









Strategic Design Supplementary Planning Document **April 2021**

FOREWORD

I am delighted to endorse the St Cuthbert Garden Village's Supplementary Planning Document (SPD). It is another important step forward for the ambitious scheme that will see managed growth over the decades ahead.

The document has been developed and shaped with the support and involvement of local communities, landowners, businesses and partners. Engagement is key and we'd like to thank all those that had their say during the consultation process.

St Cuthbert's Garden Village, based in the south of Carlisle, is a unique opportunity to create locally distinctive, high quality new garden communities. It will have a strong emphasis on green infrastructure and healthy environments.

A tremendous amount of work has been carried out with local communities and other stakeholders, with the finalising of the Masterplan for the area achieved in late 2020.

Developers and landowners are now showing interest in bringing sites forward, the SPD therefore provides detailed guidance, clarity and direction in addition to policies in the Carlisle District Local Plan, in advance of the St Cuthbert's Local Plan being adopted.

It shows how development proposals can help deliver against our vision and principles for the Garden Village.

Having it in place ahead of the SCGV Local Plan promotes a positive planning process and establishes the Council's high expectations on achieving design quality for planning applications and new development within the Garden Village.

Cllr John Mallinson

Leader of Carlisle City Council

John Mellins

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1. INTRODUCTION

1.1 St. Cuthbert's Garden Communities - Delivering Ambition

St Cuthbert's Garden Village is one of the largest projects of its kind nationally and the largest in the north of England – 10,000 homes and supporting facilities and infrastructure. It is located within a stunning setting with the Lake District National Park, Hadrian's Wall World Heritage Site, North Pennines and Solway Coast AONBs, Scottish hills and the City of Carlisle within easy reach. It provides a unique opportunity for a new garden settlement fit for the 21st century.

Since Carlisle South was approved as a broad location for growth in the Carlisle District Local Plan 2015 – 2030 (CDLP), in line with Policy SP3 (Broad Location for Growth: Carlisle South), Carlisle City Council has been working with their partners, the local community, landowners and wider stakeholders, to set a vision, guiding principles and masterplan framework for delivering a high-quality, sustainable new community at St Cuthbert's Garden Village. With the national designation of St Cuthbert's Garden Village in 2017, this work has been founded on garden settlement principles and we now have a clear concept to create a series of sustainable, linked neighbourhoods forming a high-quality living, working and leisure environment, based on its fantastic landscape and location on the edge of an excellent city.

Delivering a new garden village will require all parties concerned to demonstrate not only a commitment, but a willingness to work flexibly and in a way that has not previously been experienced in Carlisle. Implementing the required step change in development requires an equal step change in attitude and approach from all. This document sets out what that step change means in practice and helps to guide and define the expectations for high-quality, community-focused, comprehensive, landscape-led, sustainable development at St Cuthbert's Garden Village.

1.2 The Strategic Design SPD - Planning Context, Purpose and **Principles**

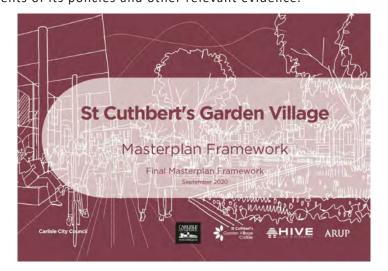
This supplementary planning document (SPD) is subsidiary to the Carlisle District Local Plan and in particular applicants should use the SPD to assist in developing proposals and planning applications to help them comply with Local Plan policies. Whilst a number of the Local Plan policies apply to St Cuthbert's Garden Village, this SPD particularly helps to interprete and articulate the requirements of Policies SP3 and SP6, in setting out the Council's expectations for avoiding piecemeal development and encouraging goodquality, comprehensive, landscape-led design in St Cuthbert's Garden Village, appropriate for a Garden Settlement (see Section 4 Policy and Guidance). In line with current and emerging national guidance, this SPD helps to define what is meant by 'beautiful' development in the context of St Cuthbert's1.

Emerging St. Cuthbert's Garden Village Local Plan

As required by the CDLP, the Council are currently preparing the St Cuthbert's Garden Village Local Plan, which will formalise the policy framework for the garden village. The policy areas to be addressed include: strategic land uses (allocations); design; affordable housing; planning Obligations; Stewardship; strategic green and blue infrastructure; biodiversity net gain; self and custom build housing; smart environments; low carbon development; drainage; and sustainable transport. It is anticipated that the St Cuthbert's Garden Village Local Plan will be adopted in Summer 2022. The Preferred Option Policies of the St Cuthbert's Garden Village Local Plan was the subject of public consultation in November and December 2020.

Masterplan Framework for St Cuthbert's Garden Village

A Masterplan Framework has been prepared by Arup and Hive Land & Planning on behalf of the Council, as an evidence base for the emerging St Cuthbert's Garden Village Local Plan. This Framework was the subject of public consultation and was completed by the end of October 2020. The Masterplan Framework has been used as an evidence base for this SPD, to inform its content. The illustrative plans provided within this document are derived from the work undertaken as part of the Masterplan Framework and it is anticipated that once the St Cuthbert's Garden Village Local Plan is adopted, this SPD will be updated and reviewed accordingly to fully align with and articulate the requirements of its policies and other relevant evidence.



Principles of the SPD

It is important to note that this SPD is not a detailed masterplan or design code, but is structured to provide strategic design guidance. It uses the approved Masterplan Framework to highlight the main structuring issues and principles in order to guide the preparation of planning applications and any future area/site-specific masterplans and design codes. Once adopted, the SPD will be a material consideration in determining planning applications.

Planning Policy & Masterplaninng Process

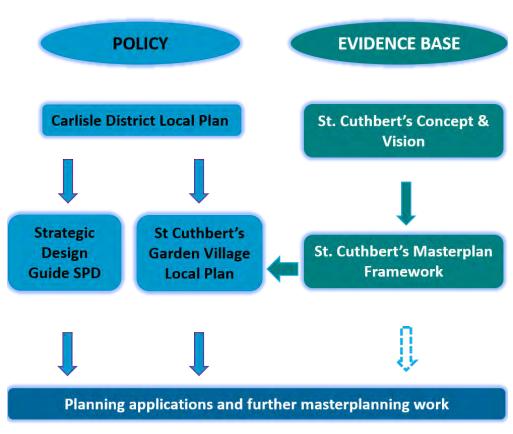


Figure 1: Overview of the planning policy and masterplanning process at St. Cuthbert's

NPPF para 130 and as potentially amended in the consultation dated 8th February 2021

SPD Core Purpose:

- Expand on Policy SP3 of the Local Plan in encouraging the comprehensive and coordinated planning, design and delivery of St Cuthbert's Garden Village, discouraging piecemeal development.
- Complement the policies within the adopted Carlisle District Local Plan and other related documents and, in particular, utilise the approved Masterplan Framework as an evidence base to provide strategic guidance on good design, in the specific locational context of St Cuthbert's Garden Village.
- Guide the preparation and determination of future planning applications, ensuring that they are of the highest quality and in keeping with the Vision for St Cuthbert's Garden Village
- Enable and coordinate the delivery of land for development ahead of the St Cuthbert's Garden Village Local Plan adoption, to help maintain an adequate supply of new housing.
- Define what a healthy, low carbon, green environment will incorporate.
- Provide clarity on our expectations for innovation.
- Support a constructive planning process, informing planning negotiations and decisions.

1.3 A Robust and Inclusive SPD Process

The Concept and Vision and Masterplanning Framework stages of the emerging local plan process have engaged and consulted with interested parties and people as part of the design process. A summary of these discussions and outcomes is available on the St. Cuthbert's Garden Village website. This SPD has drawn on the results of these engagement activities and outcomes to date and was itself prepared through a collaborative process, including direct involvement from partners, utility providers and landowners, together with feedback from the local community, Parish Councils and Statutory consultees during the Statutory Consultation stage. A separate Statement of Consultation has been prepared, detailing the specific activities and the evolution of content that has taken place as a result.

1.4 A Clear SPD Structure

The content of this document applies to the whole of the St Cuthbert's Garden Village area (see Fig 6) and is structured to assist applicants in preparing planning applications as follows:

- Chapter 2 provides all applicants with guidance on the content of and process for planning applications, together with the proposed actions of the Council and their partners regarding delivery and design quality.
- Chapter 6 outlines the Strategic Design Requirements that will apply to all developments within St Cuthbert's Garden Village and sets out the strategic issues for applicants, to ensure that development proposals are bought forward within a comprehensive place making context, avoiding piecemeal development.
- Chapter 7 provides detailed guidance relating to specific topics that inform high-quality, sustainable development. It is organised around key themes that will be of relevance to the majority of planning applications, but allows users to focus in on the topics that are most appropriate to their
- Chapter 8 outlines the different character areas across St Cuthbert's Garden Village, together with the guiding principles for key locations. Applicants should refer to the character area/location that is appropriate to inform their specific proposal.

2. DELIVERY AND PLANNING APPLICATION PROCESS

This section sets out guidance for applicants regarding the application process, to avoid piecemeal development and deliver comprehensive, quality placemaking as defined by this document. The Council encourages collaborative working and early engagement with Development Management (email at: EDA@carlisle.gov.uk) and Cumbria County Council is considered essential for all planning applications.

2.1 Delivering Quality

As set out in the National Planning Policy Framework (NPPF):

'Design quality should be considered throughout the evolution and assessment of individual proposals...with permission refused for development of poor design that fails to take the opportunities available for improving the character and quality of an area and the way it functions, taking into account any local design standards or style guides in plans or supplementary planning documents...In determining applications, great weight should be given to outstanding or innovative designs which promote high levels of sustainability, or help raise the standard of design more generally in an area, so long as they fit in with the overall form and layout of their surroundings.'1

This document sets out the Council's expectations and requirements to discourage and avoid piecemeal development and deliver quality, comprehensive placemaking for St Cuthbert's Garden Village, in line with the NPPF, National Design Guide and as required under Policies SP3 and SP6 of the CDLP. Applicants should have full regard to the content of this SPD in formulating development proposals and this section sets out the process that should be followed in evolving planning applications, to ensure that this guidance is applied appropriately.

Good-quality, Comprehensive Development:

All applications will be considered against the requirements of Policies SP3 and SP6 in particular. To avoid piecemeal development, applications that are not able to demonstrate their contribution to good-quality design and the comprehensive delivery of St Cuthbert's Garden Village, including local and strategic infrastructure requirements, will be resisted.

Applicants should demonstrate clear regard to the context and setting of their proposal and how they will deliver sustainable development, are landscape-led and are contributina to the overall delivery of the St Cuthbert's vision, principles and the masterplan framework.

Applicants must demonstrate that they have incorporated high standards of design throughout the design evolution process and how these will be carried through to completions and subsequent maintenance. If the applicants are not the developer, the applicants will be expected to set out what steps will be taken to ensure that these high standards are carried forward by subsequent developers to completions and maintenance.

2.2 The Design Process and Planning Applications

The design of new development proposals should evolve in partnership with the City Council, in order to achieve good-quality outcomes. The design ethos, approach and objectives for any proposed development should be made clear at the outset of the planning application process and will need to flow through the whole of the design process, to delivery. Landowners and developers are strongly encouraged to engage with the Council at the earliest possible opportunity in progressing any form of proposal for development within St Cuthbert's Garden Village. The Council will enter all discussions in a proactive and positive way and pre-application discussions, for which there is currently no charge, are encouraged and expected. On more complex proposals, encouragement is given to the provision of a Planning Performance Agreement, to establish an agreed timetable, key milestones and information requirements (see below).

Applicants are strongly encouraged to have regard to the content of this SPD, in evolving and finalising proposals. In order to avoid piecemeal development and to ensure that critical infrastructure, design quality and place making components are clearly considered and defined as part of any planning permission, applications should include the following:

 Design and Access Statements (DAS) are required to accompany all major planning applications (as defined in article 2 of the Town and Country Planning (Development Procedure Order) 2015) and should set out the design approach, considerations, key principles and components of the scheme, with regard to the CDLP, other relevant Carlisle and Cumbria guidance and the content of this SPD. In particular, the DAS should set out the vision and design objectives for their scheme and how the proposal is in accordance with the Vision and Principles for St Cuthbert's Garden Village (see Chapter 3). The DAS should show how the scheme will contribute to a coordinated and comprehensive approach to development in St Cuthbert's Garden Village. This will provide the basis for the quality of design to be controlled through subsequent design codes and reserved matters.

On applications for more significant, complex and/or sensitive proposals, it would be appropriate to develop illustrative layouts, which demonstrate how the design objectives can be delivered and articulated across the development site. It would also be appropriate to include typologies depicting typical blocks, streets and open spaces. The information should be in accordance with the principles of this SPD.

- Parameter Plans may be required to define the key structuring components of place, including its movement network (with emphasis on encouraging sustainable movement); land use parcels; key urban design features and critical built form elements (such as building heights); and structural landscape and green & blue infrastructure. The parameter plans for the application area must demonstrate how the proposals contained within the application integrate with the surrounding area, particularly in terms of accessibility, key development interfaces etc. Figure 2 provides an illustration of how parameter plans can be shown in context.
- Delivery Strategies will be required on proposals where a phased approach to development and infrastructure is appropriate. These

delivery strategies will set out the key infrastructure components of the parcel of development, including those requirements that may need to be delivered outside of the site (such as the movement network, critical green infrastructure, sustainable drainage, community facilities and other relevant utilities etc.), demonstrating how they will be implemented and come forward alongside housing to ensure a comprehensive approach is being applied. Strategies should include detailed phasing plans for infrastructure delivery, together with proposals for long-term management and maintenance.

• Where appropriate, Environmental Impact Assessments will also be required and should be in accordance with the regulations. A scoping opinion should be obtained from the Council in advance of undertaking the EIA.

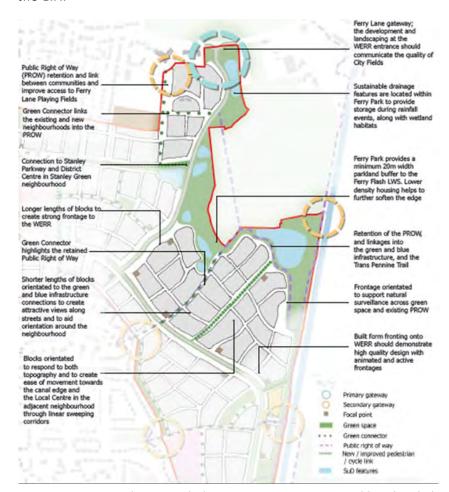


Figure 2: Parameter Plan Example (Source: Ferry Gateway Neighbourhood Plan)

NPPF 2020 para 128, 130 and 131

2.3 Design codes

In order to ensure a consistent approach to the delivery of high-quality, sustainable development through the planning application process, and in line with emerging national guidance on proposals for large-scale development, the Council will encourage that design codes are submitted and approved following Outline stage, concurrent with the submission of Reserved Matters. The Council will look to agree the inclusion of relevant conditions on any outline approval requiring their submission, and Reserved Matters applications will need to be in accordance with the approved design codes. In the case of full applications, a design code will be required to accompany the application.

A design code sets out specific rules to guide the nature of the built form, streets and spaces and should be prepared in accordance with the principles of this SPD and subsequent approved Design and Access Statements. Design codes will help to deliver the highest feasible and viable design standards and provide certainty and clarity to developers and other stakeholders about the form of development expected at the detailed stage. Design codes should be prepared in partnership between the developers, Local Planning Authority, service providers and other stakeholders. All design codes should include as a minimum:

- movement strategy;
- access and street hierarchy;
- land use and mix;
- density;
- heights;
- number of homes; and
- identity and character of buildings and public spaces.

Depending on the nature of the proposal, it may also be necessary to include relevant detail relating to:

- primary, secondary and tertiary streets;
- edges, gateways and corners;
- community buildings and facilities;
- sports facilities (indoor and outdoor);
- public spaces;
- block sizes;
- built form:
- character and materials;
- potential for the provision of custom and self-build properties;
- appropriate parking solutions, which should include bicycle parking/storage and electric charging points;
- building heights and set backs;
- provision of external bin storage;
- location and details of street furniture and service installations;
- tree and shrub species to be used;
- hard and soft landscape materials; and
- design, layout and connectivity of green infrastructure.

2.4 Regulatory Plan Fixes

It is important that any design code provides a Regulating Plan for the development. The Regulatory Plan should be in compliance with the Outline Planning Permission approved Parameter Plan (see Figure 2), Development Specification and Design & Access Statement Principles. The Regulatory Plan sets the design fixes for the development and should include:

- Strategic elements of green infrastructure;
- Strategic streets/road infrastructure; and
- Individual development parcels (for commercial, residential, mixed-use and community uses) that are positioned within the network of green infrastructure and streets. Whilst the Regulatory Plan sets an overall framework for development, it is acknowledged that a degree of flexibility will be required in the design of detailed proposals, for example:
 - Although street corridors are fixed in scale, the detail design of streets will need to be explored in greater detail in parallel to the consideration of the access requirements for adjacent parcels.
 - Likewise, whilst the location of green infrastructure is fixed, the exact design of these spaces, including their boundaries, is subject to detail design that will need to be considered in line with adjacent development parcels and streets.

The design code should set out how this flexibility is dealt with.



Figure 3: Example of a Regulatory Plan

2.5 Provision of Infrastructure and Avoiding Piecemeal **Development**

In order to ensure a comprehensive new community at St Cuthbert's Garden Village, as set out in Policy SP3, piecemeal and ad hoc planning applications which fail to deliver coherent and integrated strategic infrastructure will be resisted. Development should be delivered at the right time and in the right place to ensure a high-quality and sustainable community is established. Planning applications will therefore be expected to address the following issues to ensure that piecemeal development is avoided and a comprehensive, sustainable community results:

- Connections to (and where needed provision of) key public transport infrastructure and routes:
- Sustainable access to (and where necessary provision of) suitable community facilities such as neighbourhood centres and primary schools (based on the principle of walkable neighbourhoods);
- Provision of requisite green infrastructure and access to open space, to encourage a healthy lifestyle and biodiversity;
- Connections to appropriate (and where necessary provision of/ contributions to) strategic infrastructure that may be provided outside of the application site but is necessary to ensure sustainable development;
- Contribution to wider strategic infrastructure costs to ensure it can be delivered to support the overall provision of a sustainable community; and
- Avoiding disconnected and isolated pockets of residential development, which do not contribute to good placemaking principles.

In order to ensure comprehensive and coordinated development and the appropriate delivery of key infrastructure and facilities, planning conditions and obligations attached to any planning permission may take the following

- the direct provision of essential, relevant and necessary infrastructure both on and off the St Cuthbert's Garden Village site;
- the provision of land for a specific community/specialist use as agreed between the developer and the Council;
- commuted payments in lieu of provision of infrastructure;
- monetary or in-kind contributions towards strategic infrastructure;
- the provision of affordable housing; and/or
- relevant provisions to prevent the imposition of 'ransom strips' in the interests of encouraging comprehensive and coordinated development, the Council will work with landowners and applicants to prevent unreasonable restrictions that may impede comprehensive development.

The requirements as set out above will evolve through a collaborative process between the Council and applicants, and any legal agreements should be discussed at the earliest opportunity in the planning application process and ideally at pre-application stage. This SPD provides advice on how the above issues can be addressed in the formulation of planning applications within St Cuthbert's Garden Village.

2.6 Further Design Quality Controls

The Council will continue to promote high-quality design across St Cuthbert's Garden Village and will encourage and draw on a range of tools that can integrate with and benefit the planning application process. The use of these tools will be established through dialogue between the Council and prospective applicants and used where appropriate:

Planning Performance Agreements (PPAs), when used positively and proactively, should create a framework in which parties come together to agree the design ethos and approach to an application and how they are going to take a development proposal through the planning process. They can be used to agree the vision and objectives for a development, as well as setting timescales, actions, and resources for handling particular applications. They can also be used as part of pre-application and application stages, and potentially extend through to the post-application stage. PPAs should encourage joint working between an applicant and the Council and can also help to bring together other parties such as statutory consultees. This can provide a basis for a more efficient, joined-up and less adversarial way of working based on the principles of development management. A PPA is agreed voluntarily between an applicant and Council, most commonly prior to an application being submitted, although it can also be applied at any stage in the planning process, including managing post-determination aspects such as precommencement conditions and reserved matters.

Design review panels provide an independent service in which peers can comment on major development schemes. As part of the masterplanning process for St Cuthbert's Garden Village to date, the Council established a bespoke design review panel and this approach will be maintained to assist with planning applications. The use of design review will be most appropriate for large-scale applications, but may also be required for proposals of a sensitive and/or complex nature and will be funded by applicants. Any review should take place at an early stage of pre-application discussions, in order for the recommendations of the review panel to be taken into account in preparing proposals. The requirement for and timing of design review should be the subject of early discussion with the Council.

Building for a Healthy Life (BHL), formally Building for Life 12, assessments score the design quality of planned or completed developments. In preparing a Design and Access Statement, the BHL criteria should be considered and the Council will use BHL as a proactive tool to assess and guide the content of emerging proposals and planning applications.



Design review panels being held for St Cuthbert's Garden Village as part of the Masterplan Framework process

(Credit: Stuart Walker Photography)

3. VISION AND PRINCIPLES FOR ST. CUTHBERT'S GARDEN VILLAGE

3.1 A Shared Vision

The vision is supported by nine guiding principles which set the tone for St Cuthbert's Garden Village and this SPD guidance, and promote a balance of environmental, social and economic objectives.

The Council requires all planning applications at St Cuthbert's Garden Village to demonstrate how the proposals aim to deliver the ambitions as set out in the Vision Statement and Principles.

"St Cuthbert's Garden Village will provide connected villages set in stunning healthy landscapes within the world class setting of the Lake District National Park, the North Pennines Area of Outstanding Natural Beauty and Hadrian's Wall World Heritage Site. A cluster of distinct garden villages set in an attractive recreational, riverside and landscape setting will be well connected to Carlisle and wider countryside. St Cuthbert's Garden Village will actively promote healthy lifestyles providing integrated communities focused around high-quality homes, locally distinctive spaces and inclusive facilities. Innovation and technology will support attractive employment opportunities and exemplary low carbon living."

St. Cuthbert's Garden Village Vision





PRINCIPLE 1: START WITH THE PARK Deliver a landscape led masterplan that harnesses the rivers, world class views and woodlands to create a network of unique, high quality, active landscapes and new destinations.



PRINCIPLE 2: LOCALLY DISTINCTIVE Support locally distinctive, design of buildings, streets and spaces to create memorable and unique places to live.



PRINCIPLE 3: QUALITY HOMES & LIFETIME NEIGHBOURHOODS Promote a mix of high quality homes in distinct and integrated lifetime neighbourhoods.



PRINCIPLE 4: COMMUNITY FOCUSED Focus inclusive communities around a hierarchy of excellent facilities clustered around village centres.



PRINCIPLE 5: INNOVATIVE **EMPLOYMENT OPPORTUNITIES** Support a variety of entrepreneurial and creative employment and skills opportunities.



PRINCIPLE 6: HEALTHY **ENVIRONMENTS** Promote health and well-being through accessible facilities and healthy lifestyles for all ages.



PRINCIPLE 7: SMART & SUSTAINABLE LIVING Support low carbon living through sustainable planning, transport and



PRINCIPLE 8: INTEGRATED SUSTAINABLE TRANSPORT Provide excellent sustainable connections and environments that make walking, cycling and public transport the most attractive method of getting from A to B, making the most of the opportunities presented by the Carlisle Southern Link Road.



PRINCIPLE 9: EXEMPLARY **DELIVERY & STEWARDSHIP** Continue to positively engage a range of people and communities in design, delivery and stewardship.

Figure 5: St Cuthbert's Garden Village Principles for development (Source: Gillespies)

Figure 4: St Cuthbert's Garden Village Greenway Sketch (Source: Arup)

4. THE AREA IN CONTEXT

4.1 The Site

The scale (1,323ha) and location of St Cuthbert's Garden Village provides an opportunity to add to the existing local assets, whilst enhancing opportunities to provide high-quality housing, facilitate healthy lifestyles and promote sustainable growth.

The River Caldew and River Petteril are the two main rivers that flow from south to north though the site, with several minor watercourses. These are primarily surrounded by a mix of semi-natural open spaces, vegetation and wooded areas. The River Caldew forms part of the River Eden Special Area of Conservation (SAC) and the River Eden and Tributaries is a Site of Special Scientific Interest (SSSI).

Most of the site is used for agricultural purposes, with small settlements located on the arterial routes. The northern edge of the site is bounded by the Carlisle city edge and existing residential uses, including a number of open spaces such as Blackwell Common. Other uses include Carlisle Racecourse centrally, in addition to existing local businesses and community facilities scattered in neighbouring settlements.

Dixon's Chimney is a local landmark that can be seen from the site, in addition to long-distance views to the Lake District and North Pennines. These and other key views are set out in the Stage 2 Masterplan Framework. As outlined later, the physical environment of the site presents opportunities for green corridors, cycling and pedestrian links, as well as preserving key views.





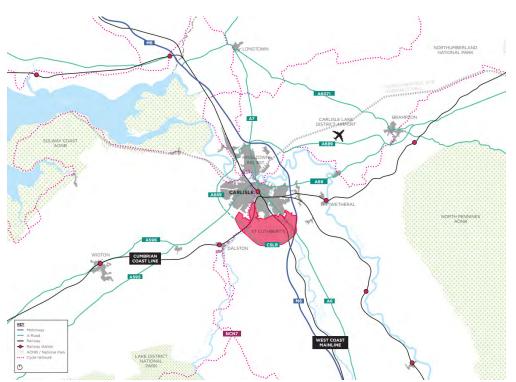


Figure 6: Regional Context Plan (Source: Arup)



Site photos (Sources: Stuart Walker Photography, Gillespies and Arup)

4.2 City and Neighbourhoods Context

Carlisle City will provide much of the higher-order facilities for the residents of St Cuthbert's Garden Village, as well as being the public transport hub, with links to London, Scotland, the North East and west Cumbria. The city centre, Kingmoor Park, Kingstown Industrial Estate, Parkhouse Industrial Estate, Rosehill Industrial Estate, McVitie's, Pirelli and Nestle are among the key locations where people work.

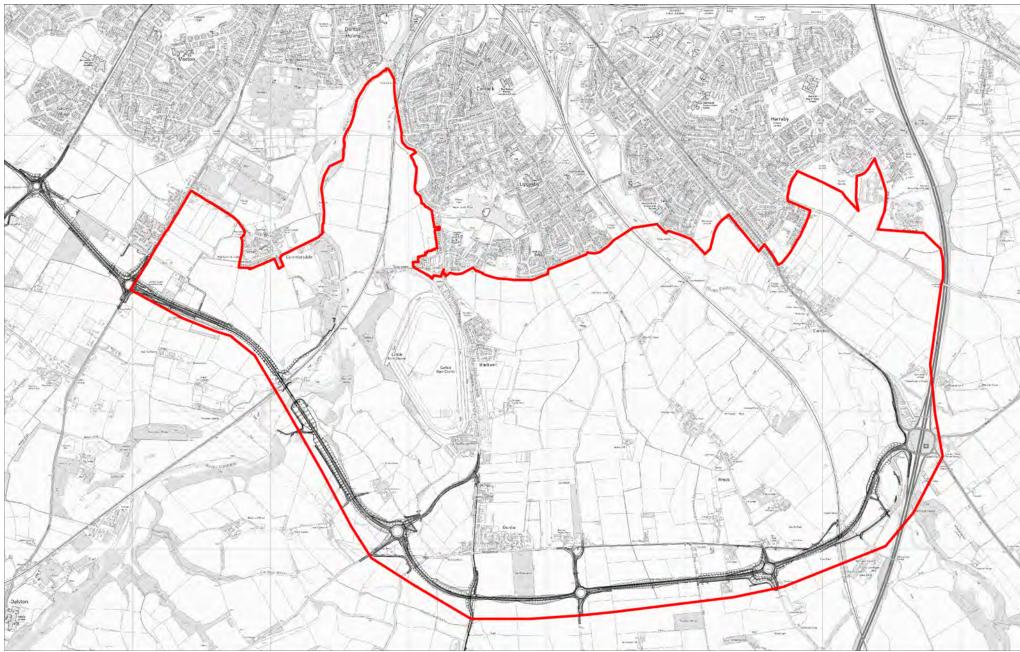
The surrounding neighbourhoods, including the local centres of Morton, Upperby and Harraby, and the district centre of Dalston, provide local facilities for residents.





The Ridings Development (Source: Stuart Walker Photography), and Brisco Village

Figure 7: St Cuthbert's Garden Village Site Boundary



5. POLICY AND GUIDANCE

5.1 National

National Planning Policy Framework (NPPF)

The NPPF provides a positive policy context for consideration of St Cuthbert's Garden Village, setting out the presumption in favour of sustainable development through the three pillars of sustainability: economic, social, and environmental. The NPPF identifies good design as a key aspect of sustainable development and recognises the positive role that large-scale developments can play in delivering sustainable places and inclusive communities. It is vital that, in line with the NPPF, St Cuthbert's Garden Village continues to:

- Promote a well-designed place.
- Make effective use of land and deliver a sufficient supply of homes.
- Plan for climate change and flooding.
- Conserve and enhance the natural and historic environment.
- Promote healthy and safe communities.
- Promote sustainable transport.
- Support high-quality communications.

Proposals should use good design to set out how they are contributing to sustainable development and healthy communities. The NPPF sets out that, 'permission should be refused for development of poor design that fails to take the opportunities available for improving the character and quality of an area and the way it functions, taking into account any local design standards or style quides in plans or supplementary planning documents' (para. 130).

Planning Practice Guidance

The NPPF is further supported by various Planning Practice Guidance documents, providing additional detail to national policy and applicants should have regard to all relevant sections. Of particular note:

- The Guidance on Design: process and tools sets out the expected approach to achieving good design through the planning process. This includes guidance on masterplanning, design codes and community engagement and consultation, all of which are particularly relevant.
- The Guidance for Viability ensures local planning policies are realistic and deliverable. It also indicates that the price paid for land is not a relevant justification for failing to accord with relevant policies in the plan and provides the principles for carrying out an assessment.

The National Design Guide

The National Design Guide sets out the characteristics of well-designed places and demonstrates what good design means in practice. Applicants should use this to consider the extent tot which their proposals are well-designed, inclusive and support community cohesion. It forms part of the government's collection of planning practice and should be read alongside local guidance (as detailed in 5.2).

Building for Healthy Life

Building for a Healthy Life (BHL) is the latest edition of - and new name for -Building for Life 12. It is a well-known and used design tool for creating places that are better for people and nature. It can help structure discussions (e.g. pre-application advice and community engagement) around new residential development and can assist developers in conveying how proposals have been sensitively designed and considered. BHL has integrated the findings of the Healthy New Towns Programme, led by the NHS, setting out how healthier places can be planned and designed.

Manual for Streets

Manual for Streets (MfS) provides a link between planning policy and residential street design. It explains how design principles can help achieve local distinctiveness and walkable neighbourhoods, illustrates appropriate layout and forms and gives advice on crime prevention. MfS also outlines how detailed design issues can be overcome, how inclusive design can be achieved and the various requirements for different road users. The guidance was updated in 2020 and is due to be published in 2021.

National Model Design Code

The National Model Design Code (NMDC) was published for consultation in February 2021. The purpose of the NMDC is to provide detailed guidance on the production of design codes, guides and policies to promote successful design. It expands on the ten characteristics of good design set out in the National Design Guide. Applicants should build on the existing St Cuthbert's Garden Village baseline information to develop solutions on issues expected to be addressed, as detailed in the NMDC. An emphasis on consultation and community engagement is outlined, which will be vital for applicants to factor into their programme to ensure it is meaningful.

Town and Country Planning Association (TCPA) Guidance

The TCPA provides various guidance documents that outline practical steps for delivering Garden Cities. In particular, Guide 3: Design and Masterplanning (2017) sets out the Garden City design ethic, basic principles and how to make the most of the design process. Guide 4: Planning for Energy and Climate Change provides examples of how Garden Cities can contribute to keeping global warming below 2 degrees.



Figure 8: 10 Characteristics of a well-designed place, as supported by the National Design Guide and National Model Design Code

5.2 Local

The SPD is not a standalone document and must be read in conjunction with the policies in the Carlisle District Local Plan. Furthermore, as outlined in the introduction of this document, the CDLP requires the Council to prepare the St Cuthbert's Garden Village Local Plan, which will formalise the policy framework for the garden village. This is currently underway.

Carlisle District Local Plan 2015 – 2030

The CDLP provides the long-term spatial vision and strategic objectives to support the development of a thriving district. It does this through the identification of land to accommodate new development and policies to achieve this growth in a positive, managed and sympathetic way, whilst ensuring the timely delivery of infrastructure necessary to support growth. Of particular relevance is Policy SP3 (The Broad Location for Growth: Carlisle South) and SP6 (Securing Good Design), which sets out a series of design principles that development proposals will be assessed against. Other policies that are of note in relation to this SPD are:

- Strategic Growth and Distribution (SP 2);
- Strategic Connectivity (SP 5);
- Valuing our Heritage and Cultural Identity (SP 7);
- Green and Blue Infrastructure (SP 8);
- Healthy and Thriving Communities (SP 9);
- Employment (EC 5);
- Housing (HO 4; HO 10);
- Infrastructure (IP 1; IP 2; IP 3; IP 4; IP 5; IP 6; IP 8);
- Climate Change and Flood Risk (CC 1; CC 2; CC 3; CC 4; CC5);
- Health, Education and Community (CM 1; CM 2; CM 4; CM 5; CM 6);
- Historic Environment (HE 2; HE 3; HE 6; HE 7); and
- Green Infrastructure (GI 1; GI 3; GI 4; GI 5; GI 6).

Several <u>Supplementary Planning Documents</u> have been produced as a supplement to the CDLP by the City Council. Of particular relevance to this SPD is 'Achieving Well-Designed Housing' as detailed below.

Achieving Well-designed Housing SPD (2011)

The Achieving Well-designed Housing SPD was produced by Carlisle City Council to guide new residential development to create well-designed and locally distinctive schemes that can contribute to the quality of Carlisle and its town and villages. It covers movement, open space and landscape, form, and sustainable design.

Cumbria Development Guide

The Cumbria Development Guide provides advice and guidance on highways and SuDS from Cumbria County Council as the Highways Authority and Lead Local Flood Authority (LLFA). It builds on practice set out in the Manual for Streets and encourages pre-application discussions. This document is currently being reviewed and applicants are advised to undertake discussions at an early stage with the County Council to ensure the most up to date advice is available.

6. STRATEGIC DESIGN REQUIREMENTS FOR PLANNING APPLICATIONS

All planning applications within St Cuthbert's Garden Village should include supporting information that demonstrates how the proposal would address Strategic Requirements SR1 – SR7.

6.1 Strategic Design Requirements

The development of a high-quality sustainable place such as St Cuthbert's Garden Village is underpinned by a number of key place making components or layers as illustrated below. These layers formed the basis of the Masterplan Framework for St Cuthbert's Garden Village and have informed the content of the Strategic Requirements, as set out in the next section.



Figure 9: Overview of Masterplan Framework Layering

Strategic Requirements

This section sets out a number of Strategic Requirements that seek to inform and ensure the delivery of a comprehensive, high-quality garden community at St Cuthbert's Garden Village. These Strategic Requirements flow from the policies of the CDLP (as set out in Table 1) and have been developed as part of the Masterplan Framework process. Applicants should have regard to these requirements, as listed below in the preparation of development proposals.

- SR1 Connected Green and Blue Infrastructure;
- SR2 Diverse, Accessible and High-quality Open Space;
- SR3 Ensuring a Healthy, Low Carbon Community;
- SR4 Sustainable Neighbourhoods;
- SR5 Placemaking Considerations;
- SR6 Sustainable Movement; and
- SR7 Street Hierarchy.

The illustrative plans provided within this section are derived from the work undertaken as part of the Masterplan Framework and articulate the Strategic Requirements in spatial form. It is anticipated that once the St Cuthbert's Garden Village Local Plan is adopted, this SPD will be updated and reviewed accordingly to fully align with and articulate the requirements of its policies and other relevant evidence.

Table 1 summarises the relationship between the Strategic Requirements set out in this SPD and the key policy requirements of design relevance, as set out in the Carlisle District Local Plan. The dots within this table indicate which policies support each of the Strategic Requirements.

		SPD Strategic Requirements									
		SR1	SR2	SR3	SR4	SR5	SR6	SR7			
	SP 2				٠						
	SP 3										
	SP 5					•		•			
	SP 6	•	٠	•		• .	÷.				
	SP 8	*	•								
ies	SP 9					10-4					
Carlisle District Local Plan Policies	IP 1		٠				•				
an F	IP 2						<u></u>				
I I	IP 3			•		1	, • i				
Loca	IP 5			•		10					
rict	IP 6				•						
Dist	IP 8		•		•						
sle	CC 3			•	•						
arli	CC 5	•	•	•							
•	CM 1 - 5				1	•					
	GI 3	•									
	GI 4		•		1.						
	GI 5	•						10			
	GI 6	•		20.5							

Table 1: Overview of Strategic Requirements for applicants, in line with the Carlisle District Local Plan policies.

The key policies of the CDLP as shown in Table 1 are:

- Sustainable Development (SP 1);
- Strategic Growth and Distribution (SP 2);
- Broad Location for Growth: Carlisle South (SP 3);
- Strategic Connectivity (SP 5);
- Securing Good Design (SP 6);
- Green and Blue Infrastructure (SP 8);
- Healthy and Thriving Communities (SP 9);
- Delivering Infrastructure (IP 1);
- Transport and Development (IP 2);
- Parking Provision (IP 3);
- Waste Minimisation and Recycling of Waste (IP 5);
- Foul Water Drainage on Development Sites (IP 6);
- Planning Obligations (IP 8);
- Energy Conservation, Efficiency and Resilience (CC 3);
- Surface Water Management and Sustainable Drainage Systems (CC 5);
- Health, Education and Community (CM 1- 5);
- Biodiversity and Geodiversity (GI 3);
- Open Space (GI 4);
- Public Rights of Way (GI 5); and
- Trees and Hedgerows (GI 6).

Green and Blue Infrastructure: Strategic Considerations

St Cuthbert's Garden Village will be landscape-led and comprise highquality, diverse and connected blue and green infrastructure as set out in the illustrative Green and Blue framework plan. A fundamental principle of St Cuthbert's Garden Village is to 'Start with the Park', seeking to capitalise on its great landscapes, open green spaces and environmental assets to create a community with exceptional quality of life and robust health and wellbeing. The retention and enhancement of the site's natural landscape assets is a fundamental principle of development. Existing assets will be protected and enhanced to establish a multi-functional, integrated and accessible blue and green infrastructure network which maximises wider public and ecological benefits. The Garden Village will be set within an enhanced landscape framework including farmland, woodland, parkland, riverside/wetlands and the 10-kilometre St Cuthbert's Garden Village Greenway Loop, as illustrated in Figure 10.

<u> Strategic Requirement 1 – Connected Green and Blue</u> <u>Infrastructure</u>

To deliver a key element of the St Cuthbert's Garden Village vision, as shown in Figure 10, and ensure biodiversity net gain is achieved, green and blue infrastructure should be planned and implemented in a coordinated network of commuting, leisure, recreation and natural species routes for pedestrians, cyclists and wildlife, creating links within the Garden Village and to external destinations.

Development proposals should contribute to a site-wide, connected, climate-resilient, multi-functional and adaptive green and blue infrastructure framework by:

- Positively integrating with the central Greenway Loop and river corridors, supporting their deliverability as long-term community
- Creating green links that are integral to new neighbourhoods, as a place making feature, promoting healthy living and biodiversity.
- Using sustainable urban drainage to integrate green and blue corridors and drainage areas as key features.
- Ensuring green spaces are multi-functional, with a range of benefits such as biodiversity, amenity, movement etc.
- Ensuring that buildings front green and blue spaces with active and attractive frontages, creating usable and safe spaces.
- Using green and blue infrastructure to create strong, attractive and usable buffers and space, such as adjacent to the CSLR and between settlements.
- Maximising links into the City Centre and out to the surrounding
- Building upon existing landscape character to maintain and enhance a sense of local identity.
- Embracing nature and seeking to enhance the existing landscape assets to create a linked ecosystem. Habitats and species should be preserved and protected (as outlined in Section 7.2.4 and Figure 10).



Figure 10: Illustrative Green and Blue Infrastructure Framework

Note: Carlisle City Council will be preparing a Green and Blue Infrastructure Strategy and Action Plan to evidence the emerging St Cuthbert's Garden Village Local Plan and provide further guidance and clarity regarding its implementation.

Wider GI Connectivity Opportunity Node

Green/ Blue Corridor

Preserved Landscape

New Development

Key Amenity Greenspace

Green Buffer/ Structural Planting

Accessibility

The establishment of a network of paths and cycleways connected through and to the Garden Village and linked to the wider network will promote sustainable active travel. This is expected to be defined in work underway by Cumbria County Council via a Local Cycling and Walking Infrastructure Plan (LCWIP) and a Transport Improvements Study. The development will promote walking and cycling as the primary mode of transport, with a network of connected clusters and local centres accessible by walking and cycling routes with the Greenway at its core.

The Greenway

The centrepiece of the Garden Village is the new multi-modal Greenway, a strategic green corridor linking the Caldew and Petteril river valleys east-west across the garden village and creating a walking and cycling loop around the Garden Village. The Greenway will link the village centres of Cummersdale, Durdar and Carleton and connect along the edge of the city, uniting proposed and existing communities with the river corridors. The Greenway will be the focus for community activity and pedestrian/cycle movement and will be expected to provide connections to existing walking and cycling routes, including the CSLR route. As a strategic green link, it will accommodate major open space provision with multi-functional green infrastructure co-located close to schools and village centres, enabling sharing of facilities such as car parking, welfare facilities and to reduce long-term management and maintenance costs.

River Corridors and Blueways

Development proposals will be expected to work around existing corridors to retain and enhance existing river corridors, becks, streams and other blueways, to ensure a future-proofed development that is resilient to the impacts of climate change. Blue corridors must be enhanced and promoted as green assets for the community and local wildlife.

The river corridors can be subject to fluvial flooding with significant history of flood alleviation and protection works focused on the River Petteril and River Caldew corridors. The river flood zones and network of existing ditches, becks and streams provide a structure for development and their retention and enhancement is integral to delivery of the Garden Village. In accordance with the County Council's Development Design Guide, development should restore and enhance watercourses to reduce flood risk, conserve habitats and provide connectivity for people and wildlife.

Water Quality and Sustainable Drainage Systems (SuDS)

In accordance with Local Plan Policy CC5 (Surface Water Management and Sustainable Urban Drainage Systems) and the County's Development Design Guide, development must manage surface water run-off via SuDS. SuDS will be considered multi-functional assets, maximising benefits for wildlife and habitat creation, recreation and amenity, access and enjoyment. Development will be expected to prioritise the use of building features and soft landscaping elements above hard landscaping and below-ground attenuation methods. Further detail is available in Section 7.2.6.

A landscape-led approach will be required that looks beyond the immediate site boundary. SuDS will be considered at the earliest stage with a high-level site evaluation undertaken before schemes come forward for development. Any development drainage strategies must consider existing watercourses, surface water flows and existing drainage systems and mimic natural drainage patterns

as closely as possible. SuDS will be considered at the earliest possible design stage and fully integrated into the design of development plots.

Where a particular development site is constrained, there may be opportunity to share SuDS schemes with other landowners and/or developers and this should be considered as part of the early site evaluation.

Applicants will need to demonstrate that the recommendations of the Habitats Regulations Assessment Report (August 2020) have been considered as part of their design thinking. In particular:

- To avoid a reduction in water quality of the River Eden SAC through St Cuthbert's Garden Village, SuDS features (which meet the required CIRIA standards), flood attenuation, overland flood routing and the retention of the existing drainage features will be required.
- Surface water must be managed at the source and discharged in accordance with the surface water drainage hierarchy. The level of provision will be as described for the highest level of environmental protection outlined within CIRIA SuDS Manual.
- Applicants for new housing and employment must have regard to the United Utilities assessment on both the Wastewater Network and Wastewater Treatment Works to ensure that the sewage requirements of the development can be met within the existing consent headroom of the receiving Wastewater Treatment Works, if they discharge to tributaries of the River Eden SAC.
- Development will need to be phased in line with the infrastructure requirements identified by United Utilities to protect water quality generally, and the River Eden SAC in particular, to ensure that no net increase in phosphate loading occurs.

Landscape Character & Local Distinctiveness

Development proposals must take into account local landscape character and retain existing green/blue assets. Areas of conservation and/or heritage value will be sensitively incorporated, and access maintained. New development must respond to site topography with key views and the site's distinct rural character safeguarded. Green buffers between existing development/the city edge and the Garden Village will be required to ensure the development is sensitively integrated into the wider context. Further guidance on sitespecific character is given in Section 7.3 and the St Cuthbert's Garden Village Landscape and Townscape Appraisal (2017).

Ecology and Biodiversity

Development proposals must protect biodiversity assets and seek to restore and enhance them where possible. Development should seek to achieve a 10% biodiversity net gain.

Particular importance is placed on the retention of trees and hedgerows and their positive contribution to landscape character. New open spaces will enhance ecological function and support existing wildlife habitats. Ecological connections along and between the river valleys of the Caldew and Petteril will be reinforced.







Spen Valley Greenway, the River Caldew and Stead McAplin (Sources: Arup)

<u> Strategic Requirement 2 – Diverse, Accessible and High-quality</u> Open Space

The provision of high-quality and accessible open space is fundamental to the successful delivery of the Garden Village. New communities must contain high-quality, diverse open space in line with Policy SP8 and development proposals must meet the quantity, quality and accessibility standards as set out in Policy GI 4 in the CDLP. GI 4 sets out minimum standards for open space as follows:

- Open space (including informal and formal grassed, wooded or landscaped land and small amenity areas of open space). 3.6ha per 1,000 population
- Playing pitches 1.86ha per 1,000 population.

Variety in the forms of open space provided should be considered as part of the planning application process, with a range of spaces and functions included to suit the scale and needs of the development. Development proposals should also take account of the network strategic green and blue infrastructure provision, to ensure appropriate accessibility and connections are achieved.

In addition, development must take into consideration the long-term maintenance and management of green and blue assets to ensure the viability and long-term survival of open spaces. Responsibilities and financial mechanisms needed to deliver and maintain green and blue infrastructure will be determined through the planning process.

Start with the Park

The principle of 'Start with the Park' is at the heart of the St Cuthbert's Garden Village vision and is a defining component of the garden village ethos. Beautifully and imaginatively designed homes with gardens, combining the best of town and country, with green places that enhance the natural environment and support healthy and connected communities is what will make St Cuthbert's Garden Village special.

In accordance with policy SP8 Green and Blue Infrastructure, existing assets should be protected and enhanced to establish a multi-functional, integrated and accessible blue and green infrastructure network which maximises wider public and ecological benefits and creates greener, more attractive living places. Key green and blue infrastructure objectives and principles to be considered when designing in the Garden Village are set out in Section 7.2.

Open space will be high-quality, multi-functional and well sited to ensure maximum value for residents and visitors. New development will be complemented by a range of community open spaces, play, sports and recreation opportunities in close proximity to neighbourhood centres and connected to each other via inclusive walking and cycling routes. Growing spaces including allotments, community orchards and community gardens will be integrated into the open space network. Walkable neighbourhoods where walking and cycling is promoted as a primary mode of transport and where nature and green environments are close to homes and accessible to all will ensure St Cuthbert's Garden Village is a great place to live.

Developers will need to consider the wider Garden Village masterplan evidence base and the vision and principles to ensure a holistic and coordinated approach to open space provision. Phasing of the development must ensure appropriate provision is provided relative to the quantum of development, to enable each phase to be self-sufficient in terms of open space.

An assessment of need and a review of wider masterplan requirements must be carried out before developing a site open space strategy. Developments will be required to demonstrate a landscape-led masterplanning approach with consideration given to existing green and blue assets, connections to existing and proposed open space outside of the site boundary as well as quantum, quality and accessibility standards. The emerging Playing Pitch and Outdoor Sport Strategy and Green and Blue Infrastructure Strategy to support the St. Cuthbert's Garden Village Local Plan will help to guide developers.

Maintenance and Stewardship

The Council will encourage and support proposals that adopt a coordinated, partnership approach to management and maintenance. Planning applications must demonstrate a sustainable, practical maintenance regime that ensures survival of all open spaces and their intended quality and use over the life of the development. Developers will need to demonstrate a strategy for stewardship, delivery and management.

The quality of all assets that require ongoing and long-term stewardship, and are proposed to be managed on completion by a trust or other community body, must be of the highest standards, and the specific requirements will be set out in a Section 106 agreement. Alternatively, where a trust or other community body agree, the asset can be handed over before completion, provided that specific measures are in place, including financial measures, to enable the completion and operation of the community asset to the highest standards.



Existing semi-natural greenspace within the site (Source: Stuart Walker Photography)



South Gardens, Elephant Park (Image credit © Allan Pollock Morris)

Figure 11: Illustrative Open Space Spatial Layout



New Development

NEAP - 12 Minute Walk (1,000m)
Outdoor Sports Facility
- 15 Minute Walk (1,200m)

Key

(S)

Roads/ Streets

Existing Development

Greenway

School Local Centre

Amenity Green Space

Blue Infrastructure - Rivers, Becks & Ponds

Wider GI Connectivity
Designated Play Area (NEAP)
Outdoor Sports Facility
- Pitches & other Outdoor Provision
Potential Country Park

Low Carbon Living: Strategic Considerations

Policy SP1 (Sustainable Development), of the CDLP requires a positive approach to the delivery of sustainable development and Policy SP9 looks to deliver healthy and thriving places. As a Garden Village for the 21st Century, it is critical that St Cuthbert's Garden Village delivers sustainable development that takes account of the latest technologies and innovation and encourages healthy living.

<u> Strategic Requirement 3 — Ensuring a Healthy, Low Carbon Community</u>

Development will be expected to contribute to the creation of a climateresilient, low carbon community that encourages a healthy lifestyle. All planning applications within St Cuthbert's Garden Village should set out how they have considered and responded to the key factors and opportunities around climate change resilience, low carbon solutions and healthy living, with particular reference to:

- Consideration of and mitigation for potential risks from climate occurrences (e.g. flooding).
- Ensuring energy efficiency of buildings is maximised.
- Locating development to allow easy access to sustainable modes of travel.
- Ensuring access to good-quality open space.
- The provision of landscaping to improve the overall environment.
- Ensuring access to local amenities in a sustainable way.

Innovative solutions to dealing with the above elements are encouraged and welcomed.

National legislation requires planning to mitigate and adapt to climate change (Planning and Compulsory Purchase Act 2004), reduce greenhouse gas emissions (Climate Change Act 2008), manage flood risk (Flood and Water Management Act 2010), set out strategic priorities for climate change (Neighbourhood Planning Act 2017) and allows Local Planning Authorities to require a portion of the energy required for new development to be sourced locally through renewable or low-carbon generation (Planning and Energy Act 2008). The importance of sourcing energy from renewable and low carbon technologies is further emphasised, explaining the role of planning in the Renewable and Low Carbon Energy Planning Practice Guidance (PPG).

The forward challenge is to ensure that St Cuthbert's Garden Village remains just as exciting, relevant and forward thinking in the decades to come. Design and quality standards adopted at the outset need not only to be ambitious, but also sufficiently flexible and adaptable to respond to future regulatory changes, and to continue to meet the demands of future inhabitants in line with climate change requirements. It is important that accessible and affordable homes are also catered for in this regard.

This is at the heart of the NPPF, as a core planning objective is to mitigate and adapt to climate change (Paragraph 8). Furthermore, Paragraph 150 outlines that innovative approaches can be achieved by shaping the location and design of development, supporting energy efficiency in existing buildings, and setting local requirements for building sustainably, provided they are in line with

national policy.

The CDLP sets out an array of climate change and flood risk policies that will be important to adhere to from an energy and water perspective. The emerging St Cuthbert's Garden Village Local Plan will adopt further policies and be accompanied by a Sustainability Appraisal and Habitats Regulations Assessment.

The 2020 COVID-19 pandemic has brought a sharp focus to the way people would like to live and work now and in the future. For some, this will mean living closer to work and school so walking and/or cycling is easier, or perhaps the ability to work remotely from home. Easy access is essential to green spaces, children's play areas and outdoor leisure. Our mental wellbeing would benefit from having more private space both inside and outside our homes. With more hours spent at home, higher energy bills can be countered by checking that the St Cuthbert's Garden Village homes are as energy efficient as they could be. Adapting our lifestyles to consume less, growing more in our gardens and allotments and shopping for local produce is a trend that may continue and should be taken into consideration when developing design proposals. In addition, residents may be more likely to expect easy access to online shopping with convenient collection points which will need to be provided easily accessible locations. Businesses and services are looking at the way they operate, establishing new ways to help staff to connect online and yet still hold some meetings in person. Balancing how best to serve the public and yet maintain a safe environment for all should be at the centre of design thinking.

The fantastic location and landscape of St Cuthbert's Garden Village, together with its scale, offer opportunities for low carbon solutions to be integral to the new place. Section 7.7 and Appendices 2 & 3 provide further guidance on how applicants can address these opportunities and meet the Strategic Requirements as set out above, when formulating development proposals.



LiLAC affordable ecological co-housing (Copyright Simon Dewhurst Photography)

Hanham Hall Eco Village (Source HTA)



6.4 Sustainable Neighbourhoods: Strategic Considerations

Policy SP3 of the CDLP makes provision for a 'major mixed-use development'. St Cuthbert's Garden Village is about delivering a series of new communities, comprising over 10,000 homes focused around and benefiting from a range of uses and facilities over a 30-year period. These will come together to create a high-quality, sustainable garden settlement. All planning applications within St Cuthbert's Garden Village will need to demonstrate their consideration of and contribution to the following key components of community creation.

<u> Strategic Requirement 4 — Sustainable Neighbourhoods</u>

Development will need to contribute to delivering an appropriate mix of uses across St Cuthbert's Garden Village and proposals should have consideration of and demonstrate the following:

- Open Space and Amenity how the development will incorporate open spaces, amenity and landscaped areas in line with the requirements of this SPD and to encourage healthy living and biodiversity.
- Residential Development the mix of types and tenures arrived at, to create diversity and variety.
- Infrastructure how appropriate local and strategic infrastructure will be provided to ensure the provision of a sustainable place.
- Local and Neighbourhood Centres ensuring development is focused around a hierarchy of local centres focused on Durdar, Carleton and Cummersdale, incorporating a series of sustainable neighbourhoods, as set out in the Masterplan Framework. All planning applications should demonstrate how they will contribute to the creation of walkable neighbourhoods and the development of local centres.
- Employment the accessibility of proposals to employment opportunities and/or opportunities to create new employment within St Cuthbert's Garden Village.
- Education how any generated needs for education requirements are met, through the provision of accessible facilities.

As a Garden Community, St Cuthbert's Garden Village needs to incorporate the full range of social infrastructure, local centre facilities, employment and open space, as set out in the St Cuthbert's Garden Village Local Plan. All planning applications and development proposals must set out the appropriate land uses that have been considered and justify the uses proposed, to demonstrate contribution to the overall provision of a sustainable new community at St Cuthbert's Garden Village.

Open Space and Amenity

As a garden community, open space and landscaping is a key component and needs to be provided across a range of scales, with variety that encourages healthy lifestyles and enhances the overall natural environment of St Cuthbert's Garden Village. All homes, workplaces and amenities should benefit from easy access to good-quality open space at both a local scale and strategically.

Residential

One of the nine St Cuthbert's Garden Village principles is the development of high-quality homes and lifetime neighbourhoods. Distribution will be focused around the three distinct garden communities of Durdar, Carleton and Cummersdale. At this scale, the full mix of residential type and tenure will be promoted. Affordable and accessible homes should be provided to the same level of quality.

Densities and character will vary, with higher densities around the local centres and lower densities in sensitive and countryside interface locations. Section 7.4 provides an overview of urban design and character considerations and requirements for planning applications, and Section 7.7 outlines how low carbon and healthy communities can be considered.

Infrastructure

Adequate social and physical infrastructure is critical to support sustainable living and all planning applications must demonstrate how infrastructure is to be provided and/or contributed to.

Local and Neighbourhood Centres

The Masterplan Framework is focused around 'higher-order' local centres at the 'heart' of the three garden communities, balancing accessibility with deliverability and commercial sustainability. The local centres comprise a series of walkable neighbourhoods, to encourage sustainable access to day to day services and the creation of community. Mixed-use local and neighbourhood centres are to incorporate retail, employment, social infrastructure, higher-density residential and public realm, relevant to their scale and function.

Employment Development

Employment uses will be focused within the local centres, to encourage sustainable access to jobs and services. The development of employment land and job creation support sustainable placemaking and the St Cuthbert's Garden Village principle of innovative employment. This will support emerging communities and balance provision north and south of the city. The emphasis will initially be on finer grained, local provision, including the integration of workspace in and around local centres. J42 provides a longer-term strategic opportunity. Section 7.7.1 of this report provides an overview of low carbon and innovative construction considerations.

Education Development

Educational facilities to meet the needs of St Cuthbert's Garden Village will be guided by Cumbria County Council requirements and the emerging Infrastructure Delivery Plan. Education is a key social infrastructure requirement, which supports the St Cuthbert's Garden Village principle of being community focused. Schools will closely relate to the local centres across the three garden communities to further support community focus. The schools will also operate as community resources beyond core hours. Early engagement will be required by applicants to ensure they are fully aware of any developer contributions for education facilities.



Example: a new secondary school at the Houlton Rugby Radio Masts development (over 6,000 homes) will be a centrepiece in the new community (Source: Urban & Civic)



Example:
co-working
space
in Leeds
(Source:
Duke
Studios)

Urban Design: Strategic Considerations

Strategic Requirement 5 - Place Making Considerations

As required by Policy SP6 of the CDLP, development proposals must have regard to the principles of good, holistic design. This document sets out the components of comprehensive and sustainable development in the context of St Cuthbert's Garden Village and planning application proposals must demonstrate how the key elements as listed below and shown on the Illustrative Urban Design Framework have informed their evolution and content:

- Key Gateways and Focal Points
- Key Frontages and Corridors
- Key Edges and Interfaces
- Key Views and Landmarks

Illustrative Urban Design Framework

The Masterplan Framework process, undertaken as part of the evidence base for the emerging St Cuthbert's Garden Village Local Plan, identified a number of key components that will underpin good place making in St Cuthbert's Garden Village. These have been interpreted in the Illustrative Urban Design Framework at Figure 12 and key locations are expanded upon in Section 8. The key strategic placemaking components comprise the following:

Key Gateways and Focal Points

The Illustrative Urban Design Framework highlights key gateways to St Cuthbert's Garden Village from the Link Road and existing arterials. It is important that a sense of arrival is created through appropriate scale, quality and character, in terms of built form, public realm and planting e.g. through attention to height and the layout of buildings and open space.

Local centres and their setting at Durdar, Carleton and Cummersdale provide key focal points for the garden communities and are significant in overall place making, by helping to define and create local distinctiveness across St Cuthbert's Garden Village. Durdar is at the top of this hierarchy in St Cuthbert's Garden Village. Design of buildings, streets and spaces will need to emphasise this level of environmental and social importance.

Key Frontages and Corridors

The illustrative Urban Design Framework emphasises key frontages that will support the quality and character of gateways and focal points across the new settlement. These frontages will provide scale and pedestrian-level interest to best frame a quality streetscene and new urban squares and village greens. Key corridors should also be emphasised through their comprehensive design - buildings, public realm / landscape and footfall generating uses - including strategic streets and green corridors. Specific set-pieces include Durdar High Street and St Cuthbert's Garden Village Greenway, which will both be a focal point for the whole community and define the quality of St Cuthbert's Garden Village.



Positively emphasising key gateways - Poynton, Cheshire



Active residential frontages (Source: Arup)



Illustration of streets with active frontages (Source: Arup)

Figure 12: Illustrative Urban Design Framework

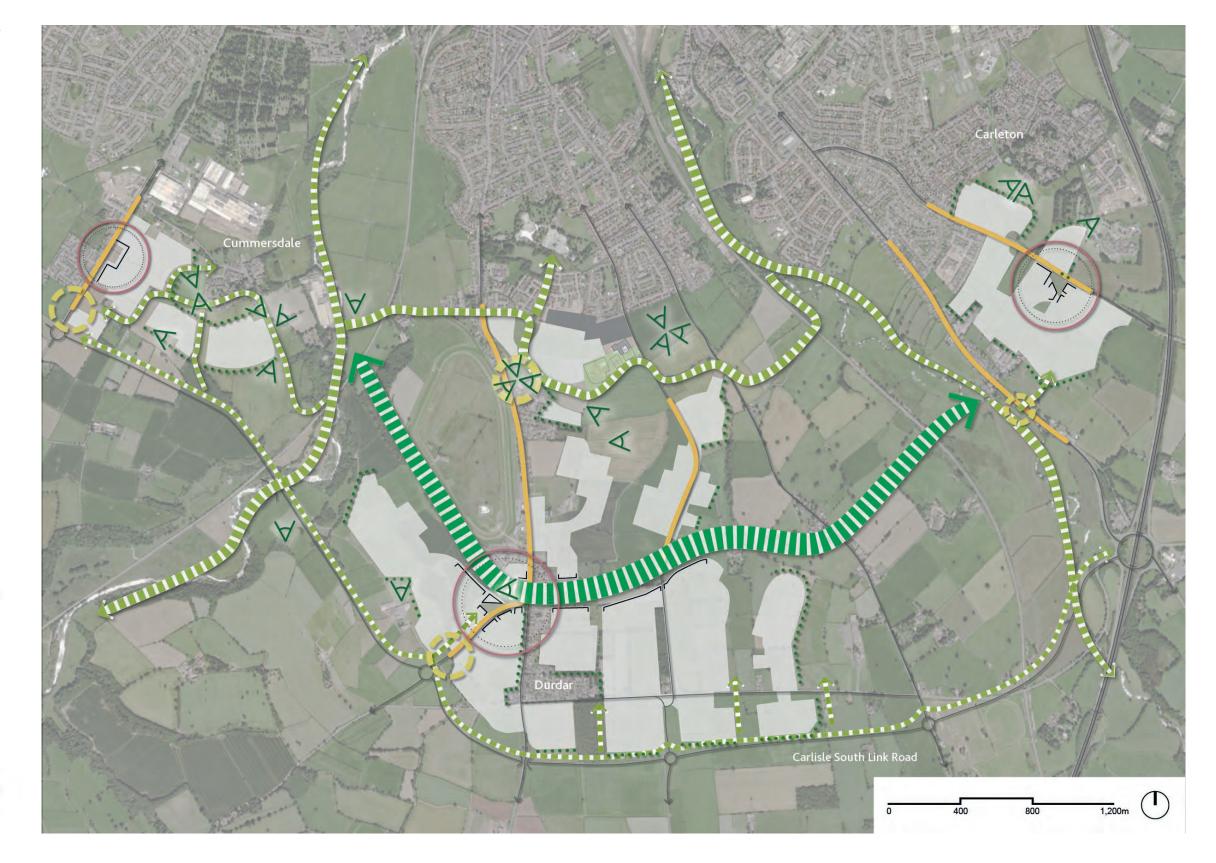




Figure 13: Green edges (Source: Arup)



Figure 14: Greenway edges (Source: Arup)



Figure 15: Green fingers to integrate (Source: Arup)



Figure 16: Open space to gather (Source: Arup)



Figure 17: Streets to connect edges (Source: Arup)

Key Edges and Interfaces

The St Cuthbert's Garden Village concept is one of new garden communities, and not urban extension and sprawl. Development will need to sensitively interface with existing villages and neighbourhoods, creating a positive new countryside edge for Carlisle. The Illustrative Urban Design Framework identifies some of the key edges and interfaces that will require sensitive treatment, but it should be highlighted that ALL edges to the countryside and interfaces between built form and open space, existing development etc. should be dealt with carefully in design terms. Well-designed and landscaped buffers will be incorporated at key locations, including those around Cummersdale. Other areas will be designed for sensitive integration, such as around parts of Durdar, Carleton and Upperby. Amenity should be protected through the use of topography, building orientation, landscaping, and generous back gardens and greenspaces.

St Cuthbert's Garden Village will generate a new countryside edge for Carlisle, including south-west of Durdar, and south of Cummersdale. These locations will need to be carefully designed, integrating with topography, bringing the countryside into the garden villages, and breaking up the edge of development with lower-density residential and farmstead-type housing typologies.

Key Views and Landmarks

Policy SP6 emphasises the need to respond to context, and respect topography, landscape and local character. St Cuthbert's Garden Village has a stunning landscape setting with views to the Lake District National Park and Areas of Outstanding Natural Beauty. Looking south, views pick up on distinctive urban landmarks such as Dixon's Chimney. Areas of high ground within the site include those in Carleton, Upperby and Cummersdale. Development proposals should have regard to these existing views, as highlighted on the Illustrative Urban Design Framework and ensure that proposals respond accordingly. New focal points and landmarks, including a new 'heart' for Durdar, provide important opportunities for new landmarks and views to be created. Hill top greenspaces can offer excellent views and will also create the need for sensitively designed roofscapes.



Views to the North Pennines from Blackwell Common (Source: Carlisle City Council)





Examples of working well with topography (Sources: Hyas and Carlisle City Council)



Making the most of great views - Greenhills, Blackburn



Greenspace framed by development - Lightmoor, Telford

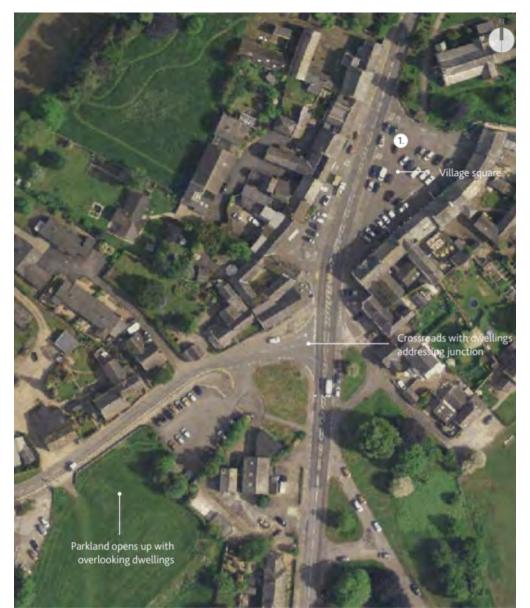
Considering Local Character and Neighbourhoods

The ambition is for St Cuthbert's Garden Village to be distinctive with varied character across the three garden communities. As part of developing design thinking, applicants can take cues from the surrounding characterful villages and historic city neighbourhoods. Opportunities for this include:

- Urban form ranging from informal village squares and tree-lined approaches and main streets inspired by nearby Dalston for example, to more formal grid patterns such as at Longtown and Chatsworth Square
- **Density** with higher-densities around new village centres and lower densities feathering into a new interface with the countryside
- House types and materials ranging from higher-density terraces, to lower-density villas and gatehouses inspired by settlements such as Brisco, and more informal farmstead courtyard typologies to break up the urban edge. Carlisle's traditional materials are distinctive including striking diaper/chequerboard brickwork, warm sandstone detailing, stone quoins and surrounds detailing, contrasting stone walling and splashes of white and pastel render
- Spaces village greens and common land, more formal urban squares and parkland, and a nestling within the surrounding countryside are all local characteristics that can inspire new development and placemaking.

The surrounding neighbourhoods, including the local centres of Morton, Upperby and Harraby, and the district centre of Dalston, provide local facilities for residents. The St Cuthbert's Garden Village Vision and Concept baseline report provides a review of the history and local distinctiveness, design analysis, and movement around these surrounding areas. Opportunities exist to build design character based on existing built form in surrounding areas.

Vernacular studies are included in the baseline reports for the St Cuthbert's Garden Village <u>Vision</u> and <u>Masterplan</u> and key plans and photographs included in this section. Further detail on opportunities for local distinctiveness are included in Section 8 – Character Areas and Key Locations.











Local Character Analysis and Features (Source: Gillespies)

Movement: Strategic Considerations

Strategic Requirement 6 - Sustainable Movement

Enabling active and sustainable travel in St Cuthbert's Garden Village is a key priority, as required by SP 5 (Strategic Connectivity) in the CDLP, that will define the Garden Village as a distinctive place in terms of movement and access. Development will be expected to:

- Integrate cycle routes and footways, delivering infrastructure that supports residents to make sustainable travel choices.
- Connect to the existing public transport network with direct connections between local/neighbourhood centres and the City Centre/Carlisle Train Station.
- Encourage public transport as a primary mode of transport and a key active travel choice with well-connected, easily accessible bus routes throughout the Garden Village.
- Be accessible from new junctions onto the existing road network and via the Carlisle Southern Link Road (CSLR).
- Mobility hubs are expected to be provided at local centres across the Garden Village. Hubs will connect transport modes and provide facilities that help enable walking, cycling and public transport use.

Development will be expected to accord with the Sustainable Movement Principles provided (right) and any outcomes of future work (i.e. the Transport Improvements Study currently underway).

Alternatives to private car travel will need to be provided from the outset and be attractive choices. This includes walking and cycling but also bus travel, bus priority, and shared mobility services (e.g. car clubs). Car parking must be effectively planned and managed from the outset (see Section 7.6) and electric vehicle charging points will need to be factored into designs to ensure that the neighbourhoods are future-proofed.

Developer travel plans will be designed around liveable neighbourhood principles, to ensure walking and cycling are the easy and natural choice for short journeys within the Village.

In accordance with the County's Development Design Guide (2017) and Manual for Streets principles, a user hierarchy must be established that prioritises users as follows:

- 1. Pedestrians and cyclists.
- 2. Public transport.
- 3. Other motorised transport.

Cumbria County Council have commissioned a Local Cycling and Walking Infrastructure Plan (LCWIP) and a Transport Improvements Study, due for completion by mid-2021. Any development proposals will be expected to adhere to its recommendations.

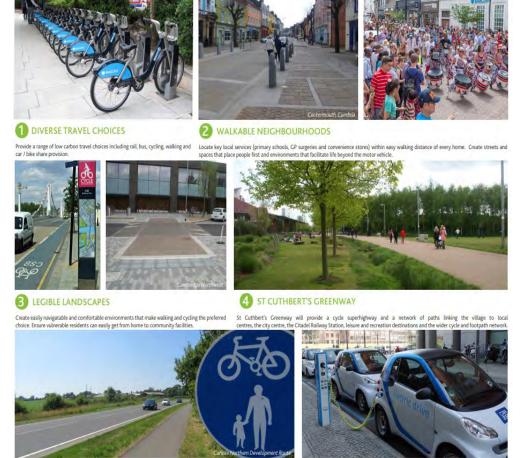
Sustainable Movement Principles

As required by Policy SP5 (Strategic Connectivity) of the CDLP, the key access and movement principles include:

- Direct vehicular access to the Garden Village from the Carlisle Southern Link Road (CSLR).
- Delivery of a strategic north-south/circular sustainable transport corridor.
- Strategic east-west connectivity via the CSLR and proposed Greenway linear
- Enabling active and sustainable travel as the primary modes of transport to, from and through the Garden Village.
- The development of active walkable neighbourhoods across the Garden Village.
- · Mobility hubs integrated within local centres providing a range of transport interchange facilities.
- Improving connectivity to and from the City Centre (outwith the Garden Village) by sustainable transport modes.
- Delivering supporting infrastructure across the Garden Village to support residents in making sustainable transport choices.
- Providing a network of high-quality, convenient, safe and attractive pedestrian and cycle routes that make wider links to existing networks.
- Delivering a hierarchy of residential roads that reflect Cumbria County Council's Residential Highways Design Guidance, particularly Appendix 4.

Pre-application engagement involving Cumbria County Council will be vital to ensure that the necessary movement and access infrastructure is identified to support development, particularly for the early phases of development. The Infrastructure Delivery Plan to support the St Cuthbert's Garden Village Local Plan will set out longer-term requirements.

Development should be structured around a clear, coherent movement network that is resilient to an increasing quantum of development over time. This will be a legible and safe network that enables active and sustainable travel as the primary mode of transport.



6 FUTURE PROOF

Figure 18: St Cuthbert's Garden Village Sustainable Travel (Source: Gillespies)

Make the most of the opportunities presented by the CSLR to improve both local and strategic connectivity walking and cycling along the adjacent cycle route and driving economic growth and inward investment. Maximise opportunities to drive local business, create thriving village centre(s) and connect people via a network of cycle and bus routes.

SOUTHERN LINK ROAD

Pedestrians and Cyclists

Development will be designed to ensure ease of pedestrian and cyclist movement through all parts of the site. This will include:

- designing streets that are attractive, low-speed, low-traffic environments with good crossings of busier roads.
- developing a network of low-traffic neighbourhoods a group of streets bordered by busier vehicle routes in which through access for motor vehicles has been designed out.
- providing direct, safe, attractive cycling and walking routes to key external locations including Carlisle City Centre and Carlisle Station.
- cycling and walking infrastructure will be designed to be inclusive, ensuring people of all ages and abilities can safely walk and cycle.
- secure cycle parking and other supporting facilities (lockers, charging stations, etc.) should be provided in key locations.
- where practical, existing Public Rights of Way (PRoW) will be retained and enhanced.
- improving river and rail crossings to enable the delivery of the Greenway loop.
- the proposed network will connect to existing strategic active travel route National Cycle Route 7 and PRoWs close to the Garden Village.
- the Garden Village will connect to and maximise the CSLR shared-use pedestrian and cycle path which will provide a new continuous east-west link on the southern edge of St Cuthbert's Garden Village from the A595 roundabout to the M6/A6 London Road.
- providing high-quality, attractive leisure routes, specifically the St Cuthbert's Garden Village Greenway.



Segregated paths can encourage less-confident riders to try new modes of travel and create pleasant environments for through and to routes (Location: Rugby Masts, Rugby. Source: Urban & Civic)

Public Transport

Dalston Road, Scalegate Road, Durdar Road and Brisco Road/Upperby Road will continue to function as bus corridors within the Garden Village. New bus routes will connect residents and visitors to mobility hubs located in local centres.

There are a number of bus routes already operating to Cummersdale, Durdar and Carleton. New development offers the potential to divert and/or increase the frequency of existing bus services, or for the provision of additional services as determined by commercial operators. There may be opportunities to provide some bus priority measures within the route to Durdar to better serve the proposed development and improve the connectivity for bus services.

Bus stops will be provided within preferably 350m (or maximum of 400m) of every resident. Provision of electric charging points will be essential, in addition to high-quality shelters.

Low-traffic Neighbourhoods should consider how buses will navigate through locations, to ensure adequate space and surfaces are provided for public transport.

Park and Ride facilities should be explored where appropriate to help facilitate sustainable travel patterns for local community and commuters. For example, in proximity to Durdar District Centre, easy access from the M6 and the CSLR might encourage some people to park here and avoid driving into the city. This could also help support viability of shops.

Ultimately, work underway as part of the Transport Improvements Study will provide further detail on the public transport improvements options, in line with feedback received from providers.



Figure 19: Example of the mobility hub concept - an array of transportation links is provided to make it easier for travellers to make more sustainable choices (Source: MaaS)

Mobility Hubs

As part of the Masterplanning Framework, mobility hubs have been considered across the Garden Village to create convenient and effective interchange spaces for different transport modes. A mobility hub can be understood as a 'place' or interchange providing different and connected transport modes supplemented with enhanced facilities to both attract and benefit the traveller.

Typical mobility hub concepts include:

- the core public transport infrastructure or services;
- the privately operated car club, shared cycling and e-scooter schemes (docked or undocked);
- electric vehicle charging facilities, rest areas, cycling and vehicle parking and parcel lockers; and
- non-mobility and urban realm improvements, such as a crèche, medical hub, or co-working space.

In terms of strategic design, mobility hubs tend to require a tailor-made solution to each location. Consideration will need to be given to the scale and level of service anticipated and how this will be integrated into the surrounding land uses. For example, healthcare, education and sporting facilities will help to enable end-to-end journeys avoiding the use of sole-occupancy cars.

Furthermore, complementary non-transport uses must be provided in these locations including delivery lockers, cycle facilities, play areas, cafés, retail units, co-working spaces and pocket parks. Mobility hubs offer opportunities to foster social cohesion and define neighbourhood centres as the heart of the community.

Mobility hubs will vary in scale and level of provision and be located in key neighbourhood centres. A primary mobility hub could be provided in Durdar, serving as the main bus hub for the Garden Village as well as providing a focal point for other pick-up and drop off and shared mobility services such as centralised parking for shared electric vehicles and cycles.

Mobility hubs can therefore help to promote sustainable travel through the provision of facilitating travel modes such as car share (ride-sharing and car clubs), on-demand bus services, e-scooter and e-bike hire, and by providing electric vehicle charging to provide a focus for sustainable mobility.

It is anticipated that ongoing transportation studies will provide further details on the suggested location(s) and number of hubs if required, in line with pedestrian and cyclist links and public transport networks.

Strategic Requirement 7 — Street Hierarchy

In line with policy SP6 (Securing Good Design) of the CDLP, a clear hierarchy of streets will form the basis for development at the Garden Village. Development will be expected to demonstrate how the following hierarchy of streets is provided (as appropriate to the scale of development proposed) and connected into:

Strategic Roads

The CSLR will provide access to locations beyond the Carlisle urban area and connect into the wider Strategic Road Network including the M6 and A595.

Main (Primary) Roads

These comprise the primary vehicle routes that connect the Garden Village to Carlisle City Centre and the strategic roads. They also include the Durdar Road High Street- the primary commercial/community spine of the district centre.

Secondary Roads

Secondary roads link active neighbourhoods to the main roads and key destinations.

Residential (tertiary) Streets

Streets that provide local vehicle access to residential properties and where walking, cycling, and socialising/playing are the dominant use. Residential streets can include residential streets, mews, lanes and private drives.

Non-vehicle access

In addition to the main streets, the village will also incorporate a network of existing and proposed pedestrian and cycle routes. All applications should have regard to the quidance provided in Section 7.5 and 7.6 relating to Streets and Parking.

Any proposals will be expected to accord with the recommended streets layout, as to be outlined in the Transport Improvements Study (currently underway).

In accordance with the County's Development Design Guide (2017), general principles of street design and Manual for Streets 1 & 2 (2007/2010), new development will prioritise pedestrians and cyclists above the needs of motorised vehicles. The emerging LCWIP and Transport Improvements Study (TIS) will agree and develop internal layouts and improvements required off site.

Accompanying guidance in Section 7.5 illustrates how each of the typical street types facilitate prioritisation to meet differing roles and functions and require different responses to built form, frontages, parking and landscaping. Together, the streets will form a connected, permeable and coherent internal road network and street hierarchy. Section 7.5 also gives further details of street types and typical form and function.

Carlisle Southern Link Road

The proposed junctions and approaches to the Garden Village from the CSLR must be designed and delivered as high-quality gateways with a focus on reducing speeds, transitioning to residential character and marking arrival to the various village centres.

New homes in proximity to the CSLR and gateway junctions must be set back to provide opportunities to define the Garden Village gateways as attractive landscaped spaces overlooked by high-quality new homes. This will also help to mitigate any noise impacts.

Cycle and pedestrian connections from the CSLR must be integrated into the Garden Village sustainable travel network.

Off-site highways improvements

Development is expected to contribute to off-site highway improvements in order to mitigate the increased demand on the existing road network. The County Council are undertaking further modelling work to understand the detail of these requirements, to help mitigate local traffic impacts, facilitate links to Carlisle city centre and existing facilities and encourage sustainable transport use. All planning applications within St Cuthbert's Garden Village must take these requirements into account.









Examples of high-quality streets at different hierarchies

7. KEY THEMES

7.1 Thematic Design Guidance

This section expands on the Strategic Requirements and assists applicants in formulating proposals, by providing advice and guidance relating to the following key themes, which are critical to achieving a good-quality, sustainable place:

- Green and blue infrastructure;
- Local centres;
- Urban design and character;
- Streets:
- Parking; and
- Low carbon and innovation.

These are common design themes for large-scale residential-led development that have been informed by Building for a Healthy Life (BHL), the National Model Design Guide and Carlisle District Local Plan SP6. A local flavour further influences this thematic guidance through recent St Cuthbert's Garden Village visioning and masterplanning work. This includes the importance of landscape - 'start with the park' - and a focus around distinct garden communities.

BHL – updated in 2020 - is now a well-established national design guidance tool for residential-led development. We strongly encourage its use as a platform for this more bespoke St Cuthbert's Garden Village guidance. BHL covers three themes – integrated neighbourhoods, distinctive places and streets for all – and 12 topics within these.



7.2 Green and Blue Infrastructure

As set out in Strategic Requirement 1 – Connected Green and Blue Infrastructure and the 'Start with the Park' guiding principle, the provision of high-quality and accessible open space is fundamental to the successful delivery of the Garden Village. St. Cuthbert's offers fantastic opportunities to build on existing topography and geographical features and enhance views to create place-specific design proposals. Any proposals for development will need to be supported by a robust understanding of the site and wider context to inform a sustainable design solution for existing and future residents.

This section provides guidance on:

- 1. Landscape Character and Local Distinctiveness;
- 2. A Range of Greenspaces;
- 3. The Greenway;
- 4. Ecology;
- 5. Productive Landscapes; and
- 6. Sustainable Drainage Systems (SuDS).

7.2.1 Landscape Character & Local Distinctiveness

Any proposed green or blue infrastructure should build upon existing landscape character and maintain and enhance a sense of identity. Key objectives include:

- Retain and create views from development to make visual connections to the surrounding landscape;
- Existing trees, hedgerows, valuable natural landscapes and watercourses shall be identified and protected wherever possible;
- Opportunities to use existing green/blue corridors for amenity, recreation, drainage and movement should be maximised;
- Incorporate green / blue assets and areas of conservation and/or historical value:
- Maintain and enhance access to heritage and cultural assets within and outside the Garden Village;
- Design within the natural topography of the site e.g. safeguarding hills for far-reaching views.

The definition of distinct village centres can be enhanced through green infrastructure. Section 8 provides further guidance on area-specific landscape characteristics that should be preserved and enhanced when developing design thinking for applications.





Note: Carlisle City Council will be preparing a Green and Blue Infrastructure Strategy and Action Plan to evidence the emerging St Cuthbert's Garden Village Local Plan and provide further quidance and clarity regarding its implementation.













Existing green routes and local distinctiveness in and around St. Cuthbert's (Sources: Stuart Walker Photography and Carlisle City Council)

7.2.2 A Range of Greenspaces

Any development proposals should consider how end users will have access to a diversity of open space from their doorstep. Policy GI 4 (Open Space) of the CDLP outlines the need for open space provision to be informed by an assessment of need. The emerging Infrastructure Delivery Plan, to support the emerging St. Cuthbert's Local Plan, will set out the overarching greenspace requirements.

The types of greenspace to be provided will include:

Natural and semi-natural greenspace

Defined as areas of woodland, scrub, grassland, wetlands, open and running water, and open-access land. Green corridors should provide connections for both people and wildlife and green buffers between development. Existing blue infrastructure should be retained and integrated into Sustainable Drainage Systems (SuDS).

Parks and Gardens

Formal greenspace destinations that include urban parks, community open spaces and country parks. The location has key amenity spaces have been identified in the Illustrative Green and Blue Infrastructure Framework (Fig 10).

The Greenway

A multi-modal green route linking the St Cuthbert's Garden Village villages through open space. The Greenway will connect people within the Garden Village and provide connections to the city and wider area. The provision of play, sports, recreation and amenity space will be concentrated along the Greenway, providing a critical green asset for residents and visitors. See Section 7.2.3 for further details.

Amenity Greenspace

Informal recreation spaces and communal green spaces in and around housing and community facilities. These may include pocket parks, neighbourhood spaces, communal courtyard gardens, village greens and village squares. A variety of scales, uses and characters will help to create vibrant and attractive neighbourhoods for all.

Play Areas

Designated areas for children and young people containing a range of equipment and facilities and an environment that has been designed to provide focused opportunities for outdoor play comprising casual or informal playing space within housing areas. Play spaces should be designed in accordance with the Russell Play Guide and meet guidance for Local Area for Play (LAPs), Local Equipped Area for Play (LEAPs) and Neighbourhood Equipped Area for Play (NEAPs). NEAPs will be located close to schools, local centres and supporting community facilities. LAPS and LEAPS should be evenly distributed throughout development within walking distance guidelines. Opportunities to integrate informal/natural play and Street Play principles will be encouraged.

Sports Fields

Formal pitch sports facilities, for example, rugby/football pitches and Multi-Use Games Areas (MUGAs). Sports pitches should be designed to Fields in Trust Examples of high-quality green spaces (Sources: Hyas, Visit Cumbria and Arup)

(FIT) minimum standards. A quality over quantity approach will be supported which promotes the provision of high-quality surfaces, multi-functionality, lighting and supporting facilities. Opportunities to share facilities should be explored and it is anticipated that schools will provide pitches on site with community use agreements in place. The opportunity to create a St Cuthbert's Garden Village community Sports Club will be supported as a placemaking and community building enterprise. The location for such a facility would be best placed close to Durdar local centre, close to or within the Greenway.

Carlisle City Council is working with Sport England and the relevant governing bodies to deliver a Playing Pitch and Outdoor Sport Strategy that will further inform the emerging Local Plan and any relevant updates to this SPD.





Other Sports Provision

Courts and greens comprising natural or artificial surfaces, including tennis courts, bowling greens, athletics tracks and other outdoor sports area. See above for details of specification and location.

Grow space

Productive landscapes including allotments, community gardens and orchards. Where possible sustainable food production should be integrated into development and provided during the early phases of development. Protecting and enhancing community grow spaces and providing access for all will help deliver sustainable development at St Cuthbert's Garden Village.





7.2.3 The Greenway

The Greenway plays a fundamental role in achieving sustainable and active travel in the Garden Village. The Greenway opportunity would seek to provide a new multi-modal, greened route, linking destinations and encouraging recreational and active travel both across and beyond the development. The Greenway offers recreational opportunities in the form of trails, formal and natural play, amenity space and outdoor sports overlooked by new homes and community facilities. The key objectives of the Greenway are as follows:

- Link neighbourhoods, communities, assets and village centres along a circular route;
- Enhance the existing PRoW and cycle network connections between Carlisle and the surrounding countryside;
- Promote active travel and provide attractive car-free routes for pedestrians and cyclists;
- Provide a focus for play, sports, recreation and food production at the heart of the Garden Village;
- Improve safe access to shared community assets such as the Rivers Caldew and Petteril, woods and countryside;
- Respond to the various housing/building uses and typologies along its edge and deliver open spaces that reflect these uses.

The design of the Greenway will vary along its length from formal and programmed near local centres to more natural and informal at development edges. It will encompass many of the Fields in Trust typologies along its course and will be the principle green space at the core of the garden village.

Whilst further site-specific analysis will be required, the following considerations should be used as a guide for the design of the Greenway in its various locations:

River Caldew

The redevelopment of the Stead McAlpin factory on the banks of the River Caldew will provide opportunities to improve green infrastructure and linkages, with the potential to include a landmark park. Ecological opportunities also exist if any land remediation is required.

Connections to the existing National Cycle Network (NCN) Route 7 will connect the Greenway to the wider countryside. Improved gateway crossing points over the River Caldew may be required to support this. If a country park is progressed in this broad area it would need to meet Natural England's accreditation criteria which includes accessibility, facilities, wayfinding, activities, management and links to the community amongst others.

River Petteril

Existing River Petteril crossings and the railway will provide pedestrian and cycle access to Carleton from Durdar. It will be important to consider any further opportunities to tie links into potential future routes along the River Petteril and to the CSLR strategic walking/cycle link.

The development and design of the Greenway will need to consider any impacts on existing landowners, in particular those who use their land for work such as farming. Early engagement with these landowners will help ensure a positive strategy/action plan is developed to minimise any potential adverse effects.

Local Centres

Where the Greenway meets the local centres, it will provide a community spine along which residents will commute, promenade, meet and play. The Greenway should support community activities and include sports pitches, play areas, recreation areas and events space. Opportunities to create high-quality, shared, multi-functional sports, play and educational areas for both school and community use is encouraged.







7.2.4 Ecology

The network of green spaces proposed at St Cuthbert's Garden Village provides an opportunity for ecological mitigation and increasing the biodiversity of the site as part of an integrated approach to development. Site-specific green infrastructure will bring distinct character to any new neighbourhood and contribute to sense of place. In accordance with the emerging St Cuthbert's Garden Village Local Plan Design Policy, the retention and enhancement of existing trees, shrubs, hedges and other wildlife habitats must be ensured. If the loss of environmental features cannot be avoided, appropriate mitigation measures should be put in place and on-site replacement of those features will be sought.

The Landscape and Open Space Typologies Plan (Figure 21) sets out an approach to habitat retention and creation. It identifies existing key landscape types and demonstrates how new green infrastructure should seek to connect north-south blue corridors, east-west across the Garden Village.

In accordance with the provisions of the Environment Bill, all new development • must deliver a measurable biodiversity net gain. The aspiration for St Cuthbert's Garden Village is for development proposals to achieve a minimum of 10% net gain. Developers should undertake a Biodiversity Net Gain Assessment using the DEFRA Biodiversity Metric 2.0 (Natural England, 2019) to • identify potential opportunities to improve biodiversity on a plot by plot basis. Developer's should refer to 'Biodiversity Net Gain: Good Practice Principles for • Development' [CIRIA, 2019].



The River Caldew adds to the ecological value of the site (Source: Arup)

Specific ecological measures will be designed within the green infrastructure framework and include:

- Applicants for development should demonstrate that a minimum 10% net gain in biodiversity will be achieved either directly on site or, where this is not achievable, through contributions to an off-site area of habitat creation and/or enhancement as shown in the final Masterplan Framework or otherwise agreed with Natural England.
- Biodiversity should be integrated within the masterplanning process and ensure a whole-area approach is taken which looks beyond the immediate
- Developers must do more than just protect existing habitats, they must seek new opportunities to increase biodiversity and connect to wider ecological assets;
- Developer's will be expected to outline net gain measures taken on site within the site's accompanying ecological assessment and Design and Access Statement:
- Where a site has recently suffered rapid or demonstrably deliberate deterioration to its ecological integrity, the initial baseline biodiversity score must be based on an assessment of the site prior to this deterioration;
- Ensure connectivity between existing and proposed habitats and connections to the ecological framework beyond the site;
- Improve the health of existing waterways;
- Existing woodlands and hedgerows should be retained where possible;
- Provide a network of new trees that use a hierarchy of forms, sizes and species, to create a strong sense of identity and legibility;
- Create a series of new SuDS waterbodies and wetland habitat mosaic that includes ponds, wetland, marsh, grassland and wet woodland;
- Enhance key ecological habitats and depleted agricultural land;
- · Use species that are native, or of known value to UK wildlife, and/or of local provenance;
- Manage the spread of invasive species;
- Incorporate habitat creation in residential and employment developments, for example through tree planting, SuDS and micro habitats such as bat/ bird boxes, insect hotels and extensive (brown) roofs;
- Mitigate the impact upon habitats and protected species;
- · All new planting should give due regard to root establishment and longterm viability.

Existing ecological areas and valuable green assets are defined on the Baseline Habitat Plan (Appendix 5). Notable habitats to be preserved and enhanced include (as set out in Figure 21):

S41 Priority Habitat – Deciduous Woodland

S41 priority habitat deciduous woodland is located at Toddhills Wood and Peastree Wood (west of Carlisle Racecourse), Tarn Plantation (south of Durdar) and Cat Wood (east of Durdar). This habitat should be retained and integrated into future greenspace provision; however, consideration will need to be given to any housing nearby to avoid any potential overshadowing impacts. Alternatively, if relocation is required, adequate consultation with the Forestry Commission will be required.

Broadleaved, Mixed Plantation Woodlands and Trees

Areas of broadleaved and mixed plantation woodland to the south and east of

Durdar and in discrete pockets throughout the survey area should be retained. Scattered trees, veteran trees and mature and over-mature hedgerow trees can be found throughout the site and provide important habitat for owls and bats. These should be retained and enhanced wherever possible. New tree and woodland planting should complement and enhance existing provision. The location of existing trees and hedgerows can be found in Appendix 5.

Watercourses

Rivers, streams, becks and other watercourses form a network of habitats across the site and should be retained. The Caldew and Petteril river corridors will be preserved for wildlife and enjoyment. Riparian buffer strips are characteristic of the area and are found close to watercourses (4-12m from the bank). Whilst sharing many species with field hedges, they can contain long grasses and riparian trees. The River Petteril has had over 17km of riverbank enhanced with buffer strips (2009 -14) by conservation groups and this practice should be continued to benefit water quality and riparian wildlife.

Natural and Semi-natural Green Infrastructure

Proposed Natural and Semi-natural Green Infrastructure will be focused around existing watercourses. Developers should identify opportunities to diversify and enhance riparian habitats through appropriate site assessment and ecological studies, which may contribute to their overall biodiversity net gain. Significant opportunities exist to provide a mosaic of wetland and waterbody habitats associated with SuDS.

Hedgerows

Species-rich hedgerows and associated ground flora are present throughout the site. The location of existing hedgerows can be found in Appendix 5. Developers should undertake further hedgerow surveys to assess the value of individual sites under The Hedgerow Regulations 1997. Throughout the natural areas but also within residential plots, retention, enhancement and creation of new hedgerows will be encouraged. In addition, the use of hedgerows to create a framework for development parcels will be supported. Preservation of existing hedgerows will embed the development in its rural character.

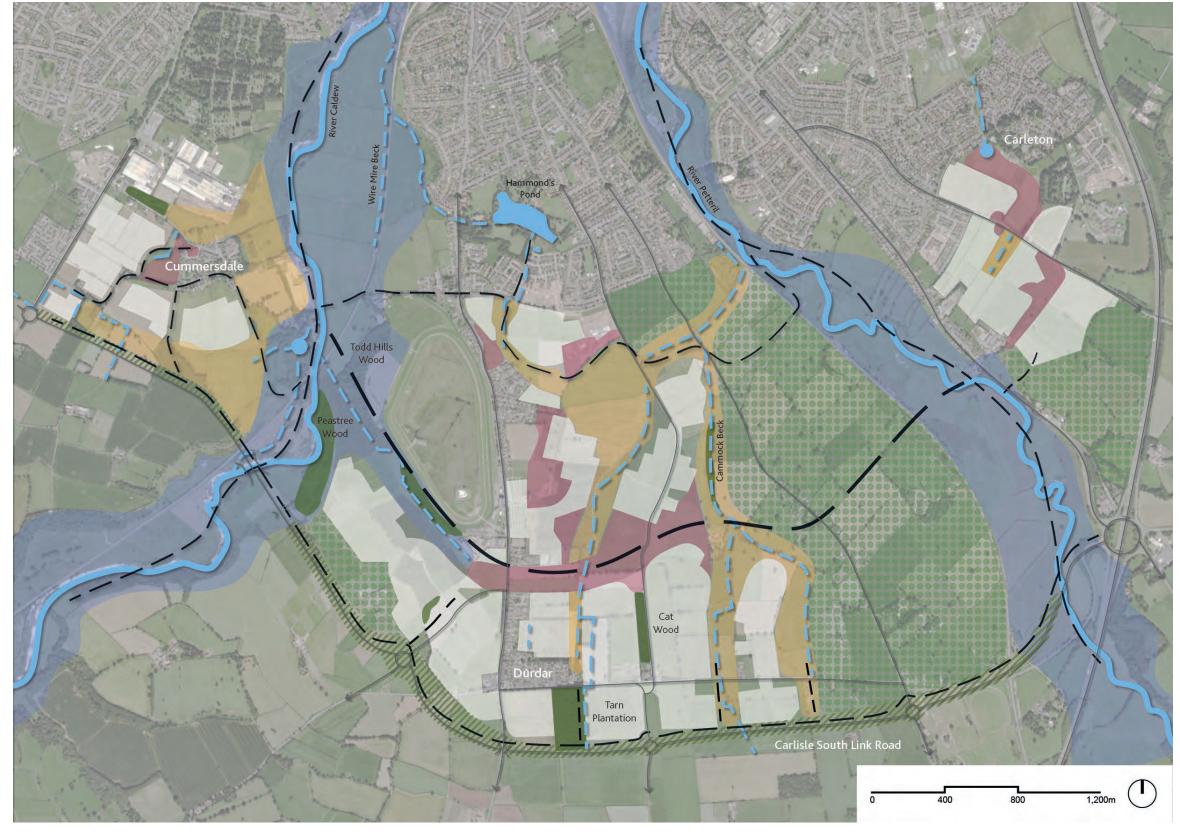
Structural Planting

Structural Planting such as woodland, tree belts and hedgerows will help to create a green gap and screen development from adjoining property and/ or highway infrastructure. Structural Planting will also provide important ecological connectivity particularly east-west between the two river corridors. The ecological value of proposed plantings should therefore be considered when developing planting strategies for individual sites.

Amenity Open Space

Green infrastructure should be used as a delivery vehicle for increasing biodiversity in new housing developments. Amenity Open Space, and in particular the Greenway, will provide living infrastructure to support wildlife and its movement between the river corridors. Developers should consider the full suite of available green infrastructure to link existing habitats as well as creating new ones. Examples of biodiversity-friendly green infrastructure include green and brown roofs, water retention ponds and SuDS.

Figure 21: Landscape and Open Space Typologies



--- Wider GI Connectivity

Retained Farmland

-- Greenway

Roads/ Streets

Existing Development

Retained Woodland Preserved River Corridor

Amenity Green Space

Blue Infrastructure - Rivers, Becks & Ponds

Natural + Semi-Natural Green Infrastructure

Key

7.2.5 Productive Landscapes

As set out in SP9 of the CDLP, food production and the provision of space to grow edibles will help to deliver sustainable development and healthy and thriving communities. The protection and promotion of community food growing spaces will help connect the Garden Village to its agricultural heritage, support community cohesion, health and wellbeing and ensure access to affordable locally produced food. Carlisle District is a founding member of the Sustainable Food Cities Network and the Garden Village provides a significant opportunity to empower change towards a vibrant and inclusive food culture. A range of scales of productive landscapes should be provided as follows:

Small-scale

On-plot food growing opportunities such as raised beds and communal grow zones within gardens and residential courtyards. Additionally, integration of fruiting trees and edible plants and herbs within amenity spaces.

Local-scale

Allotments, community orchards and the use of fruit trees and hedges on streets and in parks can connect people to food production and their local community. Forest and farm schools can continue educational opportunities for children and the creation of places for farmers markets in local centres will encourage residents to live, work and shop locally.

Regional-scale

There is great potential for the surrounding farms to build connections with the community though farmers markets, vegetable delivery schemes and with open farmsteads. Policy SP 9 (Healthy and Thriving Communities) in the CDLP seeks to protect and promote the role of community food growing as part of Carlisle's role as a Food City. Much of the site is classified as Grade 3 agricultural land with dairy and livestock farming predominating along with some arable production.

The development should have regard to agricultural activities and seek to minimise impact on farmers. Engagement will be required to ensure any potential barriers to farmers who want to develop their farms is managed.

If land is required for offsetting or biodiversity net gain requirements, applicants will be expected to engage early and meaningfully with the landowners affected to minimise the impact on food production.













High-quality productive landscapes at different scales

7.2.6 Sustainable Drainage Systems (SuDS)

Policy CC5 (Surface Water Management and Sustainable Drainage systems) of the CDLP identifies the requirement to adopt SuDS principles for all development. Surface water run-off should be managed at source and attenuated and infiltrated using the existing blue network supplemented by new blue infrastructure.

In addition to the retention and enhancement of the existing blue network, a series of large waterbodies, swales and rain gardens should supplement the area's flood water storage capacity. A range of SuDS solutions must be considered from small-scale, on-plot solutions to larger-scale detention basins within community open space. A holistic Landscape and Water Management Strategy should be developed and discussed with the Local Authority at the earliest possible design stage. The design of each plot should assess the suitability of SuDS types on a site by site basis but work on the presumption that below-ground water management will only be acceptable if roof and surface level solutions are proven to be unviable. The following hierarchy should be followed:

- Water reuse;
- 2. Soft landscaping features where possible using infiltration;
- 3. Hard landscape features permeable paving;
- 4. Below-ground features.

Source control measures to reduce the volume and rate of run-off should be incorporated during design development of the plots. Opportunities for water reuse should be reviewed on a plot by plot basis. Where larger areas of soft landscaping are introduced and appropriately located, rain gardens, ponds, wetlands, and areas for bio retention should be considered as part of the downstream landscaping strategy. When calculating volume of attenuation, developers should allow for an increase in rainfall in line with Climate Change Peak Rainfall Intensity Allowances.

Key flood and drainage principles include:

- Early engagement with Cumbria County Council and United Utilities.
- Existing blue corridors will be retained and enhanced to support and supplement any new SuDS interventions.
- Developers should consider areas outside, particularly upstream, of their immediate site and wider SuDS proposals for new infrastructure and other developments at the outset. Developers will be encouraged to discuss options for discharge as part of an early-stage, high-level site evaluation.
- SuDS should be included within all streets in the Garden Village.
- Soft landscape solutions should be the primary means of surface water drainage. These solutions could include new tree/hedge planting, green and brown roofs, rainwater gardens, swales and bio-retention basins.
- Avoiding large areas of hard landscaping and below-ground attenuation.
- Where hard landscaping is required, permeable paving should be used and be drained towards SuDS features.
- Careful drought tolerant species selection to reduce need for irrigation.
- Opportunities to integrate rainwater harvesting should be included.
- Swales, rain gardens and basins should be designed as amenity and ecological assets. Consideration should be given to the recreational value and how best to ensure SuDS are integrated well into the design of spaces.
- Overall, seek to meet the "four pillars" of SuDS design objectives where surface water runoff is managed for water quantity, water quality, amenity and biodiversity benefits.

Ongoing maintenance and possible adoption

It is advisable for developers and their consultants to give early consideration to the maintenance requirements for their SuDS scheme and potential routes for adoption.

- Maintenance should be considered at all stages of the planning, design and construction process. Guidance on www.susdrain.org states that well-designed and constructed SuDS with source control should be easy to maintain, regardless of whether they are landscape or hard engineered solutions. Poorly designed or constructed drainage systems without source control (e.g. end of pipe ponds, basins, wetlands and storage tanks) will be inherently more difficult and costly to maintain because of silt and should not be seen as good examples of SuDS components or schemes.
- In order to meet the criteria for adoption, the SuDS must be constructed to an adoptable standard, taking into consideration the current non-statutory technical standards for SuDS and the CIRIA SuDS Manual (or appropriate replacement guidance or legislation). Developers and their consultants should engage with the LPA, the Lead Local Flood Authority (LLFA) and United Utilities early on to explore mechanisms for adoption.
- Applicants should refer to the new Water UK 'Construction Design <u>Guidance</u>' when developing their proposals.

Natural Flood Management

There is an opportunity to consider a natural flood management (NFM) approach to development. The overall aim is to 'protect, restore and emulate the natural functions of catchments, floodplains, rivers and the coast'. For further information on the approach to NFM please refer to www.ciria.org.

Water Efficiency

The design of new development should consider the inclusion of water efficiency measures like rainwater recycling, green roofs and water butts in the construction of new buildings. New development should encourage water efficiency measures including water saving and recycling measures to minimise water usage. Water consumption is part of the assessment criteria for BREEAM and United Utilities currently offer an Infrastructure Charge discount of 90% where less than 100 litres per person per day is met.

All new residential development must achieve as a minimum the optional requirement set through Building Regulations for water efficiency that requires an estimated water use of no more than 110 litres per person per day.











Examples of the variety of methods in which SuDS can be integrated into their surrounding environments

7.3 Local Centres

BHL promotes the importance of facilities and services to integrated neighbourhoods, and SP3 of the CDLP supports timely infrastructure delivery - including social infrastructure. At St Cuthbert's Garden Village, our design framework focuses garden communities around three local centres - Durdar being the largest, of district significance - complemented by Carleton and Cummersdale. These provide the 'heart' for emerging communities informed by the following design principles.

A Mix of Uses

- Incorporating a clustered mix of commercial and community uses, including shops, offices, leisure, health and education
- Including higher-density housing opportunities within and around the
- Mixing uses vertically and horizontally, including living above the shop and live / work typologies
- Making the most of schools as community resources
- Complementing existing uses, including Carleton Rugby Club, Cummersdale village centre and Carlisle Racecourse in Durdar as a leisure attraction
- Primarily providing for local need, but also making the most of passing trade, to support commercial viability and sustainability, as part of a hierarchy of centres across Carlisle

Distinctive Form and Character

- Drawing on local character studies to confirm the most appropriate form for each centre
- Durdar making the most of the juxtaposition of the Greenway, link road spur / Durdar Road to create a new 'high street' and urban square, further inspired by the likes of Dalston village centre and square
- Carleton working with local topography to create an informal village centre form, making the most of the prominence provided by Cumwhinton
- Cummersdale responding to the rectilinear form of field patterns and drawing on passing trade from Dalston Road
- Clustering local centre uses and buildings around a pedestrian-friendly street and space, with massing to match the centre's position in the hierarchy.

Sustainable Access and Movement

- Locating centres primarily to satisfy local need, but also to draw on passing trade, as stated above in Durdar, Carleton and Cummersdale
- Supporting accessibility for pedestrians, cyclists and those on public transport, making the most of the Greenway and Durdar mobility hub
- Locating centres in well trafficked locations with strong footfall and overlooking to support community safety
- Incorporating safe and convenient cycle parking at the core of centres
- Integrating car parking and servicing to provide convenience and enable passing, whilst not dominating the streetscene.

Public Realm and Landscape

• Putting public realm at the heart of the local centres as part of their distinctive urban form – neighbourhood squares, high streets and village greens

- Enabling multi-functional use, including access for all and utilisation for footfall-generating activity such as markets, events and meeting up
- Integrating landscape, including trees for shade and nature, greens and lawns to make the most of the sun, and specifically incorporating the Greenway into the heart of Durdar
- Creating distinctive new landmarks, such as sculpture, public art, street furniture and interpretation/wayfinding.



District centre high street - Poynton, Cheshire



Letchwood Garden City (Source: Marshalls)



Clonakilty Street Carnival - using the Main Street to host a dinner party to serve top local cuisines to over 1,000 people - flexible spaces building a sense of community (Source: Clonakilty.ie)



Flexible spaces for a mix of uses in Kilkenny (Source: London News Online)



Poundbury Local Centre (Source: Poundbury.co.uk)



Local centre as a community hub - Bourneville, Birmingham

7.4 Urban Design and Character

Policy SP6 of the CDLP states in the reasoned justification that: "High-quality design is an integral part of sustainable development and accordingly is a key thrust of the Local Plan's strategic overarching strategy. The Plan recognises that good design is essential to creating accessible, inclusive, attractive, vibrant and sustainable places with a strong sense of place, in which people want to live, work and have fun."

This is re-enforced by the NPPF, which highlights that "The creation of high-quality buildings and places is fundamental to what the planning and development process should achieve. Good design is a key aspect of sustainable development, creates better places in which to live and work..."

As a high-quality garden settlement, St Cuthbert's Garden Village needs to contain varied development, within a range of character areas, promoting contemporary character, design and distinctiveness and this has been reflected in the approved Masterplan Framework. The Illustrative Urban Design Framework at Figure 12 highlights strategic place making features that should inform the approach to character and design and this section outlines the fundamentals of developing a design-led approach to creating distinctiveness and quality across St Cuthbert's Garden Village. This section further analyses the character of local villages, highlighting design cues to inform the approach to development at St Cuthbert's Garden Village. In considering the approach to urban design and character, applicants should also have regard to Section 8, which identifies the character areas across St Cuthbert's Garden Village and sets out design principles in a number of key locations.

<u>Essential requirement for planning applications</u>

In preparing development proposals that comply with the requirements of Policy SP6, regard should be had to the character area guidance in Chapter 8 and the following fundamental elements of achieving good design.

Distinctive Character

- Analysing positive local character, within St Cuthbert's Garden Village and around Carlisle, to inform design from an early stage.
- Drawing on the character area statements in Section 8 to support the above
- Responding positively to key site features and characteristics, such as topography, views and landmarks.
- Targeting exceptional opportunities to develop positive, distinctive contemporary character and design, supported by a strong rationale.

Blocks, Front and Backs

- Structuring neighbourhoods with an emphasis on perimeter blocks with front doors opening on to private defensible front gardens and active streets, and clearly defined, safe private back gardens.
- Ensuring that the sides of blocks provide positive frontages, windows and quality boundary treatments (avoiding long stretches of timber fencing and blank façades and isolated unsafe parking).

- Providing a clear delineation between public and private space
- Complementing the above with the occasional incorporation of well-designed and managed communal space / shared gardens, especially in higher-density areas.
- Designing tighter and looser perimeter blocks for higher and lower-density-character areas respectively.
- Establishing an urban grain and density to suit the character area –
 including strong grid patterns in parts of Durdar or informal village and
 parkland forms in parts of Carleton and Cummersdale (avoiding meandering
 roads and cul-de-sacs that do little to aid navigation).

Focal Points, Corners and Views

- Structuring neighbourhoods around a hierarchy of streets and spaces, focal points and views
- Making the most of positive long and short views, including those highlighted in the Illustrative Urban Design Framework, supported by site visits and landscape and visual analysis
- Emphasising key frontages, vista termination buildings and prominent corners, including the use of quality dual aspect homes with windows serving habitable rooms.

Edges and Interfaces

- Designing positively for a new countryside/settlement edge, including south-west of Durdar and south of Cummersdale (highlighted in the Illustrative Urban Design Framework), to create a strong and attractive interface between development and the countryside/open space, with sensitive use of densities, massing and landscaping.
- Drawing the landscape into the neighbourhoods and breaking up the edge of development with lower-density housing typologies, such as courtyard/ farmsteads.



 Responding sensitively to key interfaces (including the relationship between Cummersdale village and new development, and between Upperby and Durdar) utilising topography, development orientation, generous back gardens and landscape.

Densities and Heights

- Creating variety in built form through the use of a mix of densities that respond positively to their location and setting.
- Using mixed densities to meet a range of needs and living options, such as families, elderly people, young professionals and others.
- Using higher densities around local centres, particularly in Durdar, to create an appropriate urban form that supports local amenities.
- Considering an innovative and modern approach to higher densities, based on traditional Carlisle terraced housing.
- Use of height in built form to create a sense of enclosure to key public spaces and to emphasise gateway features.
- Considering lower densities in sensitive locations, such as the countryside edge, adjacent strategic open space or in response to nearby built form.





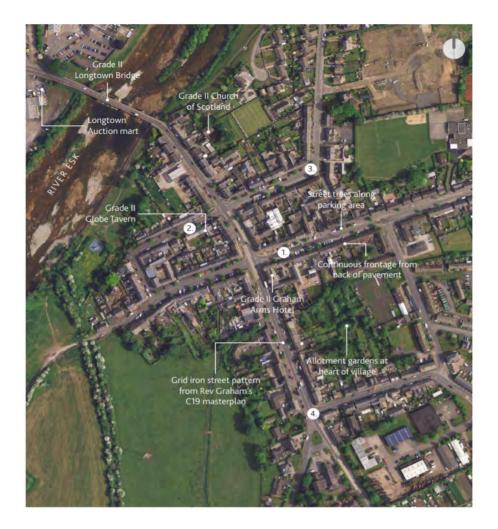
7.4.1 Local Character Cues – Longtown

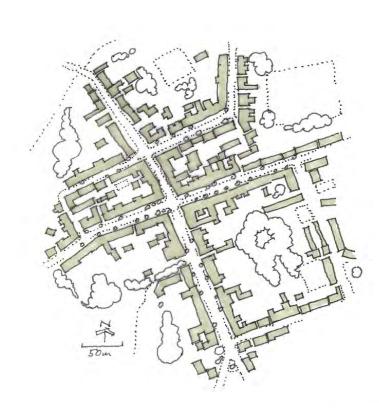
Longtown is a compact market town north of Carlisle and just south of the Scottish border. The hamlet was expanded in the 18th century based on the Georgian grid-based plans of Rev Robert Graham.

Densities range from approximately 40 to 60 units per hectare, from the settlement core to the settlement edge. Perimeter courtyard blocks are typically 60m by 100m, with secondary development and greenspace in the centres. At the edge of the town, the blocks are fragmented, feathering sensitively into the landscape.

Key cues for development at St Cuthbert's Garden Village include:

- Good fit with the context of a through route, and countryside and riverside settlement edges.
- A strong identity based on a formal grid.
- Clear perimeter blocks that vary from the core to the outer areas.
- Grid and blocks reinforced by continuous building frontages and street trees along key routes.
- A clear centre to the settlement, focused on the crossroads.
- Three-storey buildings and higher densities focused at the core and up to two-storey short runs of terraces beyond.
- Brick, stone and slate are complemented by pastel render, with doors and fenestration emphasised with strong colour.







Distinctive use of colour to emphasise doors and fenestration



7.4.2 Local Character Cues - Denton Holme

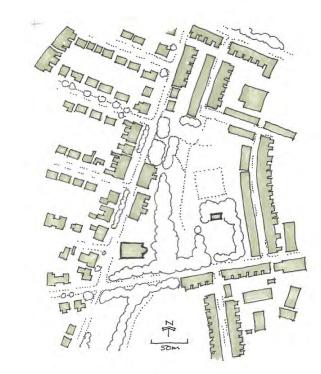
Denton Holme is a Victorian, industrial inner suburb of Carlisle. A grid structure supports high densities to the east, whilst St James Park provides the setting for more generous villas.

Densities range from 60 – 80 dph nearer to the city centre, and 25 – 30 dph to the west. Perimeter blocks vary from east to west – approximately 50m by 100m, to 70m to 200m. The grid varies to fit with the meandering River Caldew and greenspaces.

Key local cues for St Cuthbert's Garden Village include:

- A strong identity based on the street grid and a positive relationship with greenspace and the river.
- Clear perimeter blocks that vary from the city centre outwards.
- Continuous building lines formed by terraced areas to the east, and complemented by lower-density blocks to the west, framed by street trees and boundary treatments.
- Greenspaces provide the focus for characterful streets and features, including community buildings, higher-value villas and landmarks such as Bridge Street turret (see photo).
- Two and two-and-a-half-storey homes are punctuated by chimneys, bay windows, discrete dormers and corner features
- Materials include slate and a limited palette of brick types punctuated with colour splashes around doors and windows.









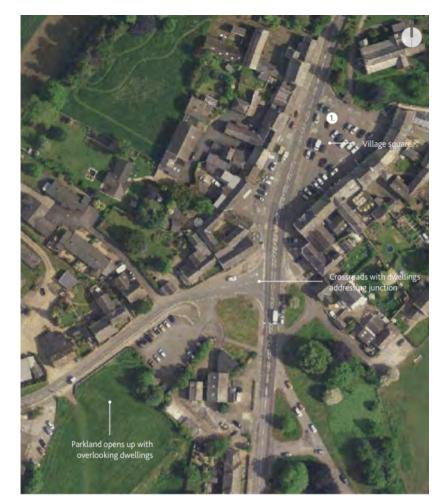
7.4.3 Local Character Cues – Dalston

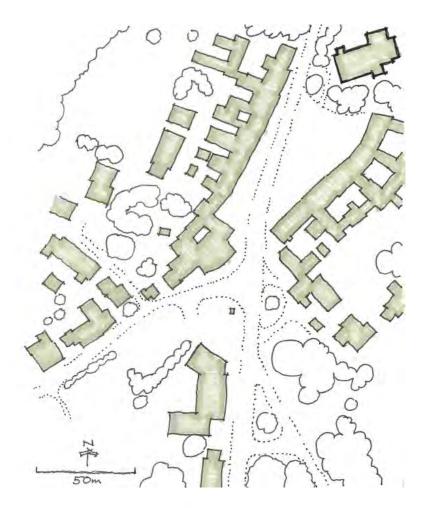
Dalston is a village south of Carlisle. It lies on the junction of a key route in the Caldew valley, and is focused on an informal square and a church surrounded by facilities.

The centre focuses on shops and pubs - densities range from 25 to 30 units per hectare. The grain of the village incorporates loose courtyard blocks approximately 30m by 80m that fragment into the countryside. The square is approximately 50m by 80m.

Key cues for St Cuthbert's Garden Village focus on local centre opportunities:

- Village centre as community heart, located at the junction of streets and
- A bustling local centre with a cluster of facilities, bolstered by passing trade.
- An appropriately proportioned village square able to host events.
- Local stone complemented by the use of pastel shades of render doors, windows and quoins emphasised with white and strong colour.
- A village square enclosed by continuous building lines largely threestory with active ground floor uses - focused on views to the landmark St Michaels Church.
- Square complemented by greenspace and easy access to the river and open
- A sensitive settlement edge incorporating clusters of outbuildings nestled amongst tree groups.







Continuous building line frames village square



7.5 Streets

This section provides key principles that should be adapted to reflect the unique location and conditions of individual village streets. For each street typology, the following is provided:

- A description of the street's role and function.
- Cross section and plan view of typical street including key dimensions and the relationship between the carriageway, public space, private frontage and built edge.
- Overview of street users.
- Overview of parking arrangements for fronting properties.
- Building types, heights and distances.
- Landscaping and public realm.

Developers should refer to Cumbria County Council's Cumbria Development Design Guide and engage early with Cumbria County Council where a deviation from this is proposed to ensure topics such as SuDS features in highways can be discussed. Applicants will need to consider the safety of users when developing their proposals.



Example, Cambridge NW Strategic Road

7.5.1 Primary (Main) Roads

Description:

These roads provide key north-south vehicle access to the Garden Village and existing communities to the south of the city centre. Primary Roads (also known as Main Roads) are intended to function with vehicle speeds of 30mph.

- Footways min 2m to both sides of the carriageway where space allows
- Carriageway max 3.2m
- Segregated / protected cycle lanes where space allows
- Continuous footways at junctions with minor/residential streets and designing in pedestrian/cycle priority
- Cycle lanes to be linked to the Greenway, NCN7 and CSLR
- Modal filters to prevent rat-running and reduce traffic flows

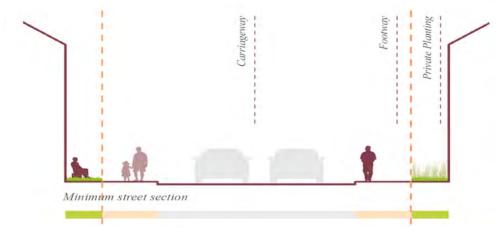


Figure 22: Minimum Street Section (Source Arup)

will be accommodated on road in segregated cycle lanes where these can be accommodated. Parking:

Where residential properties front the street, parking should be in line with section 7.6. They should have a mix of in-curtilage parking set back from the street and some unallocated parallel on-street visitor parking. The number and location of unallocated on-street parking bays will need careful consideration through the detailed design and planning application stage

These streets provide north-south access to residential areas and connect

residents to the local centres, the CSLR and city centre. Pavements should

be provided on both sides of the carriageway (where space allows) with

continuous footways at junctions with minor/residential streets. Cyclists

Buildings:

Users:

Where buildings front the street, they should be predominantly two storeys and above and provide a continuous frontage. A mix of house types may front the street, though all should benefit from provision of a front garden. Blank walls and gable ends should be avoided, unless provided to enhance views and/ or build on local design features as seen in Durdar.

Landscape:

Green verges, linear swales and tree planting to create a buffer between footway/cycle lane and carriageway should be provided where space allows. Where possible opportunities for mature tree boulevard establishment should be sought. This will help announce arrival to the Garden Village. Pavements and segregated cycle lanes should be protected by kerbs and differentiated in materials. Feature highway lighting will help to announce gateway to the development.

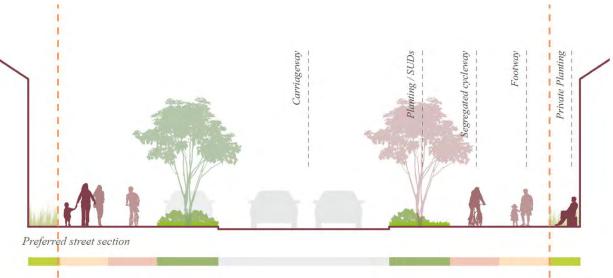


Figure 23: Preferred Street Section (Source Arup)

Requirements for planning applications

Any development that seeks to upgrade, or results in a need to upgrade Durdar Road and/or Blackwell Road will be expected to demonstrate how sustainable travel methods (walking, cycling, bus routes) have been incorporated as part of the design and provide justification and mitigation where this is unachievable. For example, where space is a constraint, outline where cycle lanes are not segregated and any safety measures that are proposed to ensure sustainable travel remains a desirable option. Consideration must also be given to the integration of the CSLR roundabout and the proposed overbridge.

All applicants should have regard to the parking and landscaping requirements as set out in the supporting text and provide details of how appropriate signage and materials will ensure the high streets are safe and usable for all people.

Description:

Durdar Road is a key public transport corridor and will be retained as a main road for general traffic use. This road provides access to the Garden Village and existing communities to the south of the city centre. Where Durdar Road meets the district centre it will change to a High Street character with spill out space for retail units and areas for people to rest and socialise. This road is intended to function with vehicle speeds of 30mph, potentially reducing to 20mph through the district centre/high street character area.

- Footways min 2m to both sides of the carriageway where space allows.
- Continuous footways at junctions with minor/residential streets.
- Carriageway max 2.75m per lane (excluding footways), 5.5m overall.
- On-road cycle lanes with enhanced safety at key junctions to existing road infrastructure.
- Segregated cycle route between Durdar district centre and the CSLR.
- Any cycle lanes will be linked to the Greenway and CSLR (in line with any specific links identified in transport studies underway).

Users:

Durdar Road will provide for key north-south vehicle movements and serve the local community by providing access for public transport but also a High Street destination for Garden Village residents and visitors. In the district centre, wider pavements should be provided on both sides of the carriageway to enable activation of the street with outdoor café seating and retail spill out. Cycle parking at these locations will encourage stopping and use of community facilities.

Parking:

Parking solutions included and or in close proximity to high streets should be in line with Section 7.6 and consider smart use of space and easy connectivity by providing links to any planned or existing mobility hubs. Short-stay parking bays should be accommodated to encourage passing vehicles to stop and use high street facilities. These could be further utilised for loading and deliveries which will be required by retail/commercial premises.

Buildings:

Where buildings front the street, they should be predominantly two storeys, with greater heights used to create definition and emphasis on key nodes/ interchanges. Continuous frontage should be provided. A mix of commercial and community ground floor uses with residential above will animate commercial areas.

Landscape:

In the district centre and where Durdar Road meets the Greenway, widened footways should provide space for spill out activity with street furniture to encourage rest and socialising. Mature tree planting and ornamental planters will help to protect pedestrians, screen vehicles and improve air quality and noise. Pavements and segregated cycle lanes should be protected by kerbs and differentiated in materials. Paved crossovers and raised pedestrian crossings can help to control vehicle speeds and announce arrival in the village centres. Feature highway lighting will help to announce arrival.











Example images: Different approaches to high street design

7.5.3 Secondary Roads

Requirements for planning applications

Any development that seeks to upgrade Brisco Road, Upperby Road and, or Newbiggin Road will be expected to comply with the preferred street section (Figure 23). Where this is unachievable, the minimum street section (Figure 22) will be required, accompanied by robust evidence to support the proposals, outlining how placemaking and users have been considered.

Applicants will be expected to demonstrate how sustainable travel methods (walking, cycling, bus routes) have been incorporated as part of the design and provide justification and mitigation where this is unachievable. For example, where space is a constraint, outline where cycle lanes are not segregated and any safety measures that are proposed to ensure sustainable travel remains a desirable option. Consideration must also be given to the integration of the CSLR roundabout and any potential modal filters.

All applicants will need to demonstrate compliance with parking and landscaping requirements as set out in the supporting text and provide details of how appropriate signage and materials will ensure they are safe and usable for all people.

Description:

These roads link the active neighbourhoods to the main roads and key destinations. Lower traffic volumes and speeds of a maximum 20mph enable cycling.

- Footways min 2m to both sides of the carriageway where space allows.
- Continuous footways at junctions with minor/residential streets.
- Carriageway max 3.2m per lane (excluding footways), 6.4m overall.
- Segregated cycle lanes where space allows.
- Cycle lanes will be linked to the Greenway, CSLR and NCN 7.
- Use of modal filters to reduce private vehicle traffic and create a strategic sustainable corridor along Scalegate Road.

Users:

These streets provide for all users connecting the active neighbourhoods to each other and the main highway network. Pavements should be provided on both sides of the carriageway with continuous footways at junctions with minor/residential streets where possible. Due to space restrictions on some roads, cyclists will be accommodated on carriageway. Segregated cycle lanes will be accommodated where space allows and consideration should be given to the use of these routes for buses.

Parking:

Parking should be in line with Section 7.6, provided through a mix of incurtilage spaces set back from the main building line, and unallocated onstreet parking parallel to the carriageway. This can be incorporated into the green verge either side of the carriageway. The number and location of onstreet bays will need careful consideration through the detailed design stage.

Buildings:

Buildings should generally be a minimum of two-storeys in height with a regular and consistent building line.

Landscape:

Green verges, linear swales and tree planting to create a buffer between footway/cycle lane and carriageway should be provided where space allows. Where possible, opportunities for mature tree boulevard establishment should be sought.

Pavements and segregated cycle lanes should be protected by kerbs and differentiated in materials.







7.5.4 Residential (Tertiary) Streets

Requirements for planning applications

Any development that includes residential streets within active neighbourhoods connecting residents to primary highway network will be expected to comply with the preferred street section (Figure 23) as a minimum design standard.

The delivery of walking and cycling infrastructure in the early phases of development, and where possible in advance of residents moving into homes, at St Cuthbert's Garden Village should be demonstrated in applications and the provision of low-traffic neighbourhoods will be strongly supported.

All applicants should have regard to the parking and landscaping requirements as set out in the supporting text and need to demonstrate how walking, cycling, socialising/playing has been considered in the development of any design proposals to support placemaking.

Streets will be expected to be designed to an adoptable standard for Cumbria County Council; therefore pre-application engagement should be undertaken to ensure this is clear in planning applications.

Description:

These are the main residential streets within the villages providing local access to properties and limited vehicle movements at speeds of maximum of 20mph

- Footways min 2m per lane (5m overall).
- Carriageway max 2.5m per lane to be shared with pedestrians and cvclists.
- Modal filters to restrict vehicle movement to access only.

Users:

Residential streets should be designed for low speeds with priority given to pedestrians and cyclists. Vehicle access will be limited with streets given over to community uses, socialising and play.

Parking:

Parking solutions should be in line with 7.6, with on-street car parking arrangements to help slow vehicles, and sensitively integrated into the streetscape with soft landscaping. Parking should be provided in-curtilage for most properties, set back from the main building line. Unallocated visitor parking should be sensitively integrated into the streetscape.

Buildings:

Buildings should generally be a minimum of two-storeys in height and will comprise a mix of diverse residential property types. There should be a regular and consistent street frontage with feature properties at key nodes to aid legibility. Active frontages (front doors, balconies, gardens, bay windows etc.) should be provided, to create life and interest in the streetscene. Corners should be carefully considered, to avoid blank gable walls.

Landscape and Healthy Streets:

The design of these streets should indicate that walking, cycling, and socialising/playing are the dominant uses. The safety of the layout and design will need to be considered as part of the design process and spaces should be inclusive for all users.

This could be achieved through traffic calming such as raised tables, build-outs and minimum carriageway widths. Modal filters in the form of bollards, pocket parks, car parking and/or street trees could be used to slow vehicle speeds and restrict vehicle movement to access only.

Places to sit, doorstep play, community pocket parks and green infrastructure such as trees and rain gardens should contribute to a sense of community and residential character. Open space in these streets should be generous and facilitate outdoor leisure and recreation.

Street trees will need to be carefully located to avoid underground utilities, not interfere with street lighting, and be of appropriate type and size and with suitable tree pit design to ensure survival and avoid root issues. The case for management and maintenance will also need to be made.

Pavements and carriageways should be single level with vehicles, pedestrians and cyclists encouraged to share space. The specification of surfaces should be markedly higher than other street types with frontage to frontage treatments and high-quality permeable surfaces as standard.

Private front gardens are clearly defined through boundary treatments and soft landscaping. Pedestrian scale amenity lighting ensures streets are welcoming, safe, and inviting after dark.









Examples of residential streets that create pleasant walking and cycling environments

7.6 Parking

Car – and cycle – parking is a key design ingredient and one that the more successful schemes incorporate well. The aim is to avoid creating cardominated environments that do not support the placemaking ambitions that we have for St Cuthbert's Garden Village. This is especially important at a time, influenced by COVID-19, when the balance of transport usage is in a state of flux, and travel habits are impressionable. Electric vehicle charging will also be an important consideration for development proposals.

Policy SP6 of the CDLP emphasises the importance of good design that is accessible, inclusive and safe. The Cumbria Development Design Guide sets out parking requirements and BHL promotes good practice in cycle and car parking. This guidance is well established, and we have copied the specific BHL positives below, supported by location specifics aspects for St Cuthbert's Garden Village. Where BHL guidance differs from the Cumbria Development Design Guide, Cumbria County Council will be open to discussions to promote good placemaking and ensure sufficient parking is provided.

The BHL national guidance is complemented by design principles of particular importance to planning applications for St Cuthbert's Garden Village.

What 'green' looks like

- At least storage for one cycle where it is as easy to access as the car.
- Secure and overlooked cycle parking that is as close to (if not closer) than car parking spaces (or car drop off bays) to the entrances of schools, shops and other services and facilities.
- Shared and unallocated on street car parking.
- Landscaping to help settle parked cars into the street.
- Frontage parking where the space equivalent to a parking space is given over to green relief every four bays or so.
- Anticipating and designing out (or controlling) anti-social car parking.
- A range of parking solutions.
- Small and overlooked parking courtyards, with properties within courtyard spaces with ground floor habitable rooms.
- Staying up to date with rapidly advancing electric car technology.
- More creative cycle and car parking solutions.

green = go ahead

Figure 24: Cycle and Car Parking Checklist (Source: Building for a Healthy Life)

Planning applications will need to consider a range of residential parking solutions by:

Responding to BHL guidance on cycle and car parking.

- Adopting a Home Zones approach to parking.
- Providing a range of carefully thought-through parking options that are appropriate to the location within the garden communities - in-curtilage, on-street and limited, carefully designed courtyard parking.
- Integrating with St Cuthbert's Garden Village area characteristics such as density, where well-designed parking courts, in line with BHL, may be one suitable typology for higher-density locations; in-curtilage parking to the sides of properties would be a suitable option for medium-density areas; and courtyard/'farmstead' parking may be appropriate for lower-density/countryside edge locations.
- Responding to street hierarchy and typologies, including welldesigned on-street parking along broader routes.
- Ensuring that parking options notably parking courts do not result in alternative unsafe pavement parking along the street.
- Responding to the ever-changing sustainability agenda, including the incorporation of electric vehicle charging in all homes.
- Ensuring adequate visitor parking is provided to prevent haphazard parking on footpaths and obstructing maintenance turning spaces.

Local Centres and Commercial Areas (including high streets):

- Working with BHL parking guidance at local centres in Durdar, Carleton and Cummersdale, carefully designing parking in and around neighbourhood squares, village greens, schools and other
- In commercial/employment areas incorporating safe and convenient parking that does not dominate the streetscene, including the potential enterprise areas between Durdar and the link road.

Cycle Parking:

parking

Car

and

cle

Responding to BHL quidance on cycle parking in residential, local centre ad commercial locations, including a cycle hub at Durdar incorporating secure sheltered parking and shower facilities.

Carlisle City Council is among 12 pilot areas that are part of the Scaling On-Street Charging Infrastructure (SOSCI) project led by Innovation UK. The awarded funding seeks to encourage the uptake of electric vehicles by supporting innovations including wireless charging technologies, meaning electric vehicles of the future could charge without the need to plug in a cable. The desired outcome is to ensure homes without off-street parking will be within 5 minutes' walk of an electric vehicle charge point.

Applicants will need to be forward thinking, therefore, as future technology and best practice emerge, the parking requirements will follow.







Examples of successfully designing parking into residential developments. Further examples can be found in the BHL guidance.

Principles for a Low Carbon, Healthy Community 7.7

To achieve deep cuts in greenhouse gas emissions, a range of measures will need to be deployed. St Cuthbert's Garden Village has a set of nine principles to guide its evolution. Each of these can be considered in a low carbon context and some ideas and opportunities for each principle are given below:

- 1. Start with the park: e.g. opportunities for the right species of trees to be planted in the right places make the soil healthier and increase carbon storage and biodiversity. Trees can provide biomass wood fuel and provide a source of local building materials. Trees can also be a vital part of flood management and create a more resilient landscape. Environmental benefits include creating habitat for many wildlife species.
- 2. Locally distinctive: e.g. using local materials where possible to construct new homes thereby minimising the embodied energy of materials, travel delivery distances and hence carbon emissions.
- 3. Quality homes and lifetime neighbourhoods: e.g. setting challenging carbon emission targets for buildings into the future, initially improved standards above current Building Regs through to Future Homes, Passivhaus, net zero, and true zero
- 4. Community focused: e.g. involve the local community in the Climate Emergency declared in Carlisle, see: https://www. climateemergency.uk/blog/carlisle/
- 5. Innovative employment opportunities: e.g. catering for entrepreneurs by providing local business incubators to start new businesses. Larger business premises so that successful fledgling businesses can expand locally and not have to commute away from St Cuthbert's Garden Village hence reducing travel carbon emissions.
- 6. Healthy environments: e.g. a physical environment with permeable housing layouts avoiding cul-de-sacs and dead ends that encourages walking & cycling. A network of routes that provides easy access to local amenity and beyond connecting Cummersdale, Durdar & Carleton and Carlisle City Centre.
- 7. Smart and sustainable living: e.g. design for a changing climate. Exploration of a range of mitigation and adaptation measures including low carbon technology (mitigation) and design for extreme weather such as the inclusion of significant areas of e.g. retention ponds (adaptive environments). Consideration of solar farms. Homes that are resilient to a changing climate.
- 8. Integrated sustainable transport: e.g. aim to make public transport more attractive. Electric charging points for vehicles fed by renewable electricity.
- 9. Exemplary delivery and stewardship: e.g. consider a low carbon champion to oversee the viable climate change/low carbon aspirations for St Cuthbert's Garden Village and ensure they are being delivered.

An holistic approach to creating a low carbon, healthy community is required at St. Cuthbert's Garden Village

















7.7.1 Low Carbon, Innovative Construction

This section provides an overview of how developers and construction companies can implement and support low carbon and innovative construction methods. A development on the scale of St Cuthbert's Garden Village will attract a range of building types and encourage applications for development that are truly smart and sustainable, in line with the CDLP Climate Change policies (CC 1 - 5).

Climate change adaptation and resilience in buildings

Increasingly, buildings will need to be resilient to a changing climate. Climate resilience is the ability to anticipate, prepare for, and respond to hazardous events, trends, or disturbances related to climate. Improving climate resilience involves assessing how climate change will create new, or alter current, climate-related risks, and taking steps to better cope with these risks.

The 'Design for Future Climate' reference provides a useful overview of some of the key opportunities for adaptation in the built environment e.g. at a building scale eaves overhang to prevent overheating in summer and solar shading devices. Stronger roof & wall construction for more extremes of weather, consideration of flood mitigation measures in new buildings etc.

Low embodied energy materials

Embodied energy is the energy consumed by all of the processes associated with the production of a building, from the mining and processing of natural resources to manufacturing, transport and product delivery. As a rule of thumb, materials nearer to their natural state are lower embodied energy i.e. the more materials have to be processed, the higher the embodied energy. Consideration of transport-related carbon emissions is also a factor. If materials can be sourced locally this will help to minimise the amount of fuel needed to transport them to site.

Modern methods of construction (MMC)

MMC is identified as off-site manufacture, innovative technologies and other non-conventional methods of construction that form the structure and envelope of the home. This includes sub-assemblies, volumetric and panellised systems manufactured off site as well as site-based MMC.

MMC can provide lower carbon opportunities for construction by e.g. being constructed in a factory near/on the site under construction. It may be important locally to understand whether the system can be warranted to provide reassurance locally. This can be provided by the National Housebuilding Council (NHBC).

Of the types of off-site housebuilding techniques available, the construction Industry Training Board predicts significant increase in the following in the next 5 years:

- Pre-cast concrete panels and frames.
- Cross laminated timber.
- Hvbrid
- Structural insulated panels
- High Technology Glazing
- Steel & Timber Frame
- Pods and modular construction

Where MMC are proposed, applicants will need to demonstrate that the style adds to the emerging character of the area and provide evidence that the

quality of the homes is resilient and has longevity.

Appendix 3 provides information relating to the mortgageability and warranty issues around such properties.

With the move towards creating all-electric homes, the core components could include:

- Heat pumps for space heating.
- Solar photovoltaics providing renewable electricity.
- Battery storage of electricity to ensure it is available when most needed.
- Electric charging point for the car.
- Smart appliances utilising energy and water as efficiently as possible.
- Smart meters to monitor energy consumption.

7.7.2 Low Carbon Standards

This section provides an overview of emerging trends and standards within the industry. Given the timescales of delivery and build out of St Cuthbert's Garden Village, it is vital that prospective developers consider and plan for meeting these standards in years to come.

Future Homes (Statutory, Due 2025)

There is an uplift to Building Regulations Part L due in 2021 with an uplift in fabric standards likely to be implemented. This might require double or triple glazing, and very high fabric insulation. Current and future Building Regulations will form statutory minimum requirements and will have to be adhered to within normal industry build costs. Costs could initially be higher, but overtime these will become normalised through supply chain and learning improvements. These regulatory energy efficiency standards should not need improvement through planning policy, however, adapting to climate change is a core consideration for applicants.

To achieve this standard, regulation would expect the home to have low carbon heating, and higher levels of energy efficiency. This would typically mean that a new home built to the Future Homes Standard would have a heat pump, a waste water heat recovery system, triple glazing and minimum standards for walls, floors and roofs that significantly limit any heat loss. The likely specification for fabric would be triple glazing and minimum insulation levels in the fabric. In terms of low carbon technology, this will likely include:

- Fabric heat pumps.
- Limited direct electric heat.
- Waste heat recovery system.
- District heating (high-density areas).

Heat pumps will likely become a lot more commonplace in the future.

Net zero standards (Future standard 2030)

Definition: A new building with net zero operational carbon does not burn fossil fuels, is 100% fired by renewable energy, and achieves a level of performance in-use in line with our national climate change targets. No carbon offsets to achieve this balance.

For some building types, such as small-scale residential, 100% of energy consumption can be met by on-site roof-mounted PV panels. Taller buildings have smaller roof areas and may require additional off-site renewable energy.

Passivhaus (Voluntary)

Passive house (German: Passivhaus) is a voluntary standard for energy efficiency in a building, which reduces the building's ecological footprint, and the UK has challenging carbon reduction targets meaning that subsequent adoption of net zero standards is inevitable. As well as high standards for fabric and low carbon technology, net zero will require lower carbon approaches to materials with lower embodied energy.

It results in ultra-low energy buildings that require little energy for space heating or cooling. Passivhaus can typically add around 10% to typical Building Regs equivalent construction.

Examples

There are several developments across the UK that have been built to a standard that exceeds the minimum requirements. Developers can look to the following schemes (amongst others) as an example of how this has been delivered elsewhere: North West Bicester; Hadham Hall (a built example); Active Homes, Neath (Wales); Rayne Park, (Norwich, under construction); ETOPIA Homes (Corby); Tallack Road (London). There are also plans for the development of a 600-home zero carbon development at Duncombe Barracks in York.

In addition, the University of Nottingham have a Creative Energy Homes research hub that has built six houses in discussions with developers to test low and zero carbon homes. The project could be a key resource for developers, particularly with respect to micro-smart grids, energy storage, demand-side management and occupants' acceptance of innovative technologies.



Example of a contemporary Passivhaus design (Source © Paper Project Architecture and Design)

7.7.3 Healthy Futures

At the heart of the St Cuthbert's Garden Village vision is creating healthy lifestyles, which is important to ensuring the longevity of the place as somewhere people want to live, visit, play and invest in. There are many ways development proposals can support this:

Space in our homes and gardens: plenty of room to accommodate the demands of working and studying at home, together with direct access to gardens and balconies is critical, particularly when we are spending more time in our houses. The Nationally described space standards set minimum rooms sizes and are used by Homes England to set standards for grant-funded homes and investment schemes. Inclusive and accessible homes, including homes that are designed to adapt over time will be encouraged. Refer to the PPG on Housing for older and disabled persons. Also supportive of innovative proposals which incorporate open span, flexible floorplates to allow occupants to easily make future changes to their homes as their lifestyle, family size or mobility evolves.

Digital connectivity: access to superfast fibre should be provided for all new homes; 5G and Wi-Fi hotspots are critical to the success of future living. Home working, remote learning, shopping online and family communications are essential to facilitate future lifestyles within the St Cuthbert's Garden Village settlements.

Shopping locally and online: making provision for new ways of shopping, whether it is easy access to the local district centre, space designated for weekly market stalls or pop-up shops or securing deliveries from online retailers. St Cuthbert's Garden Village is seeking to embrace new shopping methods and establish cutting edge routes to delivery and provision of secure delivery space within domestic and non-domestic properties.

Exercise: the provision of local cycling, walking and jogging infrastructure is essential to successfully enhance the environment and people's lifestyles. Care is needed when planning new routes to ensure that there is sufficient space for all activities to take place safely and that they are inclusive for those with disabilities. Outdoor exercise gyms and other more formal provision should be planned within a neighbourhood setting – creating a hub for healthy lifestyles.

Travelling to work: flexible working patterns, remote working and also by splitting journeys into part cycling/walking and transferring to fast modern bus route into Carlisle City or other places of work. Mobility hubs or transport interchange hubs are being provided with cycle storage and lockers/showers but maybe workspaces and cafés could be incorporated.

Socialising and play: Street cafés, integrated play areas, garden bars and outdoor entertainment venues with partial coverage for rainy days will be an essential component of successful mixed-use developments.

7.7.4 Low Carbon, Environmentally Friendly Living

The electric home of the future

The low carbon, environmentally friendly home of the future may embrace an all-electric solution. With the demise of fossil fuels, renewable electricity will have an important part to play in the home of the future. Innovation in renewable electricity generation may include a greater move towards incorporating energy-generating elements into the fabric of homes themselves. Solar tiles are already established and solar windows and even solar paint could be the next big things.

Technological convergence will allow green energy generation and its use across the home and in the car. A household electric vehicle and home energy supply can be regarded as one e.g. a vehicle when not in use could store electricity to be used in the home later – a mobile battery.

Good ventilation and avoiding overheating

Good ventilation is important for managing internal air quality and avoiding condensation. Good ventilation also keeps occupants healthy as we build new homes ever tighter, well insulated and draught proofed. Passive stack ventilation (PSV) and mechanical ventilation with heat recovery (MVHR) will become more common.

A changing climate and higher levels of energy efficiency in our homes will require consideration of overheating. Natural heat gains from people, appliances and particularly the sun will need to be considered. Avoiding air conditioning will require more use of blinds, shutters, tinted glass or even electronically dimmable windows.

2050-ready newbuild homes

The Energy Saving Trust has put forward ambitious plans for 2050-ready newbuild homes. '2050-ready' means having minimal energy use and net zero carbon emissions over the year. Such homes are highly insulated, have low water demand and are fitted with or directly connected to renewable energy systems.

A newbuild home built to 2050-ready standard could be more comfortable, cheaper to run and help to mitigate climate change. Housebuilders should be able to market these benefits. Importantly, carbon savings in buildings will play a role in achieving the UK's legally binding target of an 80% reduction in carbon emissions from a 1990 base by 2050.







Overhanging eaves and shutters to prevent overheating at Hanham Hall

Examples of ways that the design and construction industry has been adapting to become more climate-friendly and/or efficient.

8. STRATEGIC DESIGN GUIDANCE: CHARACTER AREAS AND KEY LOCATIONS

Guidance for Character and Key Locations

This section applies the thematic guidance from Section 7 to specific character areas and key locations across St Cuthbert's Garden Village:

- Durdar neighbourhoods and Blackwell interface
- Carleton
- Cummersdale

Policy SP3 of the CDLP promotes a comprehensive and coordinated development approach, and this guidance provides much of the character and immediate design context for specific development sites. Policy SP6 highlights the need to respond to context and the importance of local character and distinctiveness. BHL promotes distinctive neighbourhoods, with a memorable character. This is the platform for creating and enhancing authentic places that ensure we have a real sense of locality, rather than 'anywhere' estates. At the scale of St Cuthbert's Garden Village, we can develop a market for this quality of garden communities of significant scale delivered over a 30-year period.

St Cuthbert's Garden Village is of significant scale. The three garden communities are large enough to contain a range of character areas, varying from higher-density areas around local centres, to lower-density neighbourhoods and interfaces with the countryside, as shown in the diagram on this page.

The key locations, as shown to the left, have been selected with a number of criteria in mind: prominence and impact, development complexity and interfaces, and early phase action requirements or deliverability potential.



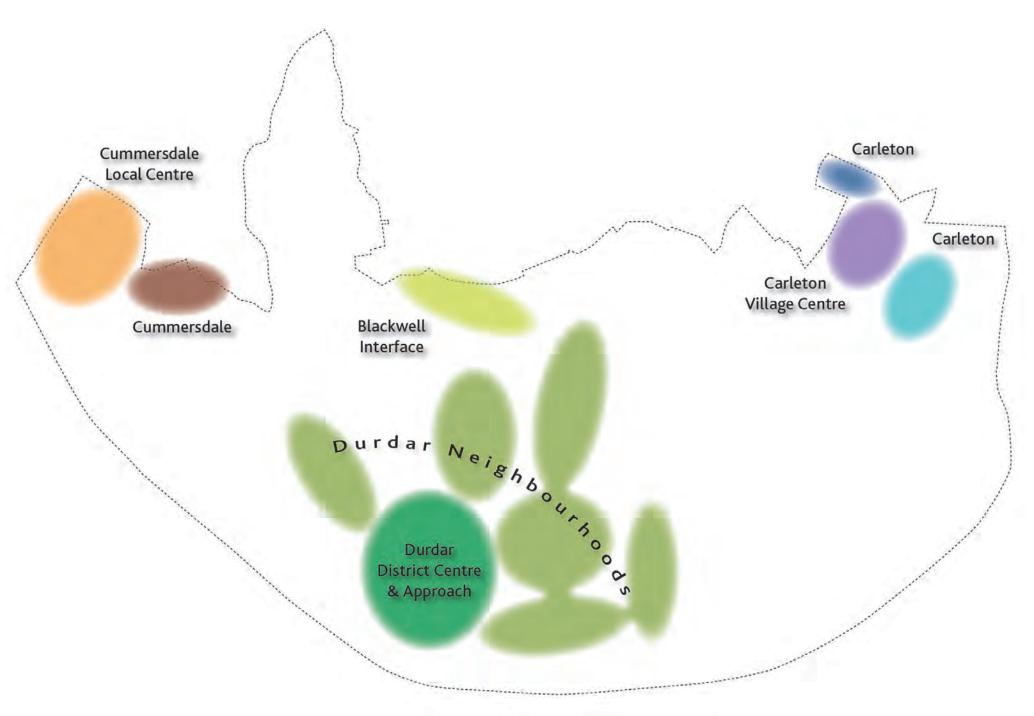


Figure 25: St. Cuthbert's Garden Village Character Areas

8.2 Contextual Local Character

















Building on existing site and area analysis will be important for applicants to demonstrate a good understanding of the place (Sources: Gillespies and Carlisle City Council)





















Durdar and Blackwell

Durdar District Centre and Neighbourhoods will be the larger of the three settlements across St Cuthbert's Garden Village and act as a 'district centre' and hub for local communities, including the adjacent neighbourhoods of south Carlisle. Durdar forms the heart of the garden community – a place to come together. Durdar will be a new gateway to both St Cuthbert's Garden Village and Carlisle, accessed from the new southern link road.

Distinctive neighbourhoods will provide a full range of homes and create a new, sensitive countryside edge. This includes the delineation of a 'green gap' between the growing Durdar and the expanding city neighbourhoods.

Durdar District Centre and Approach

The character of this area is based on its function as the most significant hub within the garden community. The full range of district centre uses will be arranged along a main street and around a neighbourhood square. Character takes cues from informal local village forms, such as at nearby Dalston (see Section 7.4.3). The centre draws in the landscape to its heart, making the most of the confluence of main streets, PRoW and the Greenway. Scale, density and building heights will emphasise the significance of the centre in the context of the adjacent Carlisle Racecourse.

This is also a new approach to the garden community, and Carlisle. This prominent gateway characteristic could be highlighted with the creation of the CSLR spur as a grand, tree-lined boulevard, framed by quality buildings, and becoming increasingly pedestrian-friendly as it progresses through the centre. This area provides the focus for one of the 'key locations' which is expanded on in 8.3.1.

Durdar Neighbourhoods

Wrapped around the centre will be a range of neighbourhoods, with higher densities near the core and of a looser grain where they create a new interface with the countryside. Higher-density communities may be based on a grid pattern, inspired by some of Carlisle's characterful residential areas. Edge-ofsettlement neighbourhoods may have a more informal form, with the edges feathering into the landscape, drawing on local typologies such as farmsteads and courtyards glimpsed through the landscape. Neighbourhoods will be crisscrossed by the Greenway and a hierarchy of tree-lined streets, and studded with a range of parks and spaces.

Street trees can be focused on key streets at the upper end of the hierarchy, at key approaches into the garden village and at focal points. They will need to be carefully located to avoid underground utilities, be of appropriate type and size and with suitable tree pit design to ensure survival and avoid root issues. The case for management and maintenance will also need to be made.

Blackwell Interface

St Cuthbert's Garden Village will contain a clear and positively designed 'green gap' to help establish a sense of place and identity to help distinguish it and city neighbourhoods. This green interface will be framed by neighbourhoods and homes, incorporate pathways and make the most of the topography and panoramic views. It will assist in integrating new and existing communities. This area is expanded on in 8.3.2.

Overarching Design Principles for Durdar and Blackwell

- Delivering a new district centre and employment opportunities as expanded on in 8.3.1.
- Providing a mix of housing as expanded on in 8.3.1/2 including a range of quality medium and lower-density homes in the Durdar Neighbourhoods, with lower-density elements helping to create a sensitive new countryside/green edge.
- Orienting buildings to overlook streets and spaces, and sensitively relating to existing homes. In addition, creative design solutions to seek to incorporate solar gain into the layout of places.
- Making the most of the Greenway by orienting layouts and homes to frame this important green/connectivity corridor, including the lining and punctuation of the route with grander properties, varied prominent quality frontages and landscape/open space features.
- Providing a green/blue framework that makes the most of topography, trees and hedgerows, and SuDS.
- Incorporating a range of spaces, as expanded on in 8.3.1/2 and potentially a new country park.
- Providing a hierarchy of pedestrian-friendly streets, and orienting buildings to positively frame streets, notably Durdar Road.
- Integrating with context, including the provision of convenient and attractive routes to the district centre, and to and along the Greenway.

8.3.1 Durdar District Centre and Approach

Opportunities

Durdar District Centre is the most significant focal point for St Cuthbert's Garden Village, and a new gateway to Carlisle. It provides the opportunity for district-scale schools, shops and facilities, located at the confluence of the CSLR spur, Durdar Road, Greenway connections and Carlisle Racecourse.





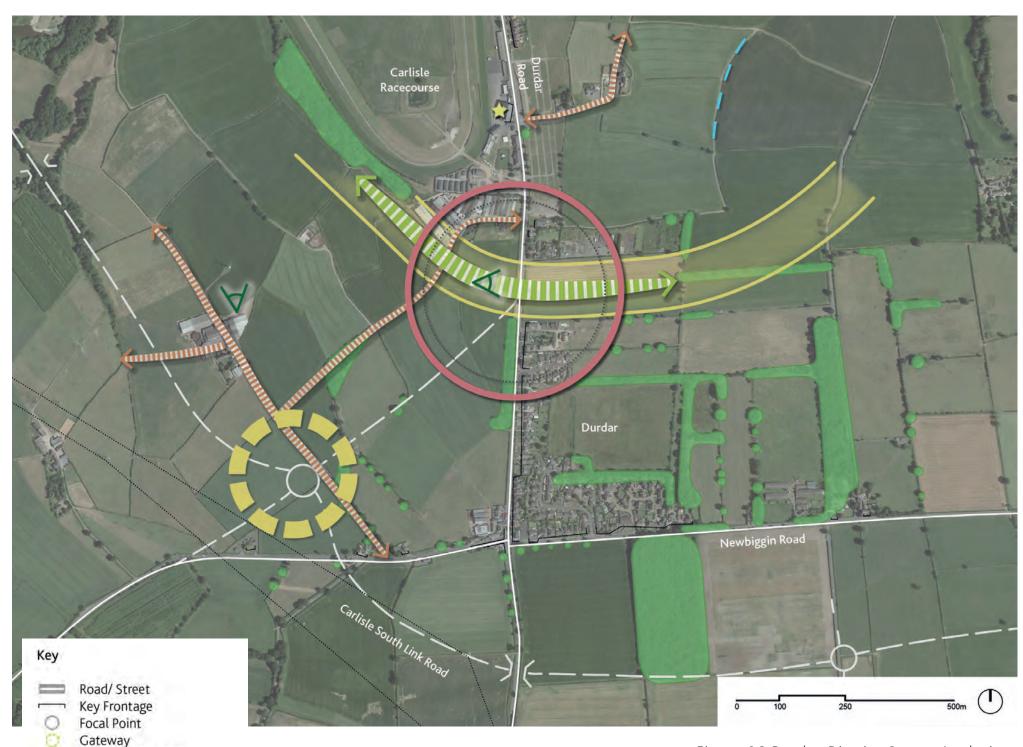


Figure 26:Durdar District Centre Analysis

Landmark Building Gas Pipe Easement Overhead Powelines

Trees or Hedgerow River, Beck or Pond

PRoW or Pathway

Key View GI Connection

1

Design Principles for Durdar District Centre

- Delivering a new district centre for St Cuthbert's Garden Village - including shops, social and community spaces, workspace and leisure/hotel related to the racecourse - at the confluence of the CSLR spur, Durdar Road and the Greenway, all framing a neighbourhood square and high street.
- Providing a mix of quality medium and higher-density housing, with the highest densities around the district centre, including the potential for an extra care facility.
- Delivering a fine grained 'gateway' commercial/business park, framing the CSLR spur, with the potential to incorporate live/work opportunities.
- Orienting buildings to frame and overlook spaces and streets notably the CSLR spur/Durdar Road, high street, neighbourhood square and the Greenway – and sensitively relate to existing homes.
- Developing a distinctive Durdar District Centre character, taking cues from higher-density Carlisle City centre, nearby villages and neighbourhoods, including re-imagining the traditional terraced properties and using traditional building materials
- Providing a green/blue framework that makes the most of trees, hedgerows and plantations, with a focus on the pivotal Greenway
- Incorporating a range of spaces including a new neighbourhood square and high street at the heart of the district centre, and core open space where the centre meets the Greenway.
- Integrating with context, including the provision of convenient and attractive routes to the district centre, to and along the Greenway, and to open countryside to the south
- Seeking to design the CSLR spur as a tree-lined boulevard approach to the city, framed by quality buildings of scale, and with vehicle speeds calmed to 30 and 20 mph in the district centre.
- As the most prominent location in St Cuthbert's Garden Village and a new gateway to Carlisle, setting the tone for garden village quality by showcasing low carbon and innovation, including Healthy Futures, community/leisure and Future Housing Standard.

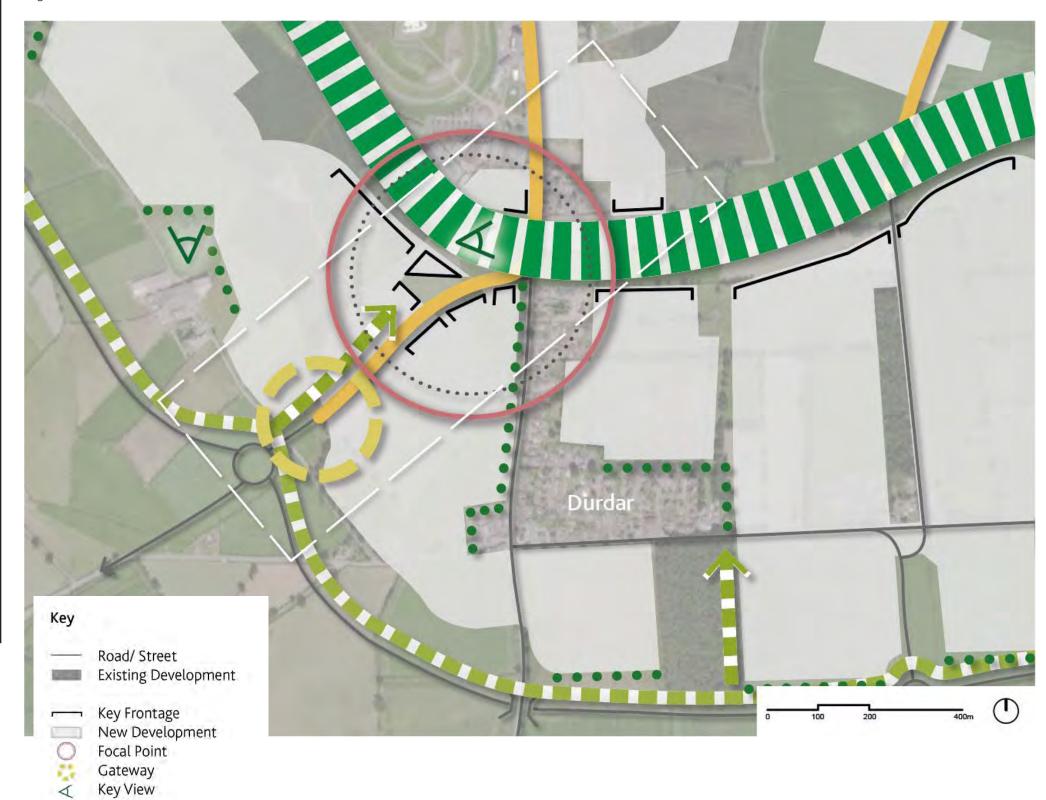


Figure 27: Durdar District Centre Illustrative Framework Plan

Corridor Greenway

Key Interface

Wider GI Connections



8.3.2 Blackwell Interface

Opportunities

The Blackwell interface area is an important location for incorporating the growing neighbourhood of Upperby and the emerging Durdar neighbourhoods. High ground exists to east and west, with Blackwell Common in a pivotal location providing panoramic views. A reminder that Carlisle is the City of the Lakes. The opportunity exists for a 'green gap' – as part of the broader St Cuthbert's Garden Village Greenway - framed by sensitively designed lowdensity development to north and south.







Figure 28: Blackwell Interface Analysis



Design Principles for Blackwell Interface

- Delivering a mix of quality lower-density homes and greenspace (with the potential for extra care).
- Orienting buildings to overlook spaces and streets, and sensitively relating to existing homes.
- Creating a new 'defensible' edge to the city that incorporates landmarks and integrates sensitively with the landscape.
- Creating a strategic 'green gap' between the city's suburbs and the garden community, linking high ground, existing and new open space – including Blackwell Common – and making the most of views.
- Providing a green/blue framework that makes the most of the 'green gap', trees and hedgerows, and SuDS.
- Integrating with context, including the green/blue connection through The Ridings to Upperby Park, and the PRoW leading to the proposed Durdar District Centre.
- Providing a hierarchy of pedestrian-friendly streets connecting both east/west and north/south, including a secondary street providing main access from Ascot Way.
- Seeking to showcase local distinctiveness, low carbon and innovation.





Figure 29: Blackwell Interface Illustrative Framework Plan



Key

8.4 Carleton

Carleton and Garlands is already an established, popular and growing neighbourhood accessed from the A6, welcoming you to Carlisle from the south and the M6. An expanded garden community in this location provides the opportunity to further integrate with existing communities and create a new, shared village centre.

A mix of housing will include distinctive housing clusters, inspired by local historic Victorian villas in wooded grounds. The undulating topography, strategic views, hedgerows and woodlands provide the foundation for a network of streets and spaces that make the most of inspiring views to the surrounding countryside. This network of greenspaces will further connect to the River Petteril, north to the city, south along the stream to open countryside and west to St Cuthbert's Garden Village Greenway.

In the longer-term, the M6 junction provides the opportunity for 'J42' west of the motorway – a prominent 21st century business/innovation park complementing existing employment-land commitments across the city.

Carleton Village Centre

This area's character is based on its function as a new village centre – a hub for its residents. A potential primary school and local shops and facilities will be clustered together addressing secondary streets and a new village green. Urban form will be inspired by the undulating topography and views to the south and west. Tree-lined approaches and green connections will support pedestrianfriendly access from across the neighbourhood.

This area is expanded on in 8.4.1

Carleton neighbourhoods

The green will be a medium-density family neighbourhood making the most of its leafy location next to the sports club and wrapped around new greenspaces with views from high ground in the north. A network of streets will pick up on the field boundary grid and a response to topography. The eastern edge of an expanded Carleton will form a new countryside edge protected from the motorway by topography and a significant green buffer.

To the east of the village, land rises towards the business / innovation park opportunity at J42 west of the motorway. This provides the opportunity to create a distinctive, contemporary hillside neighbourhood with access to the village centre, the river and a creative employment hub. Lifestyle pioneers would be attracted to Carlisle, through this promotion of a unique housing and community offer at Carleton Hillside, which could embrace co-housing, self and custom build, and modern methods of construction.

Overarching Design Principles for Carleton

- Delivering a new village centre, as expanded in 8.4.1.
- Providing a mix of housing as expanded in 8.4.1 including contemporary and innovative housing models and forms at Carleton
- Orienting buildings to overlook streets and spaces, and sensitively relate to existing homes.
- Providing a green/blue framework that makes the most of topography, trees and hedgerows, and SuDS.
- Incorporating a range of spaces, as expanded on in 8.4.1 and a new hilltop woodland at Carleton Hillside.
- Providing a hierarchy of pedestrian-friendly streets, and orienting buildings to positively frame streets.
- Integrating with context, including the provision of convenient and attractive routes to the village centre, and to the River Petteril and Greenway.

8.4.1 Carleton Village Centre

Opportunities

The core of an expanded Carleton village to incorporate a proposed local centre and primary school, and new homes, streets and greenspaces. Great views, undulating hills, woodland, sports facilities and the nearby River Petteril provide the opportunity for a network of greenspaces linked to the St Cuthbert's Garden Village Greenway.





Figure 30: Carleton Analysis



Key

Road/ Street

Key Frontage

Focal Point Gateway

Design Principles for Carleton Village Centre

- Delivering a new village centre for Carleton Garden Village, including shops, primary school and community facilities – in a prominent, accessible location facing Cumwhinton Road, and clustered around a village green.
- Delivering a mix of quality medium and higher-density homes, with the higher densities around the village centre (including the potential for an extra-care facility).
- Orienting buildings to frame and overlook spaces and streets, and sensitively relate to existing homes.
- Developing a distinct Carleton Garden Village character, taking cues from Carleton and Garlands and nearby Cumwhinton. Using traditional materials in innovative ways and using green links and spaces to define neighbourhoods.
- Providing a green/blue framework that makes the most of trees and hedgerows, and green corridors from Garlands SuDS, through the rugby club and clinic woodlands, and south along hedgerows to the River Petteril.
- Incorporating a range of greenspaces including a new village green at the heart of the village centre and a hill top park to south west of the rugby club off Cumwhinton Drive.
- Working with the characteristic topography of Carleton its undulating landscape, field patterns and panoramic views from high ground to hills south and east.
- Integrating with context, including providing convenient and attractive routes to the village centre, the River Petteril and open countryside to the north east.
- Providing a hierarchy of pedestrian-friendly streets.
- Showcasing local distinctiveness, low carbon and innovation, including MMC, digital connectivity and BREEAM multi-residential building standards.
- Integrating a generous green buffer into the landscape framework between the motorway and an expanded Carleton.



Key Road/Street Existing Development Figure 31: Carleton Illustrative Framework Plan Key Frontage New Development Focal Point Gateway Key View 1 Carleton Corridor Greenway times Wider GI Connections ····· Key Interface

8.5 Cummersdale

Historic Cummersdale provides the setting for this garden village. It developed over centuries, overlooking the River Caldew and driven by its mills, innovation and textiles heritage. Cummersdale Garden Village will respect this proud history, retaining the historic core's distinct identity and complementing this with sensitive development incorporating a landscape buffer and linear park. New shared facilities will be clustered to the west – accessible to all.

A green network of open spaces will further connect Cummersdale with Caldew River Park, further north into Carlisle and east along St Cuthbert's Garden Village Greenway to Durdar District Centre. Along the valley to the south lies the picturesque village of Dalston and beyond to the north Lakes. A range of homes are provided, many with generous gardens and greenspaces. Lower densities to the east at Cummersdale Hill, and tree-lined streets and spaces further add to the village feel.

Cummersdale Local Centre

This character area provides a new centre for Cummersdale and the surrounding area — one that complements the existing village hall and square in the historic core. The new local centre will provide a cluster of school, local shops and facilities. Urban form will pick up on the grid pattern of field boundaries and hedgerows that criss-cross this flat site, providing the framework for medium-density homes and streets. The centre itself will make the most of its location on the Dalston Road, as a new gateway to Carlisle from the southern link road, and in serving new and existing residents, including those west of the arterial road.

Cummersdale surrounding areas

Rising ground to the south of historic Cummersdale provides the opportunity to create a green buffer and linear park that wraps around the old village and connects eastwards to the Greenway and River Caldew. Further south, land provides the opportunity for a discrete, low-density neighbourhood radiating out from Cummersdale, with urban form taking cues from croft buildings set in woodland and landscape

Overarching Design Principles for Cummersdale

- Delivering a new local centre focused on a new neighbourhood square, likely to include a primary school, local shops and facilities - oriented to both be accessible to local people and topped up by passing trade.
- Providing a mix of medium and lower-density homes, with medium densities around the local centre and lower ones helping to create a sensitive new countryside edge.
- Orienting buildings to overlook streets and spaces, and sensitively relate to existing homes, notably around the southern periphery of Cummersdale and along Cummersdale Road.
- Providing a green/blue framework that makes the most of topography to the east and grid field patterns to the west, including hedgerows/trees, existing ditches and SuDS.
- Incorporating a range of spaces, including a linear park south and west of historic Cummersdale continuing eastwards along the St Cuthbert's Garden Village Greenway.
- Providing a hierarchy of pedestrian-friendly streets, and orienting buildings to positively frame streets, and a potentially calmed Dalston Road.
- Integrating with context, including the provision of convenient routes to the local centre, to the Greenway and across Dalston Road.



APPENDIX 1: GLOSSARY

Allocated Site - Sites identified for development in a development plan.

Area of Outstanding Natural Beauty (AONB) - Relatively large areas of land designated under the National Parks and Access to the Countryside Act 1949 by the Countryside Commission. The primary objective of designation is conservation of the natural beauty of the landscape. AONBs differ from National Parks in that the promotion of recreation is not an objective of their designation, though these areas should be used to meet the demand for recreation so far as that is consistent with the conservation of natural beauty, and the needs of agriculture, forestry, and other uses.

Biodiversity - Refers to the variety of plants and animals and other living things in a particular area or region. It encompasses habitat diversity, species diversity and genetic diversity. Biodiversity has a value in its own right and has social and economic value for human society.

Blue Infrastructure (BI) - The network of aquatic components that lie within and between cities, towns and villages which provide multiple social, economic, and environmental benefits. The physical components of blue infrastructure include waterways such as rivers, streams, marshes, and lakes.

Carlisle District Local Plan - Sets out policies to guide the future development of Carlisle City Council. It also sets out where future development will take place, and identifies land for new housing, community facilities, shops, and employment. It is the key document used to determine planning applications for new development in the district.

Climate Change - Term used to describe changes in weather patterns which threaten our environment and the way we live our lives both now and in the future. It is a coherent and internally consistent description of the change in climate by a certain time in the future, using a specific modelling technique and under specific assumptions about the growth of greenhouse gas and other emissions and about other factors that may influence climate in the future. Climate change is sometimes referred to as global warming because it is currently concerned with rises in global temperatures.

Community Infrastructure Levy (CIL) - A local charge on new developments. The money raised will be spent by the local authority on infrastructure. The justification for the charge is that new buildings have an impact on infrastructure need (i.e., new roads and schools), and should therefore contribute towards that provision.

Community Facilities - Facilities which help meet the varied needs of residents for health, education, and public services, as well as social, cultural, and religious activities.

Density - The volume of development relative to the size of the site on which it occurs. From a housing perspective density is generally measured as the number of homes per Hectare of land.

Design and Access Statement - A statement submitted alongside a planning application by the applicant to demonstrate that proper consideration has been given to the impact of the proposal and account taken of all relevant factors in the design and landscaping of the scheme. Development will be accessible to everybody regardless of age, gender, or disability.

Design Code - A set of illustrated design rules and requirements which instruct and may advise on the physical development of a site or area. Builds on a design vision created by a masterplan.

Development Management - The process by which development proposals in the form of planning applications, are considered and decided. It is a positive and proactive approach to shaping, considering, determining, and delivering development proposals. It is led by the local planning authority, working closely with those proposing developments and other stakeholders.

Duty to Cooperate - The Localism Act 2011 introduced a Duty to Cooperate, which is designed to ensure that all of the bodies involved in planning work together on issues that are of bigger than local significance.

Environmental Impact Assessment (EIA) - A process by which information about the environmental effects of a proposal are collected and taken into account by the Planning Authority in forming their judgement about whether or not to grant planning consent. The Town and Country Planning (Environmental Impact Assessment etc.) Regulations 1999 as modified sets out the types of project for which an EIA is required.

Evidence Base - A range of technical reports and studies that have been or are being prepared to support the development and implementation of policies and proposals in the Local Plan.

Flood Risk - An expression of the combination of the flood probability or likelihood and the magnitude of the potential consequences of the flood event. Flood Risk Assessment (FRA) - An assessment or test of the risk of flooding from river, tidal, coastal, groundwater and/ or local sources conducted to meet the requirements of national policy and practice guidance. The FRA will provide a framework for robust and sustainable flood risk management solutions within (re)developing areas.

Formal Open Space - Land used for sport and for other activities requiring dedicated open space provision. Includes sports pitches, tennis courts, multiuse games areas, bowling greens, basketball courts, ball parks, allotments, water sport areas and other similar open spaces.

Green Infrastructure - Consists of multi-functional networks of protected open space woodlands, wildlife habitat, parks, registered commons and villages and town greens, nature reserves, waterways and bodies of water, historic parks and gardens and historic landscapes.

Informal Open Space - Used by people of all ages for informal unstructured recreation such as walking, relaxing, or a focal point, ranging from formal planted areas and meeting places to wilder, more natural spaces, including green linkages.

Infrastructure - A collective term for services such as roads, electricity, sewerage, water, education, health facilities, parks and recycling and refuse facilities.

Infrastructure Delivery Plan (IDP) - Contains a list of all infrastructure needed to support sustainable growth, as set out in the Local Plan. Infrastructure projects are identified by location, cost and delivery timescale and funding. Local Distinctiveness - The positive features of a place and its communities which contribute to its special character and sense of place.

Local Areas of Equipped Play (LEAP) - The LEAP is an area of open space specifically designated and laid out with features including equipment for children who are beginning to go out and play independently close to where they live, usually within 5 minutes walking time.

Local Landscaped Area for Play (LLAP) - This is alternative provision to the LEAP, where the landscape characteristics of such sites should be incorporated into the design.

Local Areas of Play (LAP) - The LAP is a small area of open space specifically designated and primarily laid out for very young children to play close to where they live i.e., within 1 minute walking time.

Masterplan - A type of planning brief outlining the preferred usage of land and the overall approach to the layout of a development, including the coordination of necessary infrastructure, to provide detailed guidance for subsequent planning applications.

Neighbourhood Equipped Areas of Play (LEAP) - The NEAP is an area of open space specifically designated, laid out and equipped mainly for older children but with play opportunities for younger children as well. Located within 15 minutes' walk from home, the NEAP is sufficiently large to enable provision for play opportunities that cannot be provided within a LAP or LEAP.

Open Space - All open space of public value, including not just land, but also areas of water (such as rivers, canals, lakes, and reservoirs) which offer important opportunities for sport and recreation and can act as a visual amenity.

Outdoor Sport (open space) - Facilities such as grass pitches for a range of sports, bowling green's tennis courts, athletics tracks and multi-use games areas plus ancillary facilities such as car park, changing and storage. Water can only be included if it is in the form of a formal water sports lake with associated facilities and car park.

Planning Obligation - A legally enforceable obligation entered into under section 106 of the Town and Country Planning Act 1990 to mitigate the impacts of a development proposal.

Policies Map - Identifies geographically the adopted policies and proposals of the Local Plan.

Public Realm - This is the space between and within buildings that are publicly accessible, including streets, squares, forecourts, parks, and open spaces.

Renewable and Low Carbon Energy - Includes energy for heating and cooling as well as generating electricity. Renewable energy covers those energy flows that occur naturally and repeatedly in the environment – from the wind, the fall of water, the movement of the oceans, from the sun and also from biomass and deep geothermal heat. Low carbon technologies are those that can help reduce emissions (compared to conventional use of fossil fuels).

Reserved Matters Applications - Provide detailed proposals for layout, buildings, landscape, infrastructure, and local transport connections.

Section 106 (S106) - Planning agreements that secure contributions (in cash or in kind) to the infrastructure and services necessary to facilitate proposed developments. Planning obligations are normally secured under Section 106 of the Town & Country Planning Act 1990.

Statement of Community Involvement (SCI) - Explains to the public how they will be involved in the preparation of local planning. It sets out the standards to be met by the authority in terms of community involvement.

Sustainable Drainage Systems (SuDS) - Sustainable drainage systems control surface water run-off by mimicking natural drainage processes using surface water storage areas, flow limiting devises and the use of infiltration areas or soakaways.

Sustainable Development - The Bruntland Report in 1987 brought a new approach when it proposed that an ongoing balance could be struck between economic growth and the needs of the environment through the concept of sustainable development. A definition of this concept is 'development that meets the needs of the present without compromising the ability of future generations to meet their own needs'. The NPPF identifies a presumption in favour of sustainable development.

Supplementary Planning Document (SPD) - Documents which add further detail to the policies in the Local Plan. They can be used to provide further guidance for development on specific sites, or on particular issues, such as design. Supplementary planning documents are capable of being a material consideration in planning decisions but are not part of the development plan.

Transport Assessment - A comprehensive and systematic process that sets out transport issues relating to a proposed development. It identifies what measures will be required to improve accessibility and safety for all modes of travel, particularly for alternatives to the car such as walking, cycling and public transport and what measures will need to be taken to deal with the anticipated transport impacts of the development.

Travel Plan - A travel plan is a package of actions designed by a workplace, school, or other organisation to encourage safe, healthy, and sustainable travel options. By reducing car travel, travel plans can improve health and wellbeing, free up car parking space, and make a positive contribution to the community and the environment.

Tree Preservation Order (TPO) - Under Section 198 of the 1990 Act a local planning authority may, in the interests of amenity, make provisions for the preservation of individual trees or woodlands. TPOs prohibit the cutting down, topping, lopping, uprooting, wilful damage, or wilful destruction of trees without the prior consent of the Authority.

Wildlife Corridors - Areas of habitat connecting wildlife populations.

APPENDIX 2: PROCESS FOR PLANNING POLICY AND MASTERPLANNING LARGE SITES

individual development parcels.

Master Planning Process Typical Graphic Statutory planning process Establishing the policy basis for a large site Vision and Concept Involved collating a comprehensive, but proportionate, An early Vision and Concept articulates the emerging evidence base to support a broad location in the local spatial vision and development objectives, together with plan. Demonstrating that a site is viable and deliverable the overall aspirations for St Cuthbert's. within the timescale envisioned is key. St Cuthbert's Local Plan and Strategic Design Guide Master plan framework Supplementary Planning Document (SPD) Prepared by the Council, with key partners, to create a The SC Local Plan will set out the strategic policies to strategic framework for development. This document guide and inform development at St Cuthbert's, provides greater spatial clarity to the vision and concept developing on the relevant polices of the CDLP. The and starts to define the infrastructure requirements, as Local Plan will provide the necessary spatial fixes for well as the key place making features and designdevelopment. The supplementary planning document aspirations. (SPD) complements the local plan. This is particularly effective in the case of St Cuthbert's where, there are a number of landowners and no collaboration agreements exists between them. Note: other SPD's may be required over time. Outline planning application Planning application master plan Outline planning applications, provide site specific The key master plan structuring elements developed parameter plans, together with a design and access earlier in the process (e.g. land use budget, green statement. The early master planning work described infrastructure, movement and urban design principles) opposite is therefore essential to the outline planning can be presented as plans and diagrams at the outline application stage. application stage, having been subjected to EIA. The application drawings are normally supported by a design and access statement, which sets out design principles and any proposals for post-outline master planning work. Post outline (or pre-consent) design work Post outline (pre-consent) design work The post outline stage is a natural extension of the master Where appropriate an outline permission can include master planning conditions to establish a post outline planning process for large sites. At this stage detailed (but pre-consent) master planning approval process. designs will start to emerge for the scheme and earlier This should be in the form of a Design Code requiring assumptions about form can be tested and where further design detail of strategic spatial components necessary defined. This is often the stage when house (e.g. main streets, open spaces, primary school, builders/developers become more involved in the design neighbourhood centre, etc.) to be approved in advance process. of reserved matters. Reserved matters applications Reserved matters application The Council will expect all reserved matters applications At this late stage in the master planning process design to demonstrate compliance with the various layers of teams will be tasked with producing detailed designs for master planning work described above. As at earlier individual components of the scheme. These will need to stages of the process issues relating to management and comply with the overall design concept (and with any maintenance are key here too. code work) as it has evolved through the earlier stages of the master planning process. Reserved matters applications will often focus on detailed proposals for

Overview of the statutory planning process and masterplanning process to outline a good-practice approach to design and scale as development proposals emerge.

APPENDIX 3: LOW CARBON AND INNOVATION TECHNICAL EXPLANATIONS

Towards net zero carbon

On March 5th 2019, Carlisle City Council passed a motion to declare a climate emergency; an admission that global warming exists and that the measures taken up to this point are not enough to limit the changes brought by it. More information at: https://www.climateemergency.uk/blog/carlisle/

Carlisle City Council is committed to reducing carbon emissions, both as an organisation and as the Local Planning Authority, and resolves to go further than the UK100 Agreement and to act in line with the scientific consensus that we must reduce emissions to net zero by 2030, and therefore commits to:

- Make the Council's activities net-zero carbon by 2030;
- Ensure that all strategic decisions, budgets and approaches to planning decisions are in line with a shift to zero carbon by 2030;
- Support and work with all other relevant agencies towards making the Carlisle district Zero Carbon within the same timescale:
- Achieve 100% clean energy across Carlisle City Council's full range of functions by 2030.

Recently, Carlisle City Council consulted on the draft Local Environment (Climate Change) Strategy and Action Plan, setting out how environmental issues will be tackled. Comments are being reviewed to the strategy and action plan, and it is anticipated these will be adopted on 3rd November 2020. This reinforces their commitment to smart and sustainable living.

MMC and warranties

The National Housebuilding Council (NHBC) works with offsite and other non-conventional construction manufacturers to provide assurance that their systems and sub-assemblies are suitable for cover under Buildmark warranty and insurance. Builders and developers using this online resource can benefit from NHBC's experience of these different building systems and will be able to quickly look up which systems NHBC currently accepts.

MMC systems have been reviewed by NHBC for the benefit of NHBC's registered builders and they can be accepted in homes covered by Buildmark warranty. Tables available from NHBC (MMC hub) at: www.nhbc.co.uk/mmchub

Acceptance of the system is for warranty purposes only and does not negate the need for site-specific design checks, including the normal checking process of the building control provider. The builder should ensure that the design and installation meet relevant Building Regulations and NHBC requirements. NHBC reserves the right to review, amend and remove MMC systems from the list.

Mortgageability

Modern methods of construction and innovative building techniques can still cause issues for purchasers seeking a mortgage valuation. Warranties and approvals will be required by Building Societies and other mainstream lenders to ensure the longevity of a non-traditional build for the lifetime of any mortgage loan. NHBC's ethos is based upon all homes being built to a finished standard that enables the issuing of a warranty for each home – such that homes are mortgageable and insurable under normal terms. Investors, developers and lenders need to be sure that such warranty and insurance is

available on any MMC approach they are considering.

Passivhaus

For a building to be considered Passive House, it must meet the following

- 1. The space heating energy demand is not to exceed 15kWh/m2 living space (treated floor area) per year.
- 2. In terms of airtightness, a maximum of 0.6 air changes per hour at 50 Pascals pressure as verified with an onsite pressure test.
- 3. Thermal comfort must be met for all living areas during winter as well as in summer, with not more than 10% of the hours in a given year over 25 degrees centigrade.

All of the above criteria are achieved through intelligent design and implementation of Passivehaus principles: thermal bridge free design, superior windows, ventilation with heat recovery, quality insulation and airtightness.

Net Zero

Some of the key components of a net zero specification are:

Operational energy

- High fabric energy efficiency in walls, roof, floors, windows & doors.
- A very airtight building (<1 (m3/h.m2@50Pa)
- Thermal bridging given due care and attention.
- Mechanical ventilation and heat recovery.
- Targets for percentage wall area to limit heat loss.
- Target total and space heating energy consumption.
- Maximise renewables so that 100% of annual energy requirement is generated on site.
- Include external shading to prevent overheating. Balance with daylighting needs.

Embodied carbon

• 40% reduction in embodied carbon or to <500kgCO2/m2.

APPENDIX 4: ADDITIONAL SUSTAINABILITY/ LOW CARBON OPPORTUNITIES

Our One Planet Living® framework

Bioregional created the One Planet Living sustainability framework – comprising ten simple principles and detailed goals and guidance - and developed it together with WWF.

One planet living available at: https://www.bioregional.com/one-planet-living

One planet living for sustainable places available at: https://www.bioregional. com/resources/one-planet-living-for-sustainable-places

Climate and ecological emergency service for local authorities available at: https://www.bioregional.com/projects-and-services/use-one-planet-living-toact-on-the-climate-emergency

BREEAM Communities

BREEAM Communities International is a simple and flexible route to improving, measuring and certifying the sustainability of large-scale development plans. It provides a framework to support planners, local authorities, developers and investors through the masterplanning process, before embarking on procurement, detailed building level design and construction.

BREEAM Communities technical standards available at: https://www.breeam. com/discover/technical-standards/communities/

Achieving sustainable masterplans available at: https://files.bregroup.com/ breeam/communities/Achieving-Sustainable-Masterplans The-New-Case-for-BREEAM-Communities.pdf

Arup sustainability framework

SPeAR® (Sustainable Project Appraisal Routine) was developed by Arup's software and sustainability experts to help the firm support clients' sustainability goals. The tool appraises projects based on key themes such as transport, biodiversity, culture, employment and skills.

In addition, Arup have developed thinking around zero carbon buildings at zero cost, as current commercial building standards do not go far enough.

AIA Framework for Design Excellence

The Framework for Design Excellence represents the defining principles of good design in the 21st century. Comprised of ten principles and accompanied by searching questions, the Framework seeks to inform progress toward a zerocarbon, equitable, resilient, and healthy built environment.

World Green Building Council

The <u>net zero carbon buildings framework</u> sets out definitions and principles around two approaches to net zero carbon and steps to achieving a net zero carbon building.

Further information is available at: https://www.worldgbc.org/advancing-net-<u>zero</u>

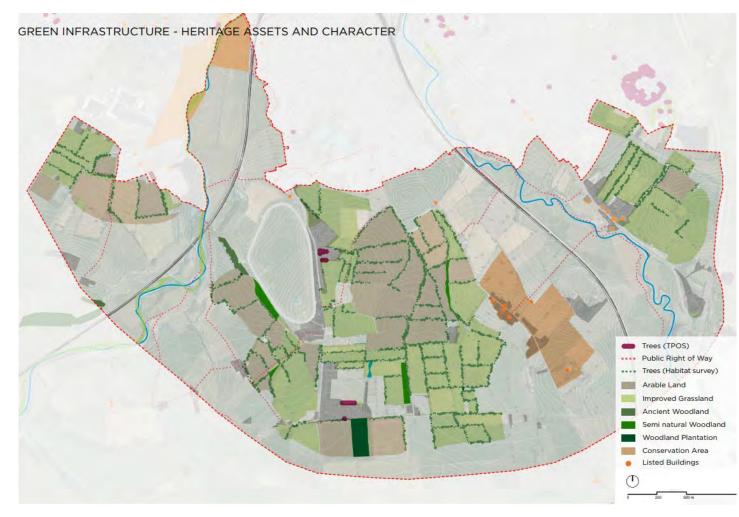
APPENDIX 5: BASELINE HABITATS, AND HERITAGE ASSETS AND CHARACTER



As part of the Masterplanning Framework a desk-based assessment was undertaken, which can help inform early design thinking and help to identify survey work required.

The baseline report can be found here: https://www.stcuthbertsgv.co.uk/ Portals/0/Documents/Masterplan/SCGV Baseline CCCRev03 2019-08-28.pdf

Appendices for Baseline here: https://www.stcuthbertsgv.co.uk/Portals/0/ Documents/Masterplan/Appendices%20Combined Rev%202019-08-28.pdf



Sources: Arup

Images courtesy of: Hyas and Stuart Walker Photography



