

Housebuilders Design Guide SPD

June 2021



1	Introduction	2
2	Background & policy context	3
3	Drivers of site design in Kirklees	4
4	Securing high-quality design through the planning process	7
5	Context	10
	5.1 Character and distinctiveness	10
	5.2 Understanding built form	14
6	Setting design parameters	17
	6.1 Establishing a site framework	17
7	Site layout	20
	7.1 Density	20
	7.2 Built form and the building line	22
	7.3 Maintaining high standards of residential amenity	26
	7.4 Green infrastructure and open space	28
	7.5 Landscaping and edges	30
	7.6 Biodiversity	32
	7.7 Walking, cycling and road connections	35
	7.8 Street design	37
	7.9 Parking	40
8	Architectural details	42
	8.1 Materials and detailing	42
	8.2 Windows and doors	44
	8.3 Rooflines	46
9	Home design	48
	9.1 Internal space standards	48
	9.2 Outdoor space	50
	9.3 Energy efficiency	51
	9.4 Waste	53

1 Introduction

1 Introduction

1 Introduction

Purpose of the SPD

- 1.1 The purpose of this Supplementary Planning Document (SPD) is to set out what the Council considers to be good residential design, to raise the quality of housing that is delivered in the district, supporting the Local Plan Vision. The main aim is to ensure that the district's future housing development has the required high-quality and socially inclusive design to help deliver quality places. The publication of the SPD provides the Council's response to the Government's emphasis on design quality being embedded within the planning system, following the publication of the National Design Guide. The document seeks to support the delivery of residential development in Kirklees that supports the Council's Climate Emergency Action Plan, for Kirklees to be completely carbon neutral by 2038.
- 1.2 The SPD provides applicants and developers with detailed guidance about the implementation of Kirklees Local Plan policy LP24 'Design' and other relevant Local Plan policies within the context of national planning guidance to create high quality buildings and places. The document considers how the distinctive built and natural environment in Kirklees can help shape high-quality residential development and provides a starting point from which developers will be expected to develop a tailored, site specific response. The guidance will be a material consideration in the determination of planning applications for all residential development, including proposals for apartments and student housing.
- 1.3 The SPD is split into six parts, intended to guide developers through the site design process:
 1. **Introduction:** Explaining the policy context, drivers for site design in Kirklees and the tools to secure good design through the planning process.

2. **Context:** Exploring the character of Kirklees and local built form to inform residential development.
3. **Setting development parameters:** Identifying a site framework to establish how the development potential of the site can be fulfilled.
4. **Site Layout:** Considering how the site can be developed within identified site parameters.
5. **Architectural Details:** Considering the materials and detailing to be used throughout the site.
6. **Home Design:** How individual homes can be designed within the developed site layout.

What is good design?

The long-standing, fundamental principles for good design are that it is: fit for purpose; durable; and brings delight. It is relatively straightforward to define and assess these qualities for a building. We can identify its activities and users, the quality of detail, materials, construction and its potential flexibility. We can also make judgements about its beauty. (National Design Guide 2019)

Design and Access Statement Prompts:

Each section includes considerations for what should be included within a Design and Access Statement accompanying a major residential scheme.

2 Background & policy context

2.1 There are several adopted national and local strategies and policies that form the policy context for the Housebuilders Design Guide SPD at the time of adoption, these are listed below.

National:

- National Planning Policy Framework (2019)
- Planning Practice Guidance
- National Design Guide (2020)
- Technical Housing Standards - Nationally Described Space Standards (2015)
- The Building Regulations 2010
- Manual for Streets (2007)
- Secured by Design – Homes 2019
- Building for a Healthy Life (2020)
- Living with Beauty (Building Better Building Beautiful Commission) (2020)

Local:

- Kirklees Local Plan (Adopted February 2019)– Related Policies:
 - LP2 Place shaping
 - LP3 Location of new development
 - LP5 Masterplanning sites
 - LP7 Efficient and effective use of land and buildings
 - LP11 Housing mix and affordable housing
 - LP20 Sustainable travel
 - LP21 Highway and access
 - LP22 Parking
 - LP23 Core walking and cycling
 - **LP24 Design**
 - LP26 Renewable and low carbon energy

- LP27 Flood risk
- LP28 Drainage
- LP30 Biodiversity & geodiversity
- LP31 Strategic green infrastructure network
- LP32 Landscape
- LP35 Historic environment
- LP47 Healthy, active and safe lifestyles
- LP63 New open space

- The Corporate Plan (2018-2020)
- Health and Wellbeing Plan (2018)
- Highway Design Guide SPD (2019)
- Open Space SPD (2021)
- Biodiversity Net Gain Technical Advisory Note (2021)
- Viability Guidance Note (2020)
- Living Play 2020 - Playable Spaces Strategy
- Public Art Policy (2017)
- Green Streets® (West Yorkshire Combined Authority) (2015)
- Kirklees Air Quality Strategy (2007)
- Kirklees Housing Strategy (2018-2033)
- Kirklees Walking and Cycling Strategic Framework (2018-2030)
- Kirklees Conservation Area Appraisals
- Dewsbury Blueprint (2020)
- Huddersfield Blueprint (2019)

3 Drivers of site design in Kirklees

3 Drivers of site design in Kirklees

3.1 The drivers of site design in Kirklees are set out in the diagram below. Designs should be informed by a thorough analysis of the broader context of the site and the landscape, heritage, cultural and natural character of the places which make up Kirklees, using the tools set out in Principle 1 and following the advice set out in Principle 2.

DRIVERS OF SITE DESIGN IN KIRKLEES

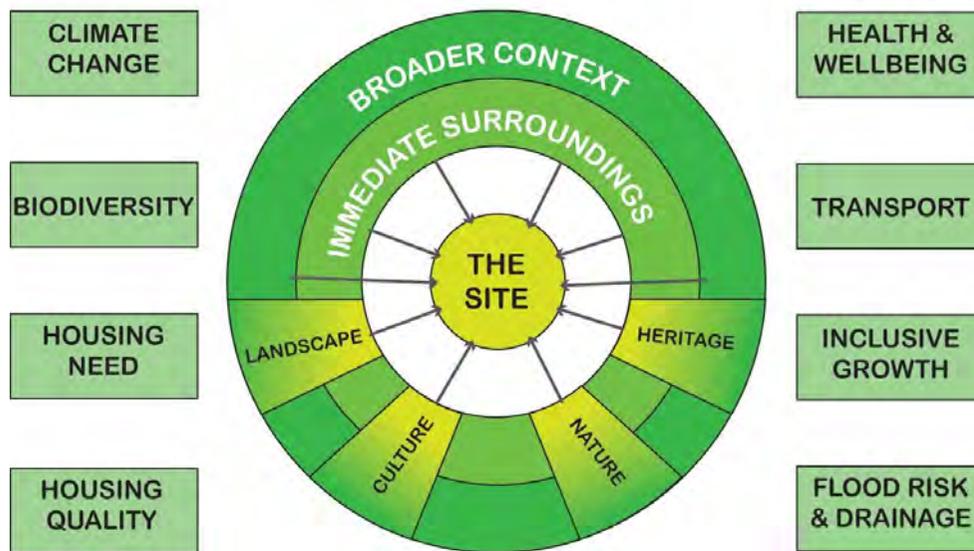


Figure 1 Drivers of Site Design in Kirklees

3.2 The design of all development should respond to wider policy challenges, with development expected to:

- Be resilient and adaptable to the impacts of **climate change** and minimise greenhouse gas emissions, in the design of both the site and the homes within it, reflecting the factors listed in the box below.
- Protect and enhance the district's **biodiversity** and integrity of the natural environment and the locally distinctive qualities that contribute to its character. This helps strengthen the beneficial services provided by the natural environment and makes a positive contribution to the health and well-being of existing and future residents.
- Provide the amount, type and tenure of homes that help meet the district's **housing need** and ensuring homes are well-integrated and designed to the same high-quality to create tenure neutral homes and spaces, where no tenure is disadvantaged.
- Ensure that **housing quality** is at the forefront of housing need, supporting innovative designs providing safe and secure homes that are built to modern sustainable standards adaptable to the changing demands of society and the climate.
- Support a positive impact on **health and wellbeing**. The design of residential developments affects health in terms of its accessibility, living space, access to outdoor space and the environment in which the house is located. This also includes access to well-connected multi-modal transport, physical activity, employment and services, community safety, green space, to healthy and affordable food choices and environmental quality.
- Support sustainable **transport** choices by being well connected to the existing network of streets, have good levels of connectivity and ease of movement throughout the site itself. New development should have good links to local services and both existing and

3 Drivers of site design in Kirklees

proposed public transport facilities to achieve sustainable movement patterns, reducing the reliance on cars and promoting sustainable travel.

- Contribute to the Council's **inclusive growth** aspirations by supporting the delivery of homes for all sectors of society and ensuring that development supports the Kirklees economy through supporting learning and skills in construction; and
- Support **flood risk and drainage** policies by incorporating natural features such as tree planting and wetlands, that form part of an integrated multifunctional green infrastructure network.



Combining industrial heritage and modern construction methods to create low carbon homes at Little Kelham, Sheffield (Image: Flickr/Academy of Urbanism)

- 3.3** Development design in accordance with the Design Principles set out in sections 6 to 9 will support well-designed developments relate well to their immediate surroundings and the site's broader context by responding to landscape, heritage, cultural and natural characteristics. New development will be integrated into the surrounding context and respond positively to local character, whilst being sensitive to its surroundings. The delivery of development in accordance with the principles set out in the SPD, along with Local Plan policies and relevant SPDs can ensure that the design and quality of new homes in Kirklees will make a positive contribution to the towns and villages of the district and play a critical role in addressing the Climate Emergency declared in Kirklees.



A car-free development comprising of energy efficient modular homes set around attractive SuDS infrastructure at LILAC, Leeds

3 Drivers of site design in Kirklees

How good residential design can address the climate emergency:

- Active Travel: Ensuring safe, attractive and convenient walking and cycling routes and providing secure cycle parking and connecting key destinations.
- Public Transport: Provide links to rail and bus services and consider how development can enhance bus service provision to help meet day-to-day needs of residents.
- Ultra-Low Emission Vehicles: Include charging points for low emission vehicles.
- Renewable Energy: Providing opportunities for energy generation on properties and site-wide energy generation schemes.
- Energy Efficiency: The orientation and fabric of buildings can reduce energy demand and make warmer homes more affordable.
- Local natural materials: Using locally sourced natural materials minimises embodied carbon and carbon produced in the transportation of materials to site.
- Re-using existing buildings: Making effective use of their embodied carbon, to minimise waste and impacts on the natural environment.
- Green and Blue Infrastructure: To enhance biodiversity, reduce and manage surface water run-off make places cooler in hot weather.
- Technology: Ensure developments are future-proofed for advancements in communications and transport.
- Recycling: Ensure residents can recycle as much waste as possible and that this is convenient and well-integrated into the site.
- Food Growth: Green space on the site can be used to grow food and could form part of a wider urban agriculture scheme.
- Density: Higher density development can support more local services such as shops, which reduces the need to travel and can make public transport services more viable.

Relevant Local Plan Policies:

LP2, LP5, LP24, LP30, LP31, LP32, LP35

4 Securing high-quality design through the planning process

Principle 1

Developers are expected to draw upon the range of tools available to help secure high-quality design for residential development, from the outset of the development process. Developers should work closely with the Council and use the most appropriate tools to secure high-quality design.

4.1 There are a range of tools available for developers to ensure that their schemes deliver a high standard of design:

- **Pre-Application Advice:** Setting the parameters and environmental constraints and opportunities including habitats, understanding developer contributions and viability issues, travel plan and transportation requirements, getting the right amount and mix of homes, conformity with local and national policy, how the site will be serviced and embedding Crime Prevention measures into the design at an early stage. Further information is available on the Council website⁽¹⁾.
- **Support from Architects and Landscape Architects:** Developers should work with architects to ensure that the built form is appropriate to the site and to provide technical advice on overcoming constraints and understanding local context. Landscape architects can help consider how the development will impact on, integrate with, complement and enhance the landscape.

- **Community Engagement:** Developers should agree what engagement will be undertaken with the local community and elected members and work together as early as possible involving them in preparing plans. Community engagement should be undertaken in conjunction with the council, or agreed with the council prior to being undertaken. Particular attention should be paid to how the development can make a positive contribution to placemaking, with an understanding of the aspirations and needs of the community. Kirklees have used the Place Standard tool to gain local insight from citizens in different settlements within the district, the evidence from this is available on the Kirklees website⁽²⁾ and can ensure that applicants respond to any significant local issues. The Kirklees Public Art policy considers the role that public artists can have in the community engagement process. The Development Management Charter⁽³⁾ sets out further advice on community engagement.
- **Statutory Consultees Advice:** Developers should identify which Statutory Consultees may be affected by the proposed development and should undertake relevant engagement with affected Consultees as early as possible. Developers should work with Statutory Consultees to ensure that the built form is appropriate to the site.
- **Development Briefs:** Prepared by the council, with the community and where applicable the landowners, to help establish the principles of development at the early stage and provide certainty to the council, community and developers

1 <https://www.kirklees.gov.uk/beta/planning-applications/get-pre-application-planning-advice.aspx>

2 <https://howgoodisourplace.org.uk/>

3 <https://www.kirklees.gov.uk/beta/planning-applications/guidance-and-advice-notes.asp>

4 Securing high-quality design through the planning process

- **Masterplanning:** Local Plan Policy LP5 sets out the expectations for site masterplans, which will be sought where feasible and appropriate, including where there are multiple landowners, several sites in a focused area or a large site that will take a number of years to build out. A masterplan must be developed at an early stage and form the basis of subsequent planning applications on the site. A masterplan for larger sites will be prepared by a multi-disciplinary team and could benefit from the input of a team of architects and use design competitions to promote new ideas and innovation.
- **Design and Access Statements:** These are required to accompany major applications and applications in conservation areas and show the evolution of a design showing how it responds to the constraints and opportunities that the site presents, how it helps meet the needs / aspirations of the community, and how the site is efficiently developed to meet the policy objectives set out in the Local Plan. Design and Access Statements should address the ten characteristics set out in the National Design Guide, as shown in figure 2.
- **Design Codes:** Where sites are likely to have multiple owners and where opportunities for self-build and custom-build houses are made available, a Design Code can set out a set of rules regarding the scale and massing of new homes; but allow for development which avoids standardised layouts and ensures the site is developed in accordance with the site's context, as assessed according to Principle 2. The Government Published the National Model Design Code in January 2021, which provides detailed guidance on the production of design codes, guides and policies to promote successful design.
- **Design Review:** A design review undertaken by an independent body can provide advice to applicants to improve design quality, the Council will encourage the use of Design Review on large-scale housing sites. The Design Council have produced guidance which includes ten principles of Design Review.
- **Health Impact Assessment:** Health Impact Assessments can identify measures to maximise the health benefits of the development and avoid any potential adverse impacts. As well as considering impacts on health infrastructure and/or the demand for health care services, this can also influence the design of the proposal. A Health Impact Assessment will be required for all proposals likely to have a significant impact on health and wellbeing.
- **Agreeing Details Early:** Working with the Council from an early stage and preparing detailed site masterplans can help ensure that responses to site constraints and detailed highways designs are agreed when a site receives planning permission and that details are not left to planning conditions. This will provide more certainty and it will support the Council's aim in swiftly dealing with Discharge of Conditions applications. The Kirklees Validation Checklist sets out what information is required to accompany planning applications to ensure that sufficient information is provided at an early stage to support good design in proposals.
- **Management and Maintenance:** Consider how open spaces and communal areas will be managed and maintained in perpetuity (including potentially through co-operation of residents and community interest companies) and how the street will work on a day-to-day basis responding to challenges presented by car parking and bin collection.

4 Securing high-quality design through the planning process

- 4.2 National Planning Practice Guidance set out more detail on the different methods available to plan for well-design places, based around the ten characteristics set out below:



Figure 2 The ten characteristics of well-designed places set out in the National Design Guide (MHCLG, 2019)

Relevant Local Plan Policies:

LP5, LP24

5 Context

5 Context

Principle 2

New residential development proposals will be expected to respect and enhance the local character of the area by:

- Taking cues from the character of the built and natural environment within the locality.
- Creating a positive and coherent identity, complementing the surrounding built form in terms of its height, shape, form and architectural details.
- Illustrating how landscape opportunities have been used and promote a responsive, appropriate approach to the local context.

5.1 Character and distinctiveness



Upland pastures looking out to the Pennine Moors at Marsden

- 5.1 Local distinctiveness is defined by the positive features of a locality that contribute to its special character and heritage assets, the sense of place and distinguish one local area from another. Kirklees has a rich and diverse historic environment that, together with the character of the landscape, creates its local distinctiveness and special interest.



The rolling wooded farmland of Emley Moor

- 5.2 The general character of the towns and villages of Kirklees is typified by stone-built properties closely following the hillside contours, with industrial and residential areas traditionally located close together and looking out onto the surrounding countryside.

5.3 Kirklees is a diverse district with a variety of landscapes which have distinctive characteristics, which are identified in the Kirklees District Landscape Character Assessment⁽⁴⁾ and summarised in the table below:

	A High Moorland Plateaux	D Moorland Fringes / Upland Pasture	E Rural Fringes	F Settled Valleys	G Wooded Rural Valleys	K Coalfield Edge, Urban Fringe Farmland	M Industrial Lowland Valleys	N Rolling Wooded Farmland	O Industrial / Business Parks	U Urban
Kirklees Rural (West)	•	•	•	•	•					
Kirklees Rural (East)		•	•		•		•			
Huddersfield			•	•			•			•
Batley & Spen			•		•	•			•	•
Dewsbury & Mirfield			•		•		•	•	•	•

Table showing the landscape character types by sub-area of Kirklees



Former textile warehouses creating a high quality urban townscape in Dewsbury Town Centre

5.4 There are several settlements in the district that have medieval origins, though the textile industry is the main influence of the built form in the district, in the form of weavers’ cottages, mills, workers’ stone terraced housing; and municipal and commercial buildings. Kirklees has a wealth of historic farmsteads, the laithe house (a dual-purpose dwelling, comprising house and agricultural building in one range), a linear farmhouse and barn is a locally distinctive form of building commonly found in upland farmsteads of West Yorkshire. Historic field boundaries make an important contribution to local character and should have an active role in shaping the form of new developments.

4 <https://www.kirklees.gov.uk/beta/planning-policy/pdf/supportingDocuments/climateChange/Kirklees-Landscape-Character-2015.pdf>

5 Context



A railway viaduct meeting domestic character in Slaithwaite.

5.5 Contemporary designs and high-quality modern interpretations of distinctive local characteristics would be welcomed where they are demonstrably appropriate to the site context and make a positive contribution to the wider environment. Great weight will be placed on the importance of good design where a proposed development may impact on a designated heritage asset or its setting. In conservation areas, it will be of great importance that development is sympathetic and responds to the context.

5.6 Kirklees has a wealth of heritage assets which help define the district's distinctive character and special interest. Conservation area appraisals, list entries and the West Yorkshire Historic Environment Record provide detailed information about character and distinctiveness. New residential development will be expected to be informed by the relative significance of the place in order to positively complement the place. Applicants should have regard to the range of resources listed above, agreeing relevant heritage assets with the Council at an early stage.



A dramatic sloping sandstone terrace in Huddersfield

- 5.7** The traditional building material throughout the district is stone, though other building materials have been used as construction became more standardised in the 20th century. Approximately 60% of all homes in Kirklees were built after 1945, meaning there are parts of the district where stone is not as prevalent in these areas. Traditional roofing materials, include locally sourced stone flags, and slates sourced from within the UK.



Clockwise from top left: stone roofs commonly found in Kirklees, stone terrace with slate roof at Thornhill, ashlar stone in Dewsbury, contemporary modular housing (Image:Citu), red brick housing at Whitley Lower, coursed rubble at Denby Dale and contemporary stone buildings at Slaithwaite.

5 Context

5.2 Understanding built form

5.8 When looking at the site's immediate context, there are several aspects that make up the built form, which are considered below:

Types / Size of dwelling

5.9 The type and size of dwelling will influence the built form. Applicants should ensure the development is meeting needs for the type of homes required in the locality and that all homes are designed in accordance with the Home design section.

Scale and Enclosure



Enclosure formed by buildings at Oakenshaw, where a newer development on the right of the picture complements the linear village form

5.10 Development should consider the scale and enclosure around the street and other public realm, by giving attention to the width between building frontages and the heights of buildings on streets that lead to the development. Planting such as street trees, or in front gardens of homes, can also provide enclosure as well as boundary treatments subject to appropriate planting and maintenance. The scale and enclosure provided by existing buildings around the site should also be considered and inform the development of the site.

Building Line

5.11 The building line is a general line of development formed by the main façade of buildings as they face on to the street. Consideration should be given to the existing building line and how new development, particularly on infill sites, can provide a continuation of the building line. Consideration should also be given to the need for punctuation in the building line to avoid monotony with projecting or recessed bays to provide accents, further detail on the Building Line is set out in Principle 5.

Urban Grain



A figure ground diagram of part of Gomersal

5.12 New development should have regard to the existing urban grain. This is the pattern presented by buildings and the spaces between them and how the spaces enable people to move between the buildings. Streets with fine urban grain tend to be in the centre of towns and where development is of a higher density. Places defined by a finer urban grain can add character and interest and can assist with accommodating challenging topography with good examples including the borough's streets of short traditional terraces. Larger footprints and massing may be more appropriate for the borough's flatter valley-bottom sites where similar scale and character already exists. A Figure ground diagram, which depicts buildings in black and unbuilt space in white, can be useful for understanding urban grain as shown in the accompanying image.

Topography



New development at the Malings, Ouseburn in Newcastle upon Tyne working with site topography to create an attractive high density housing within an urban setting.

5.13 The influence of the topography of a site and how the development responds should be clearly set out in the Design and Access Statement. Applicants should demonstrate how the topography of the site has been utilised to create well-designed and distinctive places, this can mean including bespoke house types and using the topography to provide under-croft car parking. On steep sites standard house types separated by high retaining walls should be avoided and a high-quality street scene should be maintained. The topography of the site is likely to impact on the access arrangements and the development density of the site and this should be clearly identified in Design and Access Statements.

5 Context

Design and Access Statement Prompts

- How has the proposal taken wider landscape characteristics into account and used opportunities to respond to the local character?
- Has the applicant taken account of designated heritage assets and consulted the Historic Environment Record?
- Does the scale of the proposed development reflect local character?
- Does the proposal respect the urban grain of the surrounding area?

Relevant Local Plan Policies:

LP2, LP5, LP24, LP35

6 Setting design parameters

6.1 Establishing a site framework

Principle 3

Developers are expected to clearly identify and map out site opportunities and constraints in the Design and Access Statement. This can help understand what constraints impact upon the developability of the site and ensure that they are fully embedded into the design of the site and that the site can be developed to make the efficient and effective use of land. A Site Framework will identify the purpose of each part of the site and help guide the site's development, setting the development parameters early in the planning process.

- 6.1** Many sites will have technical constraints that limit how much land can be developed and that guide the layout of the site. It is critical that these are considered early in the process and are clearly identified to better inform the design process and to secure efficient and effective use of land. These constraints are considered below and should be clearly set out in the D&A Statement:

Flood risk and Drainage

- 6.2** The approach for flood risk is set out in Local Plan policy LP27. This policy states that development will not be permitted on any part of the site identified through a site-specific flood risk assessment as performing a functional floodplain role. Drainage is considered in LP28. Flood management, drainage and the design of sustainable drainage systems need to be considered at the outset of the design process and agreed with the Council as the lead local flood authority. Applicants should seek to enhance the existing drainage arrangements and consider how

development of the site will impact on the surrounding community, beyond the site boundary. Advice on green infrastructure which plays an important role in flood risk and drainage is set out in Principle 7.

Slopes

- 6.3** Steep slopes should be identified where they present challenges to the development of the site, particularly with regard to overlooking neighbouring sites and where they would present infrastructure constraints. Steep slopes also present challenges in terms of accessibility for different users of the site. Applicants should demonstrate how they have sought to exploit the topography of the site to respond to these challenges. More advice on topography is in Principles 8 and 15.

Ground conditions

- 6.4** The industrial legacy of the district means that ground conditions may affect the development of some sites. A coal mining risk assessment is required for sites in some parts of the district (as defined by the Coal Authority) and these may present site constraints that effect the developable area of the site. Further information is provided in Local Plan policy LP53.

Infrastructure

- 6.5** Sites may have a range of utility infrastructure that presents a design constraint. Overhead powerlines, gas mains and sewerage infrastructure will require easements or diversions and undergrounding may be necessary. This is likely to result in higher costs for development so it should be considered in early viability appraisals.

6 Setting design parameters

Relationship with neighbouring land and buildings

6.6 The relationship of the site with neighbouring buildings and the suitability of different parts of the site for different uses in the case of mixed use allocations can determine its layout. This may include heritage assets, employment uses or other sensitive uses that may require buffer zones, stand-off distances and for development to respect the neighbouring buildings privacy and amenity. Where a proposal is adjacent to a canal or river, consideration should be given to how the development will integrate with them and, where appropriate, provide a safe access. For those sites around main rivers, an Environmental Permit will be required from the Environment Agency under certain circumstances, this should be identified in early discussions with the Environment Agency as advised in paragraph 4.1. If part of a site or adjacent land offers appropriate opportunities for development, applicants should apply a masterplanning approach, and explore the possibility of jointly developing and densifying sites; as set out in Principle 1 and Local Plan Policy LP5.

Landscape

6.7 Appropriateness of new development to the setting and consideration of impact on the landscape should be demonstrated. Consideration of the character of the site, features being retained and concepts behind design, space and planting for protecting, preserving and enhancing trees, vegetation, wildlife habitats, boundary treatments and historic landscape. Where sites include watercourses within/on the edge of sites, an undeveloped buffer zone to be included to allow space for water and wildlife and provide a connection into the wider green infrastructure would be appropriate.

Noise, odour and air quality

6.8 Proposals should consider local air quality in the area and how mitigation measures can be integrated into the design where the proposal seeks to introduce new residential development into Air Quality Management Areas, Areas of Concern or near other areas of relatively poor air quality in accordance with Local Plan Policy LP51. All development proposals are expected to incorporate suitable and sustainable mitigation measures which reduce pollution from a range of sources including noise, odour and light. Mitigation measures can include planting, screening and use of green walls and green roofs.

Trees and hedgerows

6.9 Planning permission will not be granted for developments which directly or indirectly threaten trees or woodlands of significant amenity. Proposals should have regard to the Wildlife Habitat Network, Habitats of Principal Importance and green infrastructure networks and consider the contribution that the trees and hedgerows make to the local distinctiveness of the area. Existing tree and landscape features should be incorporated into a scheme at the concept or initial design stage and sites should show a net gain in tree coverage.

Biodiversity

6.10 Biodiversity constraints should be identified at the outset of a proposal via a Preliminary Ecology Appraisal. The Council will be providing a technical advisory note biodiversity net gain in Kirklees and further information is set out in Principle 9.

Walking and Cycling Connections

6.11 An assessment of the site's relationship with the surrounding street hierarchy and walking and cycling network should be provided. This can inform how to best make connections to help prioritise walking and cycling journeys and to identify how to make connections to existing and proposed routes, further detail is set out in Principle 10.

Views



Golcar viewed from Linthwaite, showing development working with the topography to create an attractive and distinctive setting for the village (Image: Tim Green, Flickr)

6.12 Any development proposal should consider views from public vantage points to important landmarks, the scope of a development to open-up and frame new views; and the impact of development on long distance views. In the case of development within or adjacent to a conservation area, views to and from the conservation area must be considered. Proposals for taller residential buildings should consider their visual impact in terms of long-distance views, the townscape and the impact on the setting of heritage assets.

Design and Access Statement Prompts

- Are areas that are unsuitable for development because of constraints arising from biodiversity, flood-risk, topographical constraints, utilities infrastructure, ground contamination and stability clearly identified?
- Is the role and function of each part of the site clearly identified, for example for drainage attenuation, open space or on-site biodiversity compensation?
- Are existing trees and hedgerows clearly identified and do these form the basis of the site's open space and green infrastructure network?
- How has the site layout sought to mitigate any noise and air quality issues?
- How has the site layout taken the position of neighbouring buildings into account to maintain privacy and residential amenity?
- Are important views into, out of, and within the site identified and how has the site layout taken them into account?
- Are heritage assets within or adjacent to the site identified; and the measures that would help safeguard their setting clearly identified?
- Does the site framework clearly identify a net-developable area?

Relevant Local Plan Policies:

LP5, LP7, LP20, LP21, LP23, LP24, LP27, LP28, LP30, LP31, LP32, LP33, LP35, LP47, LP51, LP52, LP53, LP63

7 Site layout

7 Site layout

7.1 Density

Principle 4

Net development density is expected to achieve at least 35 dwellings per hectare, though higher densities are supported in areas in or adjacent to town centres which are well served by public transport and to secure more sustainable forms of development. Densities lower than 35 are only permitted in line with Local Plan Policy LP7. The location of the site is important in terms of the requirement for car parking provision, on-site open space provision and the type of housing required in the locality.

- 7.1** The Site Framework should be used to establish and clearly identify the developable area of the site as well as areas unable to form part of the net developable area; and in the case of mixed use allocations those areas of the site that are designated for other uses. The net developable site area should not include areas that: are at high risk of flooding and existing flood routes and drainage infrastructure; are priority habitats; contain protected and important trees; and are unable to be developed because of ground conditions and land stability issues. Areas of open space provided in accordance with LP63, streets and car parking are within the net area of the site. Detailed site analysis will provide more in-depth information to inform the net developable area.
- 7.2** Density should positively respond to the scale, form and massing of the surrounding locality. It will be important that new development ensures the conservation and where possible enhancement of heritage assets and their settings. In conservation areas, conservation area appraisals can provide useful guidance.

7.3 Higher development densities have been shown by the Housing Design Audit for England⁽⁵⁾ to result in better design and can help:

- ensure that local services are more viable;
- reduce the need to travel to access community facilities and services; and
- support higher frequency bus services.

7.4 Achieving a high development density is subject to other policy requirements, such as car parking on-site open space provision and a range of housing types of properties needed to support housing mix. Car parking and highways should be efficiently designed to ensure they do not take up a high proportion of land. Opportunities for densification should be identified, especially if land is highly accessible and currently under-used.

7.5 Developers may need to demonstrate flexibility when considering standard house types, the location of larger detached houses should be considered within the overall housing mix of the site, against density requirements and their appropriate location within the site.

7.6 The density of homes and their parking and servicing requirements needs to be balanced against the need of being able to achieve a highway layout that is of an adoptable standard.

7.7 Lower densities may be necessary to ensure:

- the development is compatible with its surroundings;
- development viability would not be compromised;
- particular house types are secured to meet local housing needs (LP11); or
- the development of low-energy housing built to Passivhaus standards.

⁵ <http://placealliance.org.uk/research/national-housing-audit/>

- 7.8** On larger sites, it may be appropriate to identify character areas where different development densities can be provided. This can take account of the local character and site context and help sites make a transition from urban to rural. This can also ensure that new development creates character and identity and help to create a memorable sense of place.

Design and Access Statement Prompts

- Does the development achieve a net density of 35 per hectare and is sufficient justification provided for lower densities?

Relevant Local Plan Policies

LP5, LP7, LP11, LP24

7 Site layout

7.2 Built form and the building line

7.9 Following the identification of a site framework (as set out in Principle 3) and considering the type of housing required and the appropriate density; the site layout should be established which takes into account remaining Principles in this section.

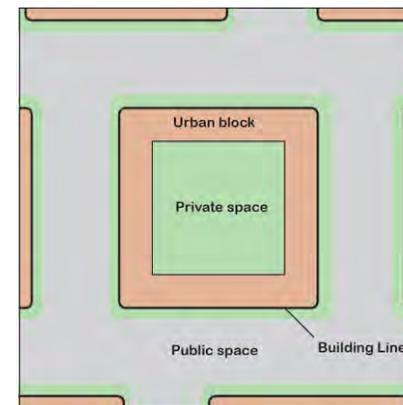
Principle 5

Buildings should be aligned and set-back to form a coherent building line and designed to front on to the street, including corner plots, to help create active frontages. The layout of the development should enable important views to be maintained to provide a sense of places and visual connections to surrounding areas, and seek to enable interesting townscape and landscape features to be viewed at the end of streets, working with site topography. The arrangement of buildings should consider maintaining privacy and residential amenity. Effective boundary treatments should be used to form defensible space and delineate between public and private realm. Buildings should be arranged to take account of weather and microclimates.

7.10 Good quality built form is supported by a strong and distinctive building line which helps create active street frontages and defines the character of places. It is recommended that:

- Buildings front on to the street to with well-designed frontages and prominent front doors
- windows look out over the street, and
- careful consideration is given to accommodating garages and car parking within the development to ensure they are not visually dominant

7.11 In higher density areas, the building line will generally be closer to the street and on the edge and outside of urban areas properties will tend to be set back. Infill development should reflect the building line of existing development and new development should provide clear and consistent building lines that are appropriate to the area, as considered in Principle 2. The character of the building line could be varied, with groups of buildings set back from the main building line, although a scattered and constantly changing building line can be unattractive and confusing. Regard should be had to the traditional built form of the area, with many earlier rural houses facing south and presenting gable ends to the street. In lower density suburban areas, a softer building line may be appropriate having regard to the wider character of the surrounding area.



A diagram of the perimeter-block layout in its simplest form

7.12 A strong building line can help define public and private spaces which puts private spaces at the rear of properties away from the street in the form of an urban block. Private space can be enclosed within a block, though if this is not possible or appropriate and private space fronts on to the edge of the site, boundary treatments should be considered – as set out in Principle 8. A perimeter-block approach helps define public and private space, enhances legibility, ensures little exposure of

vulnerable rear gardens to public access and can be delivered in a variety of forms. Residential amenity and privacy should be considered by having regard to the guidance set out in Principle 6.



A house with low level planting and active frontage on two elevations as it turns a corner at Black Rock Mills, Linthwaite

7.13 Boundary treatments should be used to clearly distinguish between public and private space, helping to minimise the risk of crime whilst performing an important role in breaking up the dominance of on-plot car parking. Boundary treatments can comprise railings, walls and hedges and the choice of treatment and material used should reflect the site context and location. At the front of plots, any boundary treatments should be kept low so that dwellings are kept open to view. Where access to rear gardens is taken from the front of dwellings, this should offer high gated access close to the front building line to avoid deep recesses between buildings. Low quality and intrusive boundary treatments can have a negative visual impact on the public realm;

particularly high fences where rear gardens face on to the street. Consideration should be given to how the built form can be designed to enhance natural surveillance and reduce fear of crime, ensuring views are not obscured by vegetation, high walls and fencing. The location and type of planting within the site and its maintenance should be considered at the outset of the design process.



A Distinctive corner building with frontages sensitively incorporating garages at Abode, Cambridgeshire (Image: Tim Crocker, Proctor Matthews Architects)

7.14 Buildings on corners should respond to their location. In more prominent locations at key junctions, these should be designed to mark the corner (with additional height where appropriate, although a different elevational treatment can be adequate) to support wayfinding, with buildings having two front elevations facing on to either street.

7 Site layout



A well-enclosed car-free street, with car parking hidden away at Paintworks, Bristol
(Image: Stride Treglown)

7.15 Building frontages that are dominated by hard landscaping and car parking that is within the plot and fronting on to the street should be avoided (see Principles 11 and 12) as this can result in dull and vehicular-dominated streetscapes. Within some sites, it may be appropriate to accommodate car parking outside of the curtilage of the dwellings provided that this is well-lit and within sight of active rooms or locate it in under-croft car parks; a strong building line and delineation of public and private space is still a key consideration in such developments.



Buildings orientated for solar gain at LILAC, Leeds

7.16 The direction of prevailing winds and sunlight influence the microclimate of outdoor spaces, the amount of light homes receive, the capacity of homes to be optimised for passive solar construction and the capability of a site to deal with extreme weather events. Further guidance on orientation of buildings for energy efficiency are detailed in principle 18.

7.17 The enclosure of buildings around the street can help frame views to important landmarks and the surrounding countryside; utilising views within a site can help create a better experience for a user of the site and to support dementia friendly design. Developments within or adjacent to Conservation Areas should have regard to any important views and townscape features that are identified in the Conservation Area Appraisal. The legibility of the site can be enhanced by streets ending at landmark buildings or helping to frame the views of attractive landscape. Streets terminating at gable ends, parking spaces, walls or fences are discouraged.

Design and Access Statement Prompts

- Are active frontages provided through the orientation of buildings and the width of plots?
- Is there a clear delineation between public and private spaces with appropriate boundary treatments?
- Does the site layout use buildings and open space to form landmarks and support wayfinding?
- Is the set back of buildings to the street appropriate to the site's context and does it help provide a sense of enclosure?
- Does the built form, building line and boundary treatments address issues of crime and minimise its impact on the safety and security of the area?
- Has the termination of streets been fully considered, with particular regard given to ensuring key streets in the site terminate with interesting views?
- Are buildings on the site orientated to take account of prevailing winds and to allow for passive solar construction?

Relevant Local Plan Policies

LP5, LP24, LP32

7 Site layout

7.3 Maintaining high standards of residential amenity

Principle 6

Residential layouts must ensure adequate privacy and maintain high standards of residential amenity, to avoid negative impacts on light, outlook and to avoid overlooking.

7.18 The space between buildings can help maximise residential amenity in terms of maintaining privacy, reducing overlooking and ensuring natural light is able to penetrate buildings. Space about buildings can also make a positive contribution to local character and street scenes. Normally new build developments should seek appropriate separation distances for servicing, accommodating future adaptations and creating attractive street scenes. These should be in keeping with the character and context of the site and proportionate to scale of the dwellings.

7.19 For two storey houses typical minimum separation distances are advised:

- **21 metres** between facing windows of habitable rooms at the backs of dwellings;
- **12 metres** between windows of habitable rooms that face onto windows of a non-habitable room;
- **10.5 metres** between a habitable room window and the boundary of adjacent undeveloped land; and
- for a new dwelling located in a regular street pattern that is two storeys or above, there should normally be a minimum of a **2 metres** distance from the side wall of the new dwelling to a shared boundary.



New housing development providing a creative design solution to a constrained site at Leeds Road, Liversedge (Image: Google Streetview)

7.20 Applicants should consider creative design solutions to maintain high development densities where this is appropriate. Applicants should also set out how they have sought to ensure adequate visual privacy for every home. There are several design solutions that allow for reduced distances between buildings such as:

- The angles of facing elevations and the orientation of the buildings;
- The size, angle and design of upper storey windows to minimise overlooking, including off-set windows and giving consideration to the advice set out in Principle 14;
- The internal layout of dwellings, to maximise distances between habitable rooms;
- Appropriate screening and boundary treatments, such as planting, fences, walls and ancillary outbuildings;
- Parts of the building that project from the rear elevation to obscure views.

7.21 Longer distances between buildings may be necessary if:

- It fits in with the local character;
- The site includes higher buildings to fit with local character, or is adjacent to higher buildings which would impact on the amount of natural light;
- Steep topography on the site, which presents challenges relating to overlooking.



A constrained site with a small set back appropriate to that site's context (Image: Ash Sakula Architects)

7.22 A setback from back of pavement of 2 – 4 metres is normally appropriate on minor residential streets to provide usable, defensible space at the front of the dwelling and to help foster social interaction with the street. This will, however, depends on local character. A larger set back is likely to be more appropriate on busier roads, and where car parking is carefully incorporated into curtilage of the dwelling, and a smaller set back could be appropriate on traffic-free streets / within car-free developments. On busier roads, designed in accordance with the Highway Design Guide SPD, verges and street trees will help provide further enclosure.

Design and Access Statement Prompts

- Is residential amenity maintained through appropriate separation distances between buildings, through screening or the orientation of buildings?

Relevant Local Plan Policies

LP24

7 Site layout

7.4 Green infrastructure and open space

Principle 7

The integration of green infrastructure and accessible open space must be considered early in the design process by assessing:

- the site's context;
- the ability to make connections with wider green infrastructure networks; and
- the multi-functional role green infrastructure can perform.

Proposals should retain existing features within the site, such as valuable trees, natural wildlife habitats and landscape features.

Green infrastructure can be provided through building features such as green roofs and green walls and through the design of streets to include street trees, and trees within residential plots and open spaces.

Open Space, particularly for recreation, should be located at the heart of the site and designed to help create identity.

7.23 Green Infrastructure and open space can add value to housing developments and should be considered at an early stage in the design process by analysis of the site, its context and Site Framework.

7.24 The Open Space SPD provides guidance on the requirement for open space, including type amount, and location on or off-site. Secured by Design Homes 2019 guidance offers specific advice on open spaces including natural surveillance, management and location within the site.

7.25 The steps set out in the Open Space SPD should be followed from the outset of the design process in tandem with understanding the site's environmental context and how any open space provided can connect

into the wider green infrastructure network and wildlife habitat network. It should consider the multi-functional nature of green infrastructure in the site particularly in relation to drainage infrastructure. Care must be taken to balance biodiversity provision with recreation provision to ensure that habitats can be undisturbed.

7.26 Careful consideration should be given to the multi-functional role that green infrastructure can perform within the development, including:

- Flood mitigation;
- Improving urban biodiversity, through street trees, woodland creation and wetlands;
- A net gain of tree coverage to provide shelter from rainfall, shade and to minimise impact of high winds;
- Providing a setting for walking and cycling connections;
- Natural playable spaces; and
- Drainage infrastructure.



Natural solutions to drainage, which also provide visual amenity in the streetscene at Greener Grangetown, Cardiff (Image: Susdrain, Flickr)

7.27 Green Infrastructure can help sites become more resilient in the face of extreme weather events which are occurring more frequently due to climate change. Utilising green infrastructure to reduce surface water run-off and to store water helps ensure that the district is more resilient to flooding and storms, with green space also providing urban cooling in response to extreme heat. Green roofs can help support green infrastructure and ecological networks and help reduce the amount of surface water run-off. Blue roofs are flat roofs that are used for water attenuation to minimise surface water run-off. These features can be integrated with rain gardens to provide rainwater management solutions. The inclusion of green and blue roofs should have regard to Principle 15, as they will require flat or shallow pitched roofs and consideration will need to be given to how these fit into the wider design.

7.28 Open spaces should be designed to ensure that they are not adversely affected by microclimate. The design of streets in accordance with Green Streets principles as set out in the Highway Design Guide SPD should be integral to the design of all sites and their green infrastructure provision.



A balanced network of public and private outdoor space at Byker, Newcastle

7.29 Well thought out and integrated open space is of fundamental importance in the layout of any new development to allow residents to enjoy their surroundings. Open Space for recreation should be located within easy reach of all residents on the site forming an accessible space at the heart of new development. Any new open space should be well-integrated with development, overlooked and activated by surrounding uses spilling out on to the space ensuring that it provides a safe, attractive and well-used space, following guidance set out in the Open Space SPD. A network of open spaces can be integral to creating a site's identity, in terms of landscaping, and on larger sites the potential for public art provision which can help foster civic pride and community involvement. Key links between spaces and the planting of street trees and segregated pedestrian and cycling routes through Green Streets ® can encourage healthy active travel. Street trees and planting can help create vistas and screening within the site, but these must be balanced against providing natural surveillance of the street from dwellings. Any tree planting should be specified with other infrastructure, including street lighting specification to ensure that tree canopies do not obstruct street lighting.

Design and Access Statement Prompts

- Is the amount of open space delivered on the site compliant with Local Plan Policy LP63 and the Open Space SPD?
- How accessible is open space to all residents on the site and how does it support the creation of a strong identity for the site?
- Does the site utilise green infrastructure for climate change mitigation?

Relevant Local Plan Policies

LP5, LP24, LP28, LP32, LP47, LP63

7 Site layout

7.5 Landscaping and edges

Principle 8

The transition from urban to open land should be carefully considered where development is located on the edge of the urban area.

Proposals should demonstrate how the new development makes a positive contribution to the character and function of the landscape through sensitive siting and good design.

For all sites in elevated areas, the appearance in the wider landscape should be considered and with applicants demonstrating how development respects the topography of the site and its surroundings.



Service road forming the edge of the site at Derwenthorpe, York to soften the transition to open space

7.30 Where a site has a boundary on to open countryside or open space, or adjoins a major road, hard edges dominated by rear fences, gable ends, and outbuildings should be avoided. Houses should front on to such edges of the site; to minimise the risk of crime arising from the exposure of vulnerable areas such as rear gardens to open land. Service roads can form the edge of the site to help create a gentler transition to the edge of the development; with appropriate planting used to soften the edge. Where open space and landscaping are adjacent to service roads on the site edges, well-designed measures should be put in place to ensure the spaces are not used for car parking. Links to the Public Right of Way network at the edges of the site should be provided in context with the local setting. Where viable, trees should be of a species capable of growth to exceed building height and managed so to do, and where mature trees are retained on site, provision is made for succession planting so that new trees will be well established by the time mature trees die.

7.31 Within the site, proposals should consider boundary treatments, both hard and soft, in relation to local patterns and use of predominant local boundary materials. New planting and landscape should enhance the setting and support local distinctiveness, avoiding the typical palette of standard plants. The type of planting that is used can also be utilised for providing additional boundary security. (see principle 9 – biodiversity)



Homes front on to open space which helps maintain the setting of the listed church building at Churchfields, Boston Spa (Image: Wikimedia Commons)

Design and Access Statement Prompts

- How do boundary treatments at the site's edges fit into the site's context?

Relevant Local Plan Policies

LP5, LP24, LP32

- 7.32** Providing planting and green space at different scales throughout a site can help maximise exposure to nature for both residents and visitors. Landscaping can maintain key and screen undesirable views and mitigate noise and air pollution. The location, scale and species of planting and its maintenance, as well as visibility in and around spaces, should be carefully considered in relation to the effect that this may have on safety and the perception of crime, with the risk of poorly maintained planting creating opportunities for concealment and pinch points.
- 7.33** The impact of development on the skyline should be considered, particularly with sloping sites. Development should take account of wider views of a settlement and consider the role of carefully placed taller buildings in making a positive contribution to views and the skyline. An analysis of views is key to understanding how any adverse visual impacts of development at the edge of open land can be mitigated.
- 7.34** Existing edges that contribute to the historic and landscape character of an area should be retained and repaired as part of the development, such as dry-stone walls and hedges.

7 Site layout

7.6 Biodiversity

Principle 9

Proposals are required to provide net gains in biodiversity, with ecological enhancement integral to the design of the development. At the outset of the design process the wildlife habitat network and Habitats of Principal Importance should be considered in addition to protected species and the maintenance and management arrangements for any wildlife spaces need to be clearly set out.



Street trees on Annie Smith Way, Huddersfield

7.35 Net biodiversity gains should be provided through good design and considered at an early stage to ensure biodiversity enhancements and habitat creation are incorporated and the function of the wildlife habitat network is safeguarded and enhanced.

7.36 The assessment of a site's context should have regard to the natural environment and blue-green infrastructure corridors and consider the ecological role of a site in supporting a higher level of biodiversity, including potential connections to the neighbouring natural environment. The strategy for preserving and enhancing the existing vegetation/habitats should be clearly demonstrated, with an aim to maintain the site's ecological function post-development. Where new development impacts on existing valuable habitats or ecological features these should avoid being included within the curtilage of residential dwellings and maintained and managed as a wildlife space by an appropriate body (such as a Wildlife Trust).

7.37 The ecological mitigation hierarchy should be applied in order to result in no significant ecological harm by:

- in the first instance seeking avoidance of loss of existing habitat;
- secondly by providing adequate mitigation; or
- as a last resort, through compensatory measures.



An integrated bird box (Image: Sarah Roberts / Action for Swifts)

7.38 The council's technical advice note on Biodiversity Net Gain in Kirklees provides guidance about how developments should achieve biodiversity net gain in accordance with Local Plan policy LP30. All development should avoid loss of extant biodiversity and demonstrate on site biodiversity net gains of at least 10%. The size, location and type of site will underpin what role it can play in supporting a measurable net gain of biodiversity and applicants should liaise with the Council's biodiversity officer. An ecological consultant should be engaged at the earliest opportunity, prior to the design phase of the development, this will ensure advice on likely constraints and opportunities can be sought at the pre-app and the necessary constraint surveys can be undertaken.

7.39 Steps to enhance biodiversity include:

- Considering how the role of green infrastructure assets within the site can help form linkages between the wildlife habitat network;
- Providing gentle transitions between different habitats and incorporating measures in walls, fences and roads that support the movement of animals and providing ecological buffer zones between developed areas and retained habitats;
- Using new access and circulation routes as opportunities to create or strengthen links to established habitat networks;
- Using natural solutions to deal with drainage (sustainable drainage systems) and incorporating multi-level green infrastructure such as green walls and green roofs;
- Retaining trees and appropriate planting for the site, taking account of biodiversity opportunity zones and relevant habitats and species of principal importance as identified within the Kirklees Biodiversity Action Plan 2009;
- Incorporating the planting of street trees as per Green Streets® and planting to support local distinctiveness and enhance existing vegetation and habitats;
- Incorporating measures such as bat boxes and swift bricks in buildings and incorporating wildlife friendly lighting particularly if there are sensitive habitats on or adjacent to the site;

7 Site layout

- External lighting should be minimised to reduce impact on bats, birds and other wildlife. It should use warm white LED lighting with temperature <2700K unless specifically required for essential security cameras. Lights should be directed downwards and away from wildlife habitats;
- Improving the quality of aquatic habitats and blue-green infrastructure connectivity by incorporating measures such as invasive species control, river restoration, removal of redundant weirs or provision of fish passes and de-culverting where feasible;
- Protecting watercourses or other water environments adjacent to or within sites by incorporating measures including suitably sized natural buffers and controlling surface run-off during and post construction.

Design and Access Statement Prompts

- Has the mitigation hierarchy been applied and demonstrated? Are there any residual negative effects on biodiversity anticipated due to the development?
- Will a measurable net gain for biodiversity be achieved?
- Do biodiversity enhancement measures reflect the relevant Kirklees Biodiversity Opportunity Zone?
- Are there any on-site interventions that form part of the proposal's biodiversity net-gain? Where biodiversity net gains are not achievable on site, off site provisions will be required.

Relevant Local Plan Policies

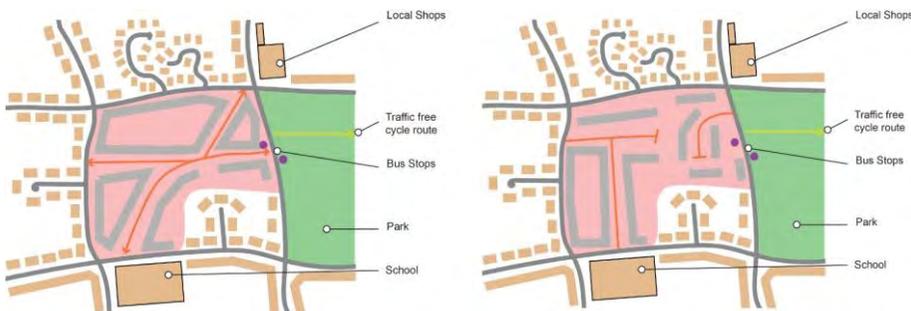
LP5, LP24, LP30

7.7 Walking, cycling and road connections

Principle 10

The site layout should make effective connections to existing walking and cycling links and take opportunities to create new connections. Site access will recognise the different needs of people walking, cycling and using cars and prioritise the needs of people walking and cycling, to encourage sustainable modes of travel. In order to contribute towards more people using sustainable modes of travel walking and cycling links should be safe, convenient, direct and accessible; and residential development may provide opportunities to improve connections via the Kirklees Core Walking and Cycling Network.

7.40 The Local Plan Policies map sets out a core walking and cycling network of existing and proposed routes and is a key starting point, alongside local routes and connections. Local and City Region strategies both aim for significant increases in the proportion of journeys made by walking and cycling.



A good and a bad example of considering connections through a site, with the red lines indicating routes for walking and cycling.



An existing residential street landscaped to limit access to motor vehicles at Waltham Forest, London (image: Twitter / E17 Modal Filters)

7.41 The layout of the site should show walking and cycling connectivity both within the site and to the surrounding area. Site layouts should ensure that access to nearby facilities can be achieved by safe and convenient routes for people on foot or on bicycles. Secure car parking can be sited to support traffic free streets. The needs of people walking, people on bicycles and people using cars are all different and require different design approaches, appropriate for each site. Careful consideration of proposed gateways and entry points into the developments to highlight a sense of arrival. Green Streets® and an avenue of trees on the estate road and approach can support this.

7 Site layout



Developments should seek to make connections to key walking and cycling routes, like the Spen Valley Greenway

7.42 The layout should consider where direct and attractive walking journeys can be made to facilities within 800m of the site and, for cycling, seek direct and safe connections to the wider cycle network and to access destinations such as schools, town centres, open space, sport and recreation facilities and railway stations, within approximately 2.5 km of the site. 800 m and 2.5km represent a journey time that can be taken in approximately ten minutes for walking and cycling respectively, and with increased use of E bikes these journeys can be undertaken quicker, with topography becoming less of a constraint. Modal filters, barriers that restrict access in existing streets for vehicular traffic but still maintain access for walking and cycling, can be used to reduce the impact of through-traffic and make residential streets a more pleasant environment. In West Yorkshire and York, the City Connect programme works in partnership with a range of organisations to support the provision of new active travel routes to ensure that walking and cycling

opportunities are accessed by a range of communities, applicants should ensure proposals complement the provision of new walking and cycling infrastructure.

7.43 The design of routes should:

- Use landscaping to encourage usage and healthy active lifestyles.
- Promote usage through marker planting, distinctive landscape design artwork or similar bespoke feature or design specific to the locality.
- Keep access to the rear and side of dwelling to an absolute minimum, particularly shared rear access to dwellings. Where these are provided access to them should be controlled to residents, with such access points being well-overlooked.
- Ensure all streets and paths through a site are open and over-looked.
- Consider and control pedestrian permeability carefully to reduce the risk of crime.

Design and Access Statement Prompts

- How does the layout facilitate safe and convenient walking and cycling routes to local destinations?
- Does access to and within the site, including main vehicular access, prioritise people on foot and on bicycles?

Relevant Local Plan Policies

LP5, LP20, LP21, LP23, LP24, LP47

7.8 Street design

Principle 11

Provide inclusive spaces that meet the needs of pedestrians, cyclists and children and ensure streets are well integrated into the development.

Streets must be able to serve emergency and service vehicles, maintain low vehicular speeds and successfully integrate on-street car parking.

Creative design should ensure natural surveillance and movement help mitigate the risk of crime and street layouts are attractive with street trees and landscaping.

An agreement of the design of highways to an adoptable standard, in accordance with the Highway Design Guide SPD, should be reached at the earliest stage of design following advice in paragraph 7.44.

- 7.44** The Highway Design Guide SPD (HDG) sets out how highways should be considered as part of residential schemes and this should be referred to by applicants at the outset of the design process.



A street prioritising people, play and interaction at Marmalade Lane, Cambridge (Image: David Butler / Mole Architects)

- 7.45** Proposals should consider the role that streets have for social interaction and informal play and be designed in a way that facilitates this. Developments should be set around linked streets following a clear hierarchy of street types, and discouraging through traffic using residential streets as a shortcut. As part of a perimeter / block layout, mews courts within blocks can help increase the density of the site but still maintain pedestrian permeability. Long, straight, uniform streets, streets that do not allow pedestrian permeability and complicated junctions should be avoided to help support dementia-friendly design.⁽⁶⁾ Where a cul-de-sac layout is unavoidable due to site constraints, care must be taken to ensure that they are not designed to be vulnerable to crime and anti-social behaviour, and that refuse collection vehicles can service the site without the need for turning and reversing. Further information is available in Secured by Design Homes 2019 guidance.

⁶ The Royal Town Planning Institute published advice on planning and dementia in 2020 including "What does a place designed for people living with dementia look like": <https://www.rtpi.org.uk/practice/2020/september/dementia-and-town-planning/>.

7 Site layout



A well over-looked ginnel providing pedestrian permeability at Derwenthorpe, York



A well screened communal bin store at Staiths South Bank, Gateshead

7.46 Increased pedestrian permeability should be considered in the context of crime and safety. The National Design Guide sets out several planning and design considerations that can help increase the safety of spaces such as active frontages on buildings around the edge, natural surveillance, reasons for people to enter into the space for an activity / destination /or natural line of travel. A risk assessment at an early stage of the design process will help to mitigate the risk of crime arising from a site layout.

7.47 Residential developments should not be dominated by over-engineered highway layouts that provide bland and uninspiring environments. Highway engineering considerations must be balanced against other design requirements to help achieve quality places to live. Hard landscaping can be broken up by local vernacular features such as stone setts, which can help development respond better to their context. Where streets are designed for parking and servicing; build-outs, verges and soft-landscaping should form part of the streetscape to mitigate hard landscaping.

7.48 Street trees should be provided in accordance with the Green Streets principles, as set out in the HDG, and considered from the outset of development, ensuring that the right tree is put in the right place for the right reasons. The long-term maintenance of street trees, particularly in respect of other infrastructure and disturbance caused by roots must be considered.

7.49 The design of streets can be influenced by their need to be serviced by refuse collection vehicles and access for emergency vehicles. Communal bin stores, with the storage placed in a convenient area for collection that is well-integrated into the streetscene may be appropriate, more information is in Principle 19. Manual for Streets sets out guidance for emergency vehicles based on carriageway widths of 3.7m and ensuring that a pump appliance can get to within 45metres of every dwelling.

7.50 The HDG sets out what is expected for streets to be brought up to an adoptable standard, and this should be addressed at an early stage in the design process and dealt with prior to approval. The HDG sets out the liabilities facing private streets and drives and the required maintenance responsibilities. Appendix 7.3 of the HDG sets out the adoption process and further guidance is available in a separate note. Providing streets that are not adopted will, like any open space and other communal areas on the site, require lighting to adoptable standards and have a maintenance and management programme in perpetuity.

Design and Access Statement Prompts

- How does the design of the street prioritise the needs and safety of pedestrians and cyclists?
- Are all highways within the site designed in accordance with the Highway Design Guide SPD?
- What measures are used within the site layout to deter anti-social car parking?
- Are streets within the site inter-connected?
- Are arrangements for bin storage and refuse collection well integrated into the site layout?

Relevant Local Plan Policies

LP5, LP20, LP21, LP24

7 Site layout

7.9 Parking

Principle 12

At the outset of the development, applicants should identify the need for car parking having considered a range of measures to reduce private car-use into the design of development and through travel plans such as promoting car sharing and car clubs, providing safe and convenient cycle infrastructure and parking, providing safe and convenient access to bus stops and providing improved passenger facilities and where appropriate working with bus operators facilitate bus services through the site; and seeking enhancements to existing bus services.

Any car parking provision should:

- **Not dominate street frontages through parking arrangements that place cars at the front of all dwellings and with overly dominant integral garages at the front of dwellings;**
- **Be provided in a mix of different formats including on street car parking, parking in mews courts, parking courtyards and under-croft / underground as well as within the curtilage of properties;**
- **Where car parking is included within the curtilage of a dwelling, creative design solutions should ensure that car parking can be accommodated at the side of buildings or to their rear to avoid dominating the street scene;**
- **Where car parking is accommodated outside the curtilage of dwellings, it should be well-integrated into the street scene with landscaping; discouraging anti-social parking and within the view of properties; and**
- **Ensure that any garages are set back from the front door of the house or are carefully designed in terms of materials so that they are not the dominant feature; any garage must be**

large enough to accommodate a large family car following guidance set out in the Highway Design Guide SPD.

7.51 Local Plan Policy LP22 sets out principles for the provision of car parking, with advisory car parking standards set out in the Highway Design SPD. The accessibility of development, type use and mix of development, availability and opportunities for public transport and local car ownership levels should be considered, as well as providing for charging points for low-emission vehicles.

7.52 Local Plan Policy LP20 supports measures to reduce car-dependency and states that travel plans will normally be required for major developments, with the travel plans including a package of measures including an approach to lower carbon emissions as part of the Council's response to the Climate Emergency.



Undercroft and on-street parking provided at the Malings, Newcastle to ensure the development maximises development density

7.53 The inclusion of car parking should avoid dominating the streetscape and the frontage of development, there are a range of different ways car parking can be included but not be over-dominant:

- On-plot car parking at the front of a property resulting in bland streetscapes should be avoided;
- Integral garages should be carefully designed to ensure that they do not dominate frontages;
- Car parking within the streetscape and within the plot at the front of dwellings should form part of a well-landscaped streetscape so its visual effect is minimised, such as screening with low hedgerows, avoiding the creation of bland streetscapes that are dominated by car parking.). In the case of under-croft parking, consideration should be given to security measures, including access controlled entry;
- Support the creation of traffic-free and low-traffic streets by carefully considering the location of secure car parking within the site;
- Ensure parking provision is well-lit, allows safe access to/from the homes it serves and is within view of active windows of dwellings (e.g. living rooms or kitchens);
- Where rear parking courtyards are provided they should be within sight of active windows of dwellings, well-lit with access protected by a gate, in accordance with Secured by Design guidance;
- Streets should be designed to ensure that anti-social car parking does not detract from the street scene.

7.54 New homes should have sufficient space for easily accessible and secure cycle parking; in accordance with principle 17. Secured by Design Homes 2019 provides detailed guidance on providing secure cycle parking.



An internal courtyard provides car parking at Carpino Place, Salford to allow the front of the buildings to interact with the street

Design and Access Statement Prompts

- Is car parking provision appropriate in the context of alternative transport options?
- How is car parking been integrated into the site to ensure that it is not visually dominant?
- If integral garages are provided, are these designed in a way that minimises their visual dominance?
- Is convenient and secure cycle parking provided?

Relevant Local Plan Policies

LP20, LP21, LP22, LP24

8 Architectural details

8 Architectural details

8.1 Materials and detailing

Principle 13

Applicants should show how different materials which are prevalent in the vicinity of the site have been taken into account in the proposal.

Consider the use of locally prevalent materials and finishing of buildings to reflect the character of the area.

A simple palette of materials, appropriate to the site's context, should be identified early in the development process to help give the site a coherent identity. The embodied carbon of the material in terms of the environmental impact of its production, transportation and thermal performance should be a prime consideration in the development process.

The detailing of the public realm on larger schemes can help form part of a cohesive public art strategy for the site; and help create a rich identity supporting the distinctive character of Kirklees.

8.1 Applicants are expected to consider the materials that are prevalent in the local area, as set out in Principle 2. It is recommended that:

- A simple palette of materials is used to create a positive contrast to existing buildings and help create a richer variety of architecture;
- The use of high quality contemporary materials is considered on the merits of the proposal and its location, with particular attention given to proposals in the setting of listed buildings and conservation areas and other designated heritage assets;

- Where modern methods of construction and modular housing form part of the scheme, consideration is given to the appropriateness of non-traditional building materials;
- Rainwater goods, gas pipes and meters, television antennae and cable boxes are carefully integrated into the design of new homes;
- Consideration is given to the role of projecting eaves, cornices and mouldings in shedding water from the face of a building; and
- Applicants look to include features that help mitigate the effects of climate change such as green walls and green roofs.



An example of energy efficient homes that are built off-site at the Climate Innovation District, Leeds (Image: Citu)

- 8.2** Regard should be had to the sustainability and durability of building materials, including their embodied energy, maintenance requirements and weathering. Modular developments, which are built off-site are often built from timber frames and clad with non-masonry materials with high solar and thermal performance ⁽⁷⁾. Recycled and reclaimed materials help the Council meet their obligations in reducing waste and avoid the energy intensive process of sourcing new materials. More information is set out in Principle 18.
- 8.3** The consideration of architectural details in new developments should be integral to the design and the vision of the proposal at the outset. Contemporary and innovative approaches will be welcomed where they are of high quality and complement the existing context, although care must be taken in the setting of listed buildings and conservation areas.
- 8.4** The Council's Public Art Policy provides further detail on the role of public artists in developing a rich and meaningful public realm which celebrate local character and distinctiveness.

Design and Access Statement Prompts

- Does the development contain a simple palette of materials which is appropriate for the site's context?
- Are the chosen materials durable and sustainable in terms of their energy performance and maintenance requirements?
- How does the architectural detailing make apposite contribution to the character of the local area?
- Has careful consideration been given to incorporating rainwater goods, gas meters, television antennae and cable boxes?

Relevant Local Plan Policies

LP5, LP24, LP35

⁷ Part B of the Building Regulations includes information on building materials and their suitability.

8 Architectural details

8.2 Windows and doors

Principle 14

The design of windows and doors is expected to relate well to the street frontage and neighbouring properties and reflect local character in style and materials. Innovation for energy efficiency is encouraged, particularly for maximising solar gain to allow for passive solar construction.



Vertical emphasis and rhythm from openings at Timekeepers Square, Salford

8.5 Windows and doors help shape the relationship with the street and other buildings. Openings on a building's primary elevation can help form a 'rhythm' to the street and providing an active frontage to the street. Vast expanses of blank walls should be avoided.

8.6 It is recommended that:

- The proportion and form of windows and doors should have regard to the size, form and orientation of windows, as well as the number of openings and the hierarchy of windows and doors in nearby properties;
- Openings should have a coherent pattern and their design should have regard to the local character and with the design of windows through a site being an important part in generating a sense of identity;
- Front doors should be prominent and there should be regular front doors along a streetscape to promote active frontages and interaction with the street;
- Porches should not be overly dominant, nor seen as an 'add-on' to a home but should be carefully incorporated into the overall design; and
- The detailing of windows and the quality of materials should be reflected on all elevations of the house.



Contemporary window materials set back in deep reveals at St Chads Tilbury (Image: Kilian O'Sullivan www.kilianosullivan.com)

Design and Access Statement Prompts

- Do the windows and doors provide a consistent rhythm to frontages?
- Are porches well integrated into building frontages and how do they complement the palette of building materials?

Relevant Local Plan Policies

LP5, LP24, LP35

- 8.7** Windows should be set in a reveal to add depth, articulation and to avoid flat facades and to ensure that window frames and facades are better protected from weathering.
- 8.8** Secured by Design Homes 2019 guidance provides detailed information on the security of windows and doors, above the current Building Regulations Part Q requirements.

8 Architectural details

8.3 Rooflines

Principle 15

The design of the roofline should relate well to the site context, including topography, views, heights of buildings and the roof types. Consideration should be given to the pitch of roofs, the inclusion of dormer windows, provision of green/blue roofs, the role of roofs in providing outdoor space and ensuring that the design of roofs does not allow for easy climbing access to upper floor windows.



The roof profile following the contours of the hill at Batley

- 8.9** Topography is a key determinant of the character of the built form in the district. Buildings and their roofscape should follow the topography; with development on steeper slopes comprised of smaller plots to allow buildings to easily step-down hillsides or with the building footprint design accordingly to take account of the topography.

- 8.10** The roof form of a building should respect that of neighbouring buildings, but more modern forms and green roofs are encouraged, with further information in Principle 18, as well as utilising roofs for semi-private outdoor space, subject to maintaining residential amenity and privacy as set out in Principle 6.

- 8.11** Where an area is characterised by a dominant building height, it would not normally be appropriate to seek a different building height. Some areas will have a range of building heights; and in some cases, a higher roofline can help form more enclosure around the street. Consideration should be given to the height of roofs and their impacts on views and landmarks; and how the development is viewed.



A distinctive roof profile using contemporary materials at Timekeepers Square, Salford

- 8.12** The pitch of the roof and materials should be consistent throughout the site and respect the local context. The ridge of a pitched roof should generally be parallel to the line of the street, subject to local character considerations, though a series of gable ends under pitched roofs can help create rhythm to a frontage and add interest to the streetscape, alongside patterns of windows and doors. High pitch angles should only be used where the building has a narrow span to avoid over-dominant roof forms. This needs to be considered where newer buildings are deeper in plan than neighbouring traditional buildings.
- 8.13** Chimneys have traditionally been an important part of the roofscape, particularly in providing punctuation to long ridgelines. Whilst traditional chimneys may not be necessary, combined service cores for gas flues and natural ventilation hoods can be incorporated into the roofscape where chimneys are a key characteristic of an area.
- 8.14** Dormers should be carefully integrated within the design of new homes, using the same materials and not being over-dominant. The purpose of dormer-windows should not be to gain extra headroom over any great width. For new dwellings it may be more appropriate to include this as an additional storey. Dormers tend not to be a feature of traditional buildings in the district and their incorporation into designs should be carefully considered.

Design and Access Statement Prompts

- Is the pitch of roofs consistent within the site and does the roofscape reflect local character?

Relevant Local Plan Policies

LP5, LP24, LP35

9 Home design

9 Home design

9.1 Internal space standards

Principle 16

All new homes should aim to be accessible and adaptable homes to meet the changing needs of occupants over time in accordance with Building Regulations. The provision of homes that meet these standards should be considered within the housing mix of the wider site in line with Local Plan policy LP11 (Housing Mix and Affordable Housing).

All new build dwellings should have sufficient internal floor space to meet basic lifestyle needs and provide high standards of amenity for future occupiers. Although the government has set out Nationally Described Space Standards, these are not currently adopted in the Kirklees Local Plan. The council will seek to adopt such a policy in the future in accordance with evidence and in the meantime will seek to ensure high quality living environments through the application of Local Plan policy LP24 (Design).

9.1 Occupants must have sufficient space within their homes to be able to carry out day to day activities, and where homes are accessible and adaptable they are able to meet the changing needs of occupants over time. The government's Nationally Described Space Standards deals with internal space within new dwellings across all tenures. The standards as shown in the table below set out minimum requirements for internal gross floor area of new dwellings at a certain level of occupancy along with floor areas and dimensions for key parts of the home particularly bedrooms, storage and floor to ceiling heights. From April 2021, the National Described Space Standards will be required for new homes delivered through Permitted Development Rights. The Council recognises the nationally described space standards as best practice to ensure that new homes are able to meet basic lifestyle needs and provide high standards of amenity for future occupiers.

Number of bedrooms (b)	Number of bed spaces / persons (p)	1 storey dwellings (sqm)	2 storey dwellings (sqm)	3 storey dwellings (sqm)	Built-In Storage (sqm)
1b	1p	39 (37) ⁽⁸⁾			1.0
	2p	50	58		1.5
2b	3p	61	70		2.0
	4p	70	79		
3b	4p	74	84	90	2.5
	5p	86	93	99	
	6p	95	102	108	
4b	5p	90	97	103	3.0
	6p	99	106	112	
	7p	108	115	121	
	8p	117	124	130	
5b	6p	103	110	116	3.5
	7p	112	119	125	
	8p	121	128	134	
6b	7p	116	123	129	4.0
	8p	125	132	138	

Table 1 Nationally described space standards: minimum gross internal floor areas and storage (sqm)

Design and Access Statement Prompts

- Is the internal floor area for each dwelling clearly set out?

Relevant Local Plan Policies

LP24

8 Where a 1b1p has a shower room instead of a bathroom, the floor area may be reduced from 39m² to 37m², as shown bracketed, applicants should refer to the government's technical housing standards for further information.

9 Home design

9.2 Outdoor space

Principle 17

All new houses should have adequate access to private outdoor space that is functional and proportionate to the size of the dwelling and the character and context of the site. The provision of outdoor space should be considered in the context of the site layout and seek to maximise direct sunlight received in outdoor spaces. Apartment development can provide outdoor spaces through balconies, though communal terraces and gardens may be more appropriate.

- 9.2** External space should be able to accommodate activities such as playing, drying clothes, cycle, waste and recycling storage. Storage in gardens should be accessible through the garden and level considered.
- 9.3** The size of private gardens should be influenced by the size of the dwelling, the potential number of occupants and its location within the site. Garden sizes will vary between sites and homes and should be incorporated in a way that takes into consideration the site's context.
- 9.4** The provision of outdoor space should take account of the access to sunlight, with at least part of open spaces within the site able to receive direct sunlight for part of the day all times of the year. Outdoor space should be provided in line with a perimeter-block approach as set out in Principle 5 and have regard to residential amenity as set out in Principle 6.
- 9.5** Where developments have areas of ecological importance, these should not be included within the curtilage of residential gardens; these areas should be planned in accordance with the strategy for preserving and enhancing existing vegetation and habitats as set out in Principle 8.

Design and Access Statement Prompts

- Do all dwellings have access to useable outdoor and has consideration been given to how the outdoor space can maximise the amount of sunlight that it receives for at least part of the day?

Relevant Local Plan Policies

LP24

9.3 Energy efficiency

Principle 18

New proposals should contribute to the Council’s ambition to have net zero carbon emissions by 2038, with high levels of environmental sustainability by ensuring the fabric and siting of homes, and their energy sources reduce their reliance on sources of non-renewable energy. Proposals should seek to design water retention into proposals.

- 9.6** Well-designed places respond to the impacts of climate change by conserving natural resources. 40% of UK emissions come from households ⁽⁹⁾ with a significant proportion coming from how they are heated and how electricity is provided.
- 9.7** The Council declared a climate emergency in January 2019 and has adopted a target for achieving 'net zero' carbon emissions across the district by 2038. Climate change will have an impact over the life span of the development, it is therefore important to consider the effects of climate change at the beginning of the design process.
- 9.8** To help reduce the impact on the environment new residential developments should be designed in a way that helps reduce the reliance on sources of non-renewable energy. This in turn will reduce greenhouse gas emissions and minimise embodied energy. Improving the energy efficiency of new build homes will not only help to achieve sustainable design but will also help reduce fuel poverty and the potential health risks of living in a cold home or over-heating. Homes can take advantage solar gain, typically with one elevation facing within 30 degrees of due-south and supporting the position of dual-aspect

buildings to allow for the penetration of natural light at different times of the day. This needs to form part of an integrated house design that avoids overheating.

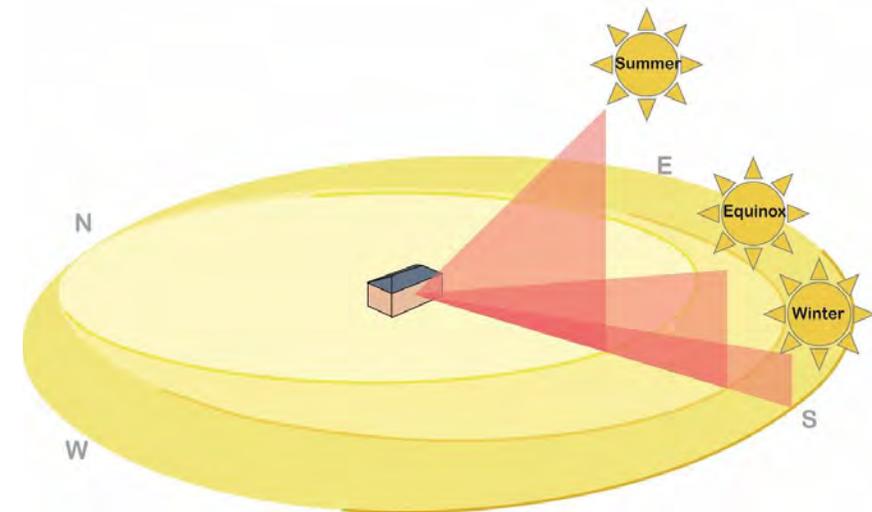


Diagram indicating the path and angle of the sun at summer, equinox and winter

- 9.9** It is crucial that early consideration is given to the building fabric, maximising a fabric first approach will ensure energy efficiency and minimise energy requirements. New homes should be designed to achieve thermal comfort without the need for mechanical space heating and cooling. This can be achieved through insulation, air-tight windows and doors and avoiding thermal bridges. The type and arrangement of windows have a significant bearing on energy efficiency and energy use, following the advice set out in Principles 6 and 14. Green roofs can have a positive heat regulating effect, with consideration given to Principle 15.

9 Home design

- 9.10** The council will support the use of renewable energy sources within residential schemes. Larger development sites have the potential to utilise heat and power networks such as ground source heat pump, water source heat pumps and gas combined heat and power. These systems can be installed as an alternative to large number of individual gas boilers and will be supported by the council.
- 9.11** The design of homes should look to include measures which increase the retention of water, and are efficient in their use of water by considering elements such as rainwater harvesting, greywater recycling, the use of water butts.

Design and Access Statement Prompts

- How does the development improve resilience towards climate change?
- Does the development make use of innovative technologies to reduce energy and water consumption?
- Does the design of homes utilise opportunities to have larger windows to southern elevations?

Relevant Local Plan Policies

LP24, LP26, LP28

9.4 Waste

Principle 19

Provision for waste storage and recycling must be incorporated into the design of new developments in such a way that it is convenient for both collection and use whilst having minimal visual impact on the development.

9.12 The storage of refuse and recycling wheelie bins and boxes should be fully accommodated into the design of new housing developments. Solutions to how waste and refuse storage is incorporated into the design of residential developments will be dependent on local characteristics, house types and should complement the design approach.

9.13 It is important to limit the visual impact on the street scene. Bespoke well designed enclosures to the front of dwellings may be required, enclosures may form part of a dwellings defensible space. Storage areas should not be located in areas where they cause obstruction to pedestrian or vehicles. For bin collection, presentation points should be provided in accordance with advice set out in the Highway Design Guide SPD.

Communal bins

9.14 Developments including apartments and sheltered accommodation the provision of communal waste and recycling areas may be a more practical solution. Any communal bin collection should be well-designed, well-screened and fit into the streetscape; potentially utilising design features such as green roofs and provide controls to prohibit unauthorised access. Further advice is in the NHBC document 'NF60 Avoiding Rubbish Design'. The location of bin storage should be in line with guidance in the HDG, the Council's Waste Management Design

Guide for New Developments and Building Regulations 2010, part H. The siting of bin storage and communal bin storage areas must be away from dwellings to prevent climbing access to upper floors.

Design and Access Statement Prompts

- Is waste and recycling storage convenient and well-designed?

Relevant Local Plan Policies

LP24, LP43

