home to the street.

The appropriate boundary treatment will vary depending on existing or proposed local character and the location, for instance whether the site is in a town centre or village core, or edge-of-settlement. It should be high quality and should enhance the street and contribute to the character of the neighbourhood.

The materials used for walls and fences should relate to the materials used on the surrounding buildings and for local boundary treatment where these contribute to local character. Close boarded fences should not be used on street frontages.

A single boundary treatment should be used consistently along a street so that it contributes to the character and quality of the streetscene.

An open-plan front garden may be appropriate in locations where this is already a characteristic, such as in some areas of suburban bungalows, or where the development fronts onto an informal village green.

Where the building set back is less than 1m, then front gardens / privacy strips should be purposely designed, and consistently landscaped and should allow an opportunity for residents to personalise the space in some manner wherever possible, for instance with plants in pots.

Where a back garden boundary has to face the street, it should be carefully designed and detailed, Swaffham.

Houses front directly or have open-plan front gardens onto some village greens. Ashill

A boundary hedge increases biodiversity and adds to the green character of this street.

Low brick boundary walls define small front gardens to this terrace of houses. Thetford

Simple paling fences are more appropriate for front boundaries in villages than close boarded fences. Sporle

Checklist:

How do boundary treatments respond to local character?

Will they enable front gardens to function well, e.g. incorporating bins, storage, parking where necessary?

How do they relate positively to local character?

Application Documentation:

- Materials strategy
- Landscape / planting strategy

5.4 Built form

5.4: The three-dimensional form of a building should be appropriate to the scale of the street and its role in the street hierarchy – it should reinforce the structure of the streets and help create character. It should also optimise a development's sustainability through careful choice of orientation, compactness and grouping of buildings.

Orientation of buildings.

Orientation is an important factor that contributes to both local character and to climate-responsive design. The key considerations are the relationship of the building form to the plot and the street, the internal arrangement of living and sleeping areas, access to sunlight and exposure to prevailing winds.

Generally, buildings should be regularly orientated on their plots and in relation to the street, in a way that is appropriate to local character. For instance, in market towns, buildings will usually be orientated to face the street, whereas in rural settlements some buildings such as farmsteads may be sited at right angles to it or may be set behind inward facing outbuildings.

Highly sustainable buildings that adopt an innovative design approach should justify their orientation in terms both of environmental performance and potential impact on local context and character.

The internal arrangements should aim to provide an appropriate level of privacy for different activities while at the same time contributing to overlooking of the street so that it feels safe to use. Ground floor bedrooms should not be sited directly at the back edge of the pavement.

The orientation of buildings and of their rooms with principal windows (generally living rooms or kitchen diners) affects the heating that is required for the home. It should aim to optimise

- the natural light and solar gain through main windows, particularly in winter months
- the potential for energy production through photovoltaics or solar water heating panels on roofs
- heat loss and heat gain through large areas of glazing on all façades, particularly heat loss from north façades and heat gains from south and west facing façades, aiming to avoid the need for shading measures to address potential overheating.

Local character, privacy and environmental considerations need to be balanced to reach a development proposal that is appropriate to its context, suits residents lifestyles and is efficient to run.

A village farmstead, set at right angles to the village street. Bridgeham

A north-south orientation suits Passivhaus developments. Carrowbreck, Norwich © Hamson Barron Smith

5.4 Built form

Checklist:

Has the development been orientated to:

- maximise natural light and solar gain;
- maximise energy production potential;
- minimise heat loss and gain; and
- respond positively to local character?

Application Documentation:

- Site layout
- Sustainability strategy

Building height

The appropriate height for a building will depend upon its location and siting, the character and sensitivity of its context, and whether it is being designed to reflect, evolve or innovate local character.

Building heights for new buildings may be different to existing buildings for a variety of reasons, not only that they have more storeys of accommodation:

- they present gables to the street rather than eaves
- they have lower floor to floor heights (than Georgian or Victorian houses)
- they have taller floor to floor heights (than timber-framed cottages).

Careful design is needed to manage differences in height. This includes the choice and articulation of building and roof forms, for instance creating a transition between existing and new, including an attic storey, using gables or dormers, the pitch of the roof and choice of gabled or hipped roof form

The height of new buildings should relate to those in the immediate context. New development should not make heights uniform where a variety of height contributes to local character. In market towns, new development should generally be at least two storeys in height.

Development proposals including taller buildings must demonstrate their appropriateness through an analysis of their potential impacts in relation to the context. Taller buildings are more visible and must also be designed and detailed to a quality that lives up to their prominence.

Taller buildings or building elements may be appropriate in certain locations, such as:

- town centres where they exist already;
- on large plots along radial routes, where buildings are set back from the street;
- in town centre fringe areas, or where former outbuildings at the rear of properties are being redeveloped,
- in landmark locations, at important points in the street network for wayfinding or where views will be focused along a street;
- to define the edge of important open spaces
- to create a focal point, local centre or nucleus;
- along main/high streets to align with the street hierarchy.

Bungalows may be included as part of a larger development. However they use land inefficiently and do not create a positive townscape character unless set in a leafy landscape, so should be designed into building groups rather than as detached houses.

A terrace of taller buildings define and overlook an existing town green in Suffolk (© Ash Sakula).

Bungalows are integrated into a building group in this development - The Gatherings, Great Hockham. © Ingleton Wood

Three storey town houses are set away from a radial route that has a suburban character. Fakenham © CL Architecture

Checklist:

How do the proposed building heights respond sensitively to the surrounding area?

Are taller building elements designed in appropriate locations with appropriate uses?

Application Documentation:

- Elevations
- 3D visuals
- Local character assessment

Simple and efficient forms

The traditional buildings in Breckland contribute to local character. They are based on relatively simple building forms, with limited articulation, which varies locally and may include:

- additions such as porches or extensions;
- dormers in roofs; or
- jettied first floors.

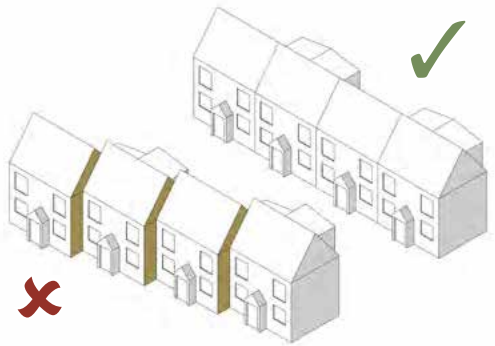
The building forms for new development should also be relatively simple. Articulation should be focused on elements that contribute to local character and climate-responsiveness.

Proposals should avoid unnecessary complication that does not have a strong design rationale in terms of responding to context or environmental performance. For instance, terraced buildings should generally have a continuous façade and roof form with no steps.

Simple, compact building forms are inherently more energy efficient as they minimise heat loss and energy requirements for heating. Most heat loss is through the walls and roof of a building so the larger the surface area, the greater potential for heat loss. The form factor (the surface to volume ratio of the building) is a way to assess this.

Where building forms are very simple then the emphasis must be on proportions, elevations, materials and details to make sure that they achieve a high standard of design. Proposals will need to include sufficient detail to secure the future quality of the built development

A simple building form that is a contemporary interpretation of a traditional timber frame house, Dormers add complexity but contribute to local character. This is an example of a Passivhaus. Hickling © Fran Bradshaw of Anne Thorne Architects



Terraced houses on a flat site should generally have a continuous building line and roof form with no steps.

Traditional building forms in market town centres are generally simple. Thetford

Simple building forms with porches as additions. Weasenham

Contemporary interpretation of timber framed housing with simple compact form, articulated only by a jettied first floor. Wymondham
© Lucas Hickman and Smith

Checklist:

Are building forms designed to be simple and compact?

How is the site layout designed to minimise unnecessarily complicated forms?

How has the development created quality design where forms are simple?

Application Documentation:

- Scale and massing
- Detailed plans, sections and elevations
- 3D visuals

Roof forms

Roof forms should respond to the surrounding context, the plan and three-dimensional form of the building, and the visibility of the proposed development.

There are a number of elements to consider, including:

- Type / arrangement of the roof – e.g. hipped or gabled;
- Orientation of ridges – parallel to the longer side of a building usually results in better proportioned roof height and scale in relation to the building as a whole;
- The pitch, which influences the size and scale of the roof. The roof should be well-proportioned in relation to the building as a whole and not out-sized;
- The materials and colour, which relate to the pitch;
- The scale and treatment of projecting elements such as chimneys and dormer windows, which require careful detailing;

Roofs should be designed to accommodate sustainable elements wherever possible and they should be integrated into the roof as a whole. This includes:

- the right orientation, aspect and pitch of roof for photovoltaics and solar hot water systems
- water management and collection to slow down and reduce run-off.

Green roofs are an effective way to manage water and increase bio-diversity, while also helping to integrate a development visually into a landscape context.

Consideration should also be given the future adaptability of roof space, particularly in smaller houses.

Where there may be long-distance views of the development, or where it is visually prominent for some other reason, then the design of the roofscape of a development will be particularly important. Particularly sensitive locations include the edges of villages, where a view of the roofs of development will be the first impression of it. The roofs of new development in the historic centres or cores of market towns and villages also need careful consideration.

In sensitive locations, the proposals should demonstrate that the roofscape of the development as a whole will be well-composed from the approach. Photovoltaics should be integrated into new roofs rather than being planted on their surface. Consideration should be given to whether it is appropriate to select a slate roofing rather than clay tiles, to reduce the contrast between photovoltaics and roofing.

Photovoltaics integrated into a roof can reduce the visual contrast of its appearance (© GB-Sol).

Orientation of buildings and poor roof design with dominant gable ends creates an unsympathetic streetscape.

This street frontage is broken up by gables with steep roofs but their height and width makes them feel dominant and out-of-scale with the village street.

Checklist:

How do the proposed development's roofs complement local character?

Do the orientation, pitch, materials and colours complement the surrounding area?

Are sustainable elements such as photovoltaics and water collection designed sensitively?

Application Documentation:

- Building elevations
- 3D visuals
- Roof plans
- Local character assessment

Building groups

In many parts of Breckland, building groups - several different buildings joined together - contribute to local character.

Grouping buildings reduces external wall area and materials, so helping to reduce their embodied carbon and heat loss.

Atypical groupings include the buildings associated with a watermill, historic infill buildings in market places, or a workhouse. Typical groupings are associated with housing or shopping streets and vary between the market towns and villages and also by place.

Development proposals for places characterised by typical building groups should demonstrate through analysis that they are appropriate for the location and local character. Typical groupings should also provide design inspiration for new development in the places where they are found.

In market towns, examples of typical groupings that contribute to local character include:

- buildings on historic shopping streets in town centres;
- residential terraces (or paired villas) in town centre fringe areas; and
- groups around public spaces in formal suburbs.

Wide fronted 2-3 storey town centre buildings with continuous frontage and shops at ground floor. Large plots with linear smaller scale outbuildings to rear around lanes or courtyards. Opportunity to intensify use/ develop outbuildings while maintaining character.

Narrow fronted 2 storey terraced housing with consistent building line on deep plots, some with small front gardens. Some with shared rear parking/ garages and some only with parking on-street. Paired villas offer on-plot parking. Opportunity to intensify other sites in town centre fringe areas in similar manner.

Wide fronted 2 storey semi-detached, linked or short terraces of housing on large plots, with weak corners. Opportunity to infill/ intensify and enhance open spaces, while maintaining character.

Checklist:

Are buildings grouped where appropriate?

How do proposed building groupings relate positively to local character?

Application Documentation:

- Site layout
- 3D visuals
- Local character assessment

In villages, examples include:

- informal terraces in village cores associated with open spaces; and
- farmsteads in agricultural villages.

Atypical groupings reflect the unique origins of a place, in which case, new development should avoid competing with them or undermining their significance by replicating them.

Views, focal points, landmarks and corners

Buildings sited at focal points or identified as landmarks are atypical elements that require special attention to design and detail so that they help to create a more legible place that is memorable and characterful.

In residential developments, where a building is required to terminate an important view within or into the development, it is likely that a building group will be needed to successfully fulfil this function, rather than an individual home. The composition of the group needs careful attention, in terms of proportions, symmetry or otherwise, elevations, quality of materials and details.

Buildings sited on street corners also require careful consideration so they contribute positively to the design of both streets. They should not have blank frontages on any street-facing elevation.

Informal and irregular group of wide-fronted two storey houses with small front gardens on deep plots defining edge of village green. Opportunity to create focal points in new developments in similar manner.

Substantial farmhouse at right angles to street, with group of inward facing farm buildings around informal courtyard. Opportunity to use as model for new development in villages of agricultural origin.

Materiality and form can be used to create successful landmark buildings.

An opportunity for a landmark building is unsuccessfully realised - the grey building fails to use architectural quality or form to enhance its prominent corner.

Checklist:

How have buildings at focal points or at the end of views been designed as landmarks or buildings of particular design quality?

Application Documentation:

- Site layout
- Building elevations

5.5 Building elevations

5.5: New development should demonstrate how the building design is high quality and an appropriate response to the local context.

Elevations should respond to local character, through

- reflecting it, where it is high quality;
- contemporary interpretation; or
- innovation.

Where the design approach is to reflect existing architectural character, this should include a faithful reflection of proportions, materials and details, for example with reveals and timber sashes to windows.

A contemporary reinterpretation should incorporate some elements of local character while introducing some contemporary elements. For instance it may integrate contemporary materials and details into traditional building forms.

Innovative design may use an original approach to both form, materials and detailing. . It should be exemplary both in quality and environmental performance.

Street scene elevations should be designed to create a consistent character along a street with sufficient variety or detail to make tit feel visually interesting.

The design of elevations should relate well to the building's form, orientation and relationship to the street. They should be well-balanced and composed with good proportions. This is of particular importance where a design approach is innovative.

Where there is a rhythm of frontages along the street, new development should be designed to reflect it.

A contemporary interpretation, retaining the scale of the historic barn door opening with large windows, dark coloured mullions and transoms and large timber doors, Norfolk.

Innovative design approach to terraced housing, with well composed elevations that create a regular rhythm along the frontage -Goldsmith Street, Norwich. © Mikhail Riches & Cathy Hawley

Well proportioned Regency villa with generous floor to floor heights, a shallow roof with projecting eaves, a hierarchy - elegant and varied window proportions, depth created by arched surrounds, reveals and timber sashes, and an attractive red brick.

Poorly proportioned house with central projecting gable, regular floor to floor heights and a concrete tiled roof that appears heavy. Windows are side and top hung casements with no reveals. Render contrasts crudely with red brick lintels at ground floor only and quoins.

5.5 Building design

Checklist:

How have the building elevations been designed to complement the character of the local area?

Are the building elevations designed with good proportions and a positive relationship to the street?

Application Documentation:

- Elevations
- Materials and detailing

Windows play an important role in:

- the design quality of the overall elevation;
- activating and supervising the street;
- the usability, comfort and attractiveness of internal rooms; and
- the building's environmental performance.

Their size, position, proportion and design should to be carefully chosen to achieve these requirements.

Window sizing should balance daylighting with privacy requirements. For example, in ground floor rooms that are close to the street, vertically proportioned windows provide more privacy than horizontal ones although full height windows rarely provide sufficient privacy. Windows should also be large enough to make the elevation of a building feel welcoming and to allow overlooking of the street, Blank walls are not appropriate for street frontages.

The proportion of glazing on an elevation should reflect its orientation. North-facing elevations should be less glazed to prevent heat loss. East and west-facing elevations should be designed to minimise overheating and the need for external shading.

Where site affected by noise, habitable rooms should be sited away from the noise source on the quieter façades. Any mitigation proposed will be expected to ensure that windows can be opened without residents experiencing an unacceptable level of internal noise. Only as a last resort when all these options have been exhausted, should consideration be given to alternative means of mechanical ventilation.

Entrances should be obvious and easily accessed from the street. They should include some shelter for residents and visitors.

Windows are well proportioned, making the building feel welcoming to the street frontage, Shipdham

Well-proportioned, gabled building with a contemporary pattern of openings that are generous, relate to the interior and create a rhythm of openings on the façade, Norwich

Small windows feel mean in relation to the size of the elevation.

Small windows on the elevation facing this open space are not well proportioned. Buildings on a corner need careful design of all street facing elevations so they contribute positively to the streetscene and activate the street, and windows are a key element of this. Norwich

Checklist:

Does the window design - including size, proportion and position - relate positively to the character of the street?

Are larger windows oriented on southern façades?

Application Documentation:

- Elevations
- Materials and details

5.6 Materials and details

5.6: Building materials and details should be attractive, high-performance and appropriate for the character of the local area. Service elements should be well-integrated into the design and not visually intrusive.

Materials and colours

Attractive and traditional materials can help to knit a new development into its surroundings. The choice of materials for new development should draw on those found in the local area.

For buildings that reflect local character, appropriate materials may include: Timber, render or plaster, gault or red bricks, flint, clay tiles and pantiles, slate, and thatching reed. Bricks, tiles and slates should be selected to match the colours and textures found in the locality. uPVC does not reflect local character and is not sustainable, windows and doors should preferably be timber.

For buildings that are a contemporary interpretation or innovative there is more opportunity to introduce different materials including contemporary materials, or to use traditional ones in new ways.

Materials should be selected for their longevity, so they will retain their quality over time, and to minimise the need for repair and replacement, and therefore waste. The operational and embodied carbon, including the costs of transport, also need to be taken into account.

Contemporary materials are combined with traditional materials in this successful example of infill build in Thetford town fringe.

Traditional materials vary in different parts of Breckland but they include timber, render or plaster, gault or red bricks, flint, clay tiles and pantiles, slate, and thatching reed - New Buckenham Village Hall.

Materials can be used to delineate different uses in a building.

5.6 Materials and details

Checklist:

Are the materials chosen high performance?

How do materials draw on local character?

Application Documentation:

- Materials strategy

Detailing

When reflecting local character, attention should be paid to make sure that the detailing is correct and appropriate to that place. For instance, traditional timber framed buildings in Breckland do not include cruck frames and generally timber frames were only expressed on larger buildings.

Render façades should be detailed with care to ensure that they will continue to look good over time, particularly where maintenance is likely to be carried out by someone other than the residents.

Contemporary design uses materials to respond to local character. Great Ellingham

Texture, detailing, and materials have been used to create characterful façades in this example in Shipdham. © Clayland Estates

Detailing to respond to character also extends to non-built elements, such as the labelling of trees in Dereham.

A well-detailed contemporary interpretation of an agricultural building with simple elevations and a mix of modern and traditional materials. Haveringland.

Well-designed materials and details add visual interest. The oak-framed porches add quality where people come into contact with it. Shipdham. © Clayland Estates

Public toilets in Thetford use traditional materials and detailing to integrate to surrounding area.

Checklist:

How have building details been designed to last?

How do the materials chosen complement and enhance the character of the local area?

Application Documentation:

- Materials strategy
- Elevations
- Precedent images from other schemes

Service elements

These elements may include utility boxes, waste and recycling, cycle storage, caring points and air source heat pumps. They are often overlooked during the design process. For smaller homes in particular, they may be located on the street or in front gardens where they can have a negative impact on the street if not designed well. By contrast, if they are designed well, they should hardly be noticed.

Development proposals should integrate the requirements for utilities, waste and recycling, cycle storage, electric vehicle charging points and air source heat pumps without impacting the streetscene or the quality of the public realm.

All new homes should provide cycle parking that is safe, secure and undercover in a location that is as easy to access as car parking.

For houses, bins should be stored on plot in a position where they are easy to access, and screened from public view. This may be in rear gardens or in front garden stores.

Where communal bins are required, they should be convenient to use and enclosed, preferably within the building or in a store that is designed as an integral part of the scheme.

Flues and ventilation ducts should be carefully positioned and well-integrated with good quality grilles that are complementary to the materials used on the building.

Where parking is on-plot, an electric vehicle charging point should also be provided. Communal charging points should also be designed into new developments wherever possible.

Air source heat pumps should be sited with care to minimise any impact on the public realm or on residents ability to enjoy their garden.

Bin storage is integrated into the front garden, easily accessible, and screened from the street view.

Bins stores can be designed to be attractive and biodiverse.

Air Source Heat Pumps are positioned at the front of dwellings to enable easy servicing, but are enclosed to screen them and avoid dominance when viewed from the street.

Cycle parking is accessible, convenient and secure.

5.6 Materials and details

Checklist:

Is there adequate external storage space for bins and recycling as well as vehicles and cycles?

How have bin storages and service elements been designed to be discrete and convenient for users?

Application Documentation:

- Site layout
- Details of bin stores
- Elevations

6 Climate responsive design

Breckland District Council declared a climate emergency in September 2019 and has committed to use its powers as planning authority to ensure that development in the district adopts more sustainable building practices. This has brought into sharp focus the need to rapidly reduce carbon emissions associated with the construction industry and the energy required to operate buildings.

Climate-responsive design includes locating development in more sustainable locations, sustainable design of the built form and associated landscapes, and encouraging behavioural change in occupants.

The Council encourages aspirational sustainable design, including proposals that target Passivhaus standards, on-site renewable energy generation, and promote biodiversity.

6.1 Climate principles in other sections

Responding to climate change through the design of new development is a core theme throughout this guide. This chapter covers specific elements relating to energy generation, building quality and adaptability, and water conservation. Other critical components to sustainability and the climate can be found in the following sections:

See appendix 1 for further resources and references.

	Chapter	Principle(s)
Protecting Breckland's landscape	1	1.3 - Integrating development into its surroundings
	3	3.1 - Retaining and enhancing existing landscape features and biodiversity. 3.2 - Maintaining green 'gaps', 'backdrops' and 'edges'
Promoting urban greening and landscape-led design	3	3.3 - Providing usable open space for play and social activity 3.4 - Integrating open spaces into an attractive network of green infrastructure 3.5 - Planting on street frontages
Creation of wildlife habitats and encouraging biodiversity	3	3.6 - Wildlife-friendly homes and gardens 3.7 – Planting species
Reducing reliance on private vehicles and encouraging active travel	4	4.1 - Improving walking and cycling links 4.2 - Connecting to key local destinations, facilities and public transport nodes 4.4 - Creating attractively designed streets and spaces 4.5 - Well-designed parking areas
Sustainable development layout and building design	3	3.5 - Climate change
	5	5.2 - Street hierarchy 5.4 - Built form 5.5 - Building design 5.6 - Materials and details

Checklist:

How have the proposals embedded sustainability strategies through all aspects of design, from the landscaping to layout and built form?

Application Documentation:

- Sustainability strategy

6.2 Flexibility and adaptability

6.2: Buildings should be designed to be flexible in how they can be used, and adaptable over time.

One of the most effective ways to reduce new carbon emissions is to retain and refurbish existing buildings, adapting them as needed to accommodate new uses, new users or new lifestyles.

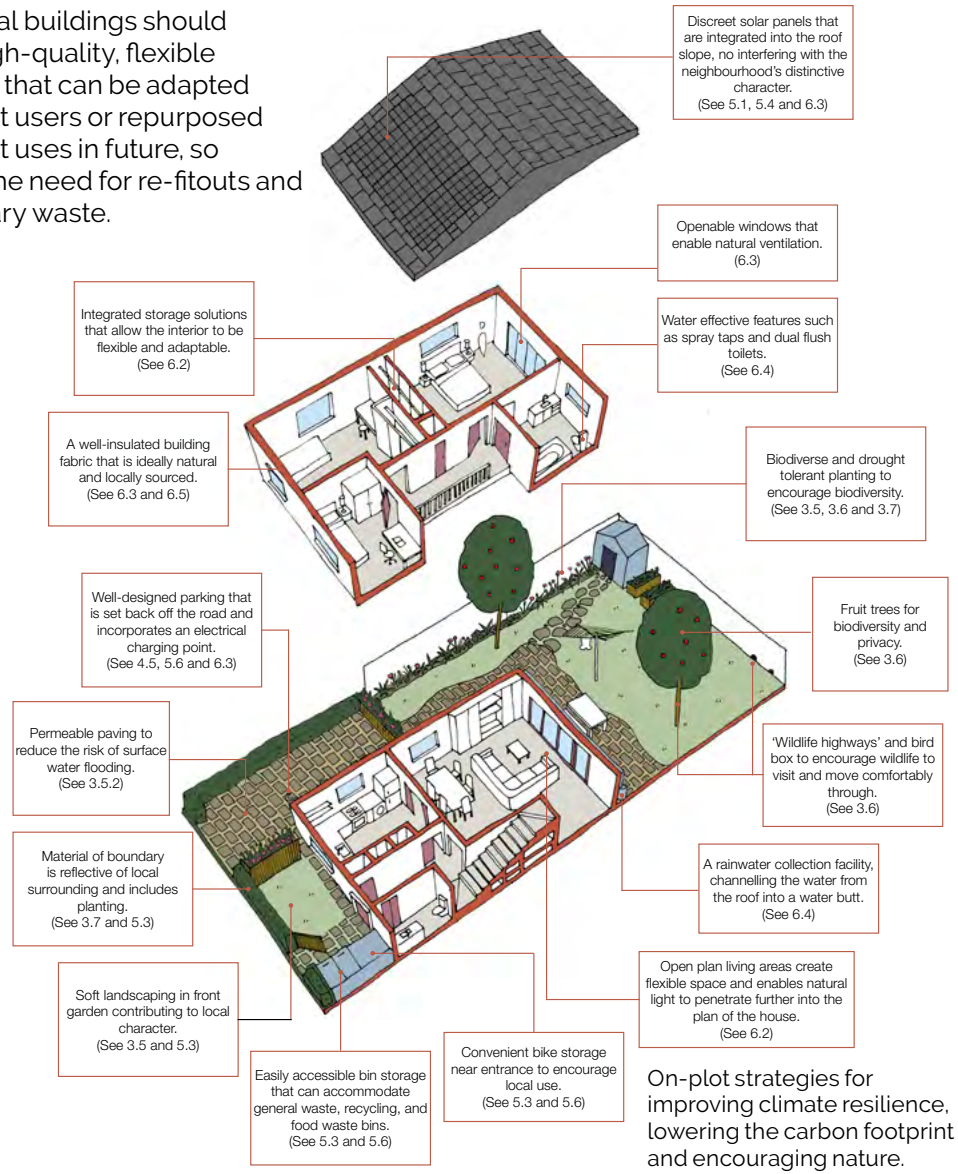
Where new buildings are required, they should allow for flexibility and should consider how they may be adapted in future, to maximise their potential lifespan.

The internal configuration of new homes should allow flexibility in their use as people's lifestyles change over time, for instance, with open plan layouts that allow for future portioning to create separate rooms. Open plan spaces may benefit some families when children are young but separate spaces may be more suitable as children grow up or households become multi-generational, possibly with additional mobility requirements for older family members.

Accommodation should be designed to achieve appropriate levels of privacy between different activities such as cooking and home working, even where they are in close proximity to one another, for instance through flexible partitions or sound insulation.

New homes should provide space for an occupant to work from home.

Commercial buildings should provide high-quality, flexible floorspace that can be adapted for different users or repurposed for different uses in future, so reducing the need for re-fitouts and unnecessary waste.



On-plot strategies for improving climate resilience, lowering the carbon footprint and encouraging nature.

6.2 Flexibility and adaptability

Checklist:

How is the development designed for flexibility of use?

How will the building(s) be adaptable for future uses?

Application Documentation:

- Sustainability strategy

6.3 Energy

6.3: Energy efficiency should be embedded into the design of new development, both to minimise running costs for users and to reduce their environmental impact, and carbon emissions in particular.

Proposals for development should demonstrate that they follow the energy hierarchy. Energy considerations should underpin every stage of the design process from initial site assessment, through design concept to detailed application and implementation.

Breckland Council encourages proposals that will achieve net zero carbon development. Energy efficiency, low carbon heating and renewable energy generation are all essential to achieving it.

The Future Homes Standard will require ultra-high levels of insulation, appropriate ventilation, renewable energy generation, and no new homes to be connected to the gas network. Proposals should aim to future-proof new buildings by designing-in energy efficiency features from the outset to avoid the need for potentially costly retrofit in future.

For this reason, new developments should avoid connection to the mains gas network unless other energy sources have been explored fully and there is a clear justification of need for doing so. Other fossil fuel energy sources should similarly be avoided.

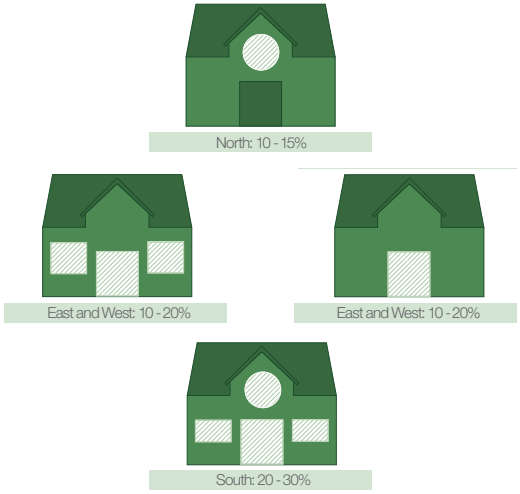
Where proposals are for energy efficient development, applicants should demonstrate this by submitting evidence with any relevant planning application.

Photovoltaic panels should be provided and integrated into the design of all development where possible. Orientation of roofs should factor in potential for solar energy production.

Passivhaus home in Swaffham, combining energy efficiency and low carbon timber cladding

Straw bales can be an effective low carbon material for energy efficient homes, used here in Hickling

New, highly energy efficient eco-homes that meet Passivhaus standards. Mattishall



Recommended glazing percentages for external façades from an energy efficiency perspective. Nevertheless this needs to be balanced with creating attractive homes and places and it should not result in overly small windows on street frontages.
(Diagram based on the glazing percentages recommendations from the Net Zero Carbon Toolkit (CC BY-NC-SA 4.0))

Checklist:

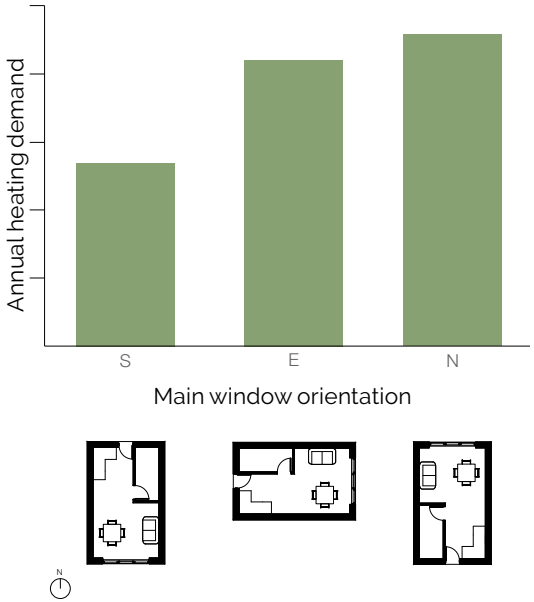
How is the development designed to maximise energy efficiency?

How has the development maximised the potential for onsite renewable energy generation?

Application Documentation:

- Sustainability strategy
- Energy strategy

The energy hierarchy in practice	
Reduce the overall need for energy through passive measures	Orientate building for solar gain in winter months and to control overheating in summer (see 6.3), encouraging south facing dwellings with solar shading Select size of openings to suit orientation of elevation and ensure they are openable and can provide natural cross ventilation Adopt simple, compact forms, with articulation only where important e.g. for function, performance or local character (see 5.4). Buildings should generally avoid complex roof arrangements, stepped building lines, massing and overhangs, and inset balconies. Insulate fabric well, with good airtightness and ventilation to control heat loss effectively
Using energy efficient M&E systems	Use heat pumps for heat supply wherever possible. Generally ground source heat pumps are more suited to large plots and rural situations and air source heat pumps to smaller plots and market towns Where not possible consider other efficient heat sources such as infra-red panel heating Minimise length of duct runs and insulate them to reduce heat loss Ventilate well to control humidity, using humidistats in kitchens and bathrooms Recover and reuse waste heat where possible including from ventilation - Mechanical Ventilation and Heat Recovery (MVHR) – or Waste Water Heat Recovery Use energy efficient electrical fittings and appliances including LED lighting Use smart meters to monitor and optimise energy consumption
Maximise renewable energy supply and storage	Use electric systems wherever possible and avoid connection to mains gas supply Incorporate site-based or local renewable energy sources such as solar water heating or photovoltaic panels with hot water/ battery storage (potentially linked to electric vehicle charging) Integrate with community-based renewable energy initiatives for solar, wind or hydro energy generation or district heating where available



The orientation of main windows affects the heating requirement of a building. Note that west facing main windows are at risk of overheating from low sunlight and are difficult to shade.

Checklist:

What passive measures will the development use to minimise energy requirements?

What energy efficient M&E systems will be used?

Application Documentation:

- Sustainability strategy
- Energy strategy

6.4 Water management

6.4: New development should minimise water consumption and should contribute to water harvesting wherever possible. It should also address surface water flooding issues and seek to improve local water quality where appropriate or necessary.

Responsible water management is a critical issue in Breckland. Development proposals must be designed to reduce water use which should not exceed limit stipulated in the local plan. Buildings should incorporate fixtures such as taps, WCs, showers and baths that meet water efficiency good practice standards.

Developments should incorporate rainwater collection and storage, for example with water butts and should consider grey-water re-use. Living roofs are encouraged to slow run-off and promote bio-diversity.

Areas of hardstanding should be minimised and paved surfaces should be permeable wherever possible. Any surface water run-off should be managed within the site boundary, preferably using landscape-based design solutions such as rain gardens, swales, wetland planting or ponds, particularly in rural areas.

Where local water quality may potentially be adversely affected, proposals will be expected to incorporate mitigation. This should take the form of landscape-based design interventions such as wetland planting or reedbeds, or permeable paving or grasscrete wherever possible.

See Chapter 3 for more information on SuDS and planting.

Appliance / Fitting	AECB Good Practice
Shower	6 to 8 l/min measured at installation. Mixer to have separate control of flow and temperature although this can be achieved with a single lever with 2 degrees of freedom (lift to increase flow, rotate to alter temperature). All mixers to have clear indication of hot and cold, and with hot tap or lever position to the left where relevant.
Basin taps	4 to 6 l/min measured at installation (per pillar tap or per mixer outlet). All mixers to have clear indication of hot and cold with hot tap or lever position to the left.
Kitchen sink taps	6 to 8 l/min measured at installation. All mixers to have clear indication of hot and cold with hot tap or lever position to the left.
WCs	≤ 6l full flush when flushed with the water supply connected. All domestic installations to be dual flush. All valve-flush (as opposed to siphon mechanism). WCs to be fitted with an easily accessible, quarter turn isolating valve with a hand-operated lever. Where a valve-flush WC is installed, the Home User Guide must include information on testing for leaks and subsequent repair.
Baths	≤ 180 litres measured to the centre line of overflow without allowing for the displacement of a person. Note that some product catalogues subtract the volume of an average bather. A shower must also be available. If this is over the bath then it must be suitable for stand-up showering with a suitable screen or curtain.

Good Practice Water Standards (AECB).

6.4 Water management

Checklist:

How will the proposals minimise water consumption?

How do the proposals incorporate water collection and storage?

How will the proposals manage surface water run-off?

Application Documentation:

- Sustainability strategy
- Water use strategy
- Drainage strategy

6.5 Selection of materials and products

6.5: Proposals for new development should demonstrate how their choice of materials and products contributes towards climate-responsive design and also enhances local character and quality.

Materials and products should be selected for their sustainability as well as for their aesthetic quality. This includes embodied carbon and technical performance. Applicants should demonstrate how they have balanced these considerations appropriately for the proposal, site and context (see chapters 2 and 5).

Embodied carbon is the total of carbon emissions emitted when producing a building's materials, their transport, their installation and their disposal at end-of-life stage. Transport can be a significant component for materials that are heavy in weight and manufactured in other countries.

The design process should consider the whole lifecycle of the buildings and the circular economy. New development should be designed for dis-assembly at the end of its life so materials can be re-used in future buildings.

Materials should be functional, durable and robust enough to accommodate regular wear and tear and to last for the lifespan of the building, given the expected level of maintenance. Their technical performance should ensure they are fit-for-purpose – whether that is for waterproofing, insulation, airtightness or breathability.

Off-site modular construction of buildings or components can improve the quality of construction and reduce the risk of failures caused by poor workmanship.

Many combinations of materials and different construction methods may be appropriate for climate responsive development depending on whether the development is proposed to reflect, evolve or be innovative in relation to local character. Wherever possible and appropriate, new buildings should aim to use low carbon materials.

The Enterprise Centre, UEA, Norwich is an exemplar sustainable building that demonstrates local sourcing of materials. Many of the traditional masonry materials of Breckland are no longer locally produced. Others have become prohibitively expensive and are often imported, so incurring relatively high transport-related carbon emissions. The Enterprise Centre uses a timber frame from Thetford Forest, flint from Holt and straw from Beccles and Dereham. It also uses locally sourced recycled and upcycled materials - for example recycled hardwood panels.

6.5 Selection of materials and products

Checklist:

How do the materials chosen minimise embodied and operational carbon of the development?

Application Documentation:

- Materials strategy

Local and regionally sourced materials should be used wherever possible - flint in this case, as seen in Sherringham.

Materials should be durable, lightweight and reclaimed where possible e.g., fibre cement tiles

Norfolk reed thatching is sustainable and locally distinctive (Photo by Karen Cann).

Reclaimed timber beams have been re-used as structural elements, Shipdham.

6.5 Selection of materials and products

Checklist:

Are the materials locally sourced or reclaimed?

Are the materials functional and durable?

Are the materials low carbon?

Application Documentation:

- Materials strategy

Appendices

Appendix 1: References and resources

References relevant to the whole document

- Current Local Plan (2019)
- Breckland Landscape and Settlement Character Assessment (2022)
- National Design Guide (2021)
- National Planning Policy Framework (NPPF) (2021; updated 2023)
- National Planning Practice Guidance (PPG) (various)
- Thetford Area Action Plan (2012)
- Norfolk Strategic Planning Framework: Shared spatial objectives for a growing county and statement of common ground (2021).
- Building for a Healthy Life (2020)
- Attleborough's Town Delivery Plan 2021-2031 (2021)
- Thetford's Town Delivery Plan 2021-2031 (2021)
- Swaffham's Town Delivery Plan 2021-2031 (2021)
- Watton's Town Delivery Plan 2021-2031 (2021)
- Dereham's Town Delivery Plan 2021-2031 (2021)

References relevant to specific chapters

Chapter 1

- Breckland District Landscape and Settlement Character Assessment (2022)
- 'Breckland 2035' Sustainability Strategy (2021)

Principle 1.1

- National Design Guide (2021) (principles C1 and I1)

Principle 1.2

- National Design Guide (2021) (principle I3)

Chapter 2

- The National Model Design Code (2021)
- Breckland District Council – Statement of Community Involvement (2022)
- Voice Opportunity Power: A toolkit to involve young people in the making and managing of their neighbourhoods (2023)
- Achieving well-designed places through neighbourhood planning (2021)

Chapter 3

- Building with Nature Standards Framework
- National Planning Policy Framework (NPPF)(2012; updated 2023)
- Outdoor Accessibility Guidance (2023)
- Inclusive Mobility: A Guide to Best Practice on Access to Pedestrian and Transport Infrastructure (2021)
- Paths and routes - Sensory Trust
- Fields in Trust guidance on play
- MAP Right to Play Pledge

Principle 3.1 and 3.2

- Breckland District Landscape and Settlement Character Assessment (2022)
- Cycle Infrastructure Design (2020)
- CIRIA SuDS Manual C753 (2015)
- CIRIA Guidance on the construction of SuDS (2017)

Principle 3.3

- Guidance for Outdoor Sport and Play: Beyond the Six Acres Standard (2020)
- Active Design: Creating active environments through planning and design (2023)
- Handbook: Designing for Physical Activity (2021)
- National Design Guide (2021) (principle H2)
- The Playful Cities Design Guide (2023)
- Make Space for Girls
- Access Chain: an inclusive design tool - Sensory Trust
- Outdoor Accessibility Guidance (2023)
- EN1176 Playground equipment standard- ROSPA
- Fields in Trust guidance on play
- MAP Right to Play Pledge

Principle 3.4

- Building with Nature Standards Framework
- Green Infrastructure Framework (2023)
- Active Design: Creating active environments through planning and design (2023)
- National Design Guide (2021) (principle N1)
- Urban Greening for Biodiversity Net Gain: A Design Guide (2021)

Principle 3.5

- BS5837:2012 – Trees in relation to design, demolition and construction (2012)
- Top Trunks Guide (tree carbon sequestering)

Principle 3.6

- Norfolk Biodiversity Action Plan
- National Design Guide (2021) (principle N3)

Principle 3.7

- Trees in Norfolk

Chapter 4

- Planning in Health (2019). North Norfolk
- Manual for Streets 2 (2010)
- Active Norfolk Insight Tools

Principle 4.1 and 4.2

- Healthy Streets for Surrey (2023)
- LTN 1/20 Cycle Infrastructure Design (2020)
- Active Design: Creating active environments through planning and design (2023)
- National Design Guide (2021) (principle M1 and M2)

Principle 4.3

- Traffic in Villages: Safety and Civility for Rural Roads. A toolkit for communities
- National Design Guide (2021) (principle M3)
- Active Design: Creating active environments through planning and design (2023)

Principle 4.4

- Healthy Streets for Surrey (2023)
- Active Design: Creating active environments through planning and design (2023)

Principle 4.5

- Norfolk County Council: Parking Standards for Norfolk (2007)(with September 2020 revisions)

Chapter 5

- Breckland District Landscape and Settlement Character Assessment (2022)
- National Planning Policy Framework (NPPF) (2021; updated 2023)

Principle 5.1

- National Design Guide (2021) (principle I3)
- LETI: Climate Emergency Design Guide (2020)
- There's no place like old homes. Re-use and recycle to reduce carbon, Historic England (2019)

Principle 5.3

- National Design Guide (2021) (principle B2)

Principle 5.6

- National Design Guide (2021) (principle H3)
- Avoiding rubbish design: Providing for bin storage on new housing developments (2015)

Chapter 6

- LETI: Climate Emergency Design Guide (2020)
- National Design Guide (2021) (principle N2)
- Net Zero Carbon Toolkit (2021)

Principle 6.2

- National Design Guide (2021) (principle R3, L1 and L2)

Principle 6.3

- National Design Guide (2021) (principle R1)
- Net Zero Carbon Toolkit (2021)

Principle 6.4

- National Design Guide (2021) (principle N2)

Principle 6.5

- National Design Guide (2021) (principle R2)

Appendix 2: Acknowledgements

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