STEVENAGE DESIGN GUIDANCE 2021

Supplementary Planning Document

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Part 1 – Purpose of the Stevenage Design Guidance

Introduction

1.1 Stevenage Design Guidance 2021 supports the strategic and detailed policies in the Stevenage Borough Local Plan (SBLP). This guidance forms a Supplementary Planning Document (SPD) which is an additional 'material consideration' in planning decisions. This guidance replaces the Stevenage Design Guide 2009; updating advice where appropriate and providing new guidance on matters introduced or strengthened in the SBLP.

1.2 This document was adopted as a Supplementary Planning Document at a meeting of the Executive Committee of Stevenage Borough Council on XX XXXX 2021.

Image: Hertfordshire LEP

1.3 A draft version of this document was subject to public consultation between 9 August 2021 and 4 October 2021. The consultation was carried out in accordance with the Town and Country Planning (Local Development) (England) Regulations 2004, as well as Stevenage Borough Council's Statement of Community Involvement. A summary of the representations received and the Council's response to these is set out in the Statement of Consultation which accompanies this document.

How to use this design guidance

1.4 This Stevenage Design Guidance sets out clear design principles to guide future development in Stevenage. It encourages a design led approach to all development, from large residential schemes to modest residential extensions and small infill developments.

1.5 This Guide provides design principles are for all developments, accompanied by illustrations and good practice examples, to help deliver good design and clearly signpost where more detailed guidance can be accessed. It aims to be user-friendly and does not seek to replicate existing policy and regulations that will continue to apply to all development.

Looking forward

1.6 This guidance has been prepared in the context of social, economic and environmental change. Technological change is rapid, with developments in digital, artificial intelligence and machine learning affecting our lives at all scales.

1.7 The demographics of Stevenage are also driving change as the population ages, the needs of some residents are changing from those originally provided for through the development of the New Town. Young people's expectations are changing too; leading to new lifestyles and new models of home ownership.

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1.8 We expect continuing change as a consequence of climate change, changing home ownership models and technological changes. It is likely to emerge and embed in society rapidly. It will influence the planning, design and construction of new homes and places.

Components for good design

1.9 Urban design is the design of towns and cities, streets and spaces, and concerns all aspects of the public realm, including the detailed design of buildings and landscapes, the way in which places work and the relationships between existing and new developments.

1.10 Good design translates into more than the appearance of buildings. It is important in both small residential extensions and large-scale developments that introduce form and materials and the creation of new streets and spaces. Functionality and practicality are embedded in design and are as important as the visual quality of a building or large scale development.

1.11 Well-designed neighbourhoods help build communities, give them a sense of belonging and make residents feel safe. Often this can be through simple approaches such as natural surveillance, an easy technique created when new streets and public open spaces are overlooked by windows and doors.

1.12 Carefully positioned car parking and cycle storage, as well as integrated refuse and recycling bins, also help to create a sense of order and reduce litter and vandalism.

Image Studio RHE

1.13 The quality of open space and the way in which new streets and spaces are designed direct affects how people feel about a place and the whole community benefits from a commitment to usable green space. Access to open space also has a direct impact on the health and wellbeing of those able to take advantage of it.

1.14 For commercial development, well designed buildings are good for business. The flexibility to respond to changing social and economic circumstances is important, as are design solutions which encourage creativity and innovation. Investment in good quality design provides a higher return on the investment made.

1.15 Good design in all development is inclusive and accessible for everyone, has a positive impact on the environment, integrates into its immediate and wider surroundings, provides flexibility for future change, is easily maintained and delivers a return on investment.

1.16 All places and spaces are different, and design is not about starting again from a blank canvas. The context and character of a place needs to be taken into account and renewal rather than demolition is encouraged where possible. There is no 'perfect blueprint' for good design, and trying to apply the same rigid principles everywhere would result in a loss of local distinctiveness and, therefore, counteract the objectives of the initial application of urban design principles.

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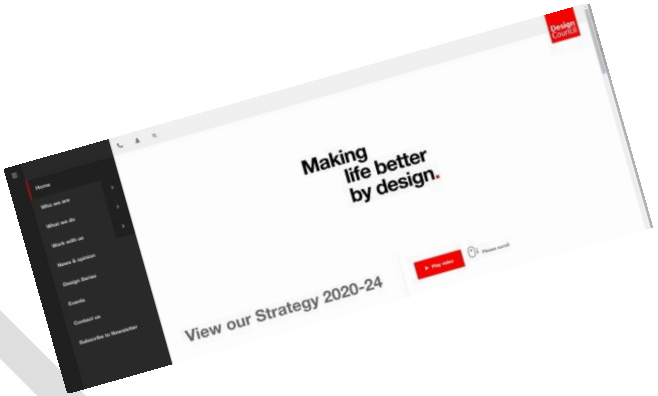
1.17 The government has placed a great deal of emphasis on the importance of creating well designed places. The Design Council provides an advisory service to the government and various best practice guidance publications have since been produced.



www.designcouncil.org.uk

The relationship between the Stevenage Borough Local Plan and the Stevenage Design Guidance

1.18 National and local planning policies influence whether a site is suitable for development and the form and nature of development. A planning review of relevant planning policy documents, including the Stevenage Borough Local Plan Policies SP8: Good Design, and GD1: High Quality Design, should be undertaken.

1.19 In addition, there is a series of other documents, including, Conservation Area Management Plans and Appraisals and Supplementary Planning Documents (SPD's) which are adopted or endorsed by the Council. These are material planning considerations in planning decisions and should be considered in the design of new development.

1.20 In some instances, construction may be able to proceed without the need for a formal planning application/approval. This is known as 'Permitted Development' (PD) rights. They derive from general planning permission granted by Parliament rather than the Local Planning authority. Further details are available from the Ministry of Housing, Communities and Local Government website.

1.21 Even if you do not need to make a planning application, you should follow good design principles, with materials, forms and architectural detailing.

1.22 In addition to planning policy, applicants should consider best practice in terms of sustainable design, creating better environments and the quality of the built form. Further advice is available from the Homes and Communities Agency (HCA), the Commission for Architecture and the Built Environment (CABE), Historic England and Landscape Institute publications.

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www.hertfordshire.gov.uk/microsites/building-futures/building-futures.aspx

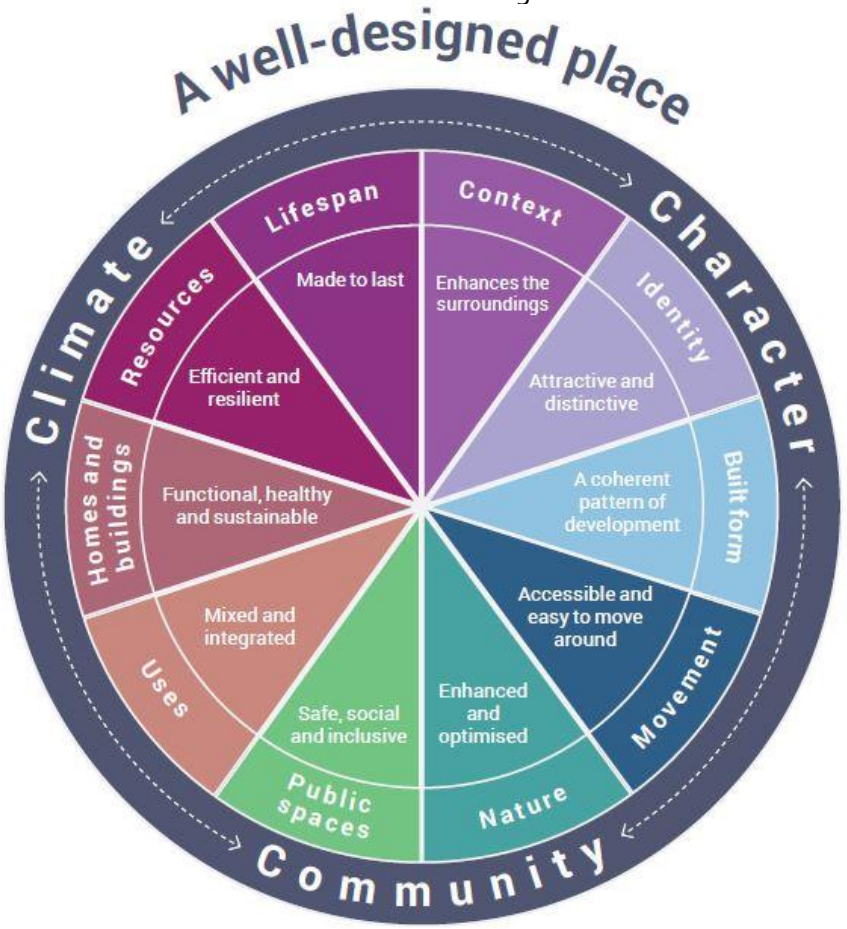
1.23 Hertfordshire County Council, in partnership with the Hertfordshire District and Borough council's, have produced Building Futures; a web-based guide to ensuring sustainable development in Hertfordshire. Aimed at planners and developers, it advocates high quality urban design as a catalyst for promoting sustainability. Modules within this guide contain information on energy, air, water, waste, safety and materials, which all interrelate to form an extensive design guide for sustainable and successful development. Building Futures must be read, in conjunction with this SPD, to ensure the sustainability of all development proposals.

Introducing the ten characteristics

1.24 The National Design Guide notes that well-designed places have individual characteristics which work together to create its physical character. These ten characteristics help to nurture and sustain a sense of community. They work positively to address environmental issues affecting climate. They all contribute towards the cross-cutting themes for good design set out in the NPPF.

1.25 This document is divided up into each of these ten characteristics in order to ensure that this guidance reflects accurately the characteristics of the National Design Guide.

Fig 1 – Ten characteristics from the National Design



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Part 2: The ten characteristics

Context

NPPF Chapters 8, 12, 14,15, 16

C.1 Context is the location of the development and the attributes of its immediate, local and regional surroundings.

C.2 An understanding of the context, history and the cultural characteristics of a site, neighbourhood ad region influences the location, siting and design of new developments. It means they are well grounded in their locality and more likely to be acceptable to existing communities. Creating a positive sense of place helps to foster a sense of belonging and contributes to well-being, inclusion and community cohesion.

Value heritage, local history and culture

C.3 Stevenage is Britain's first New Town. Designated in 1946, it was the solution to address overcrowding that was being experienced in the ravages of bomb-damaged London which lies approximately 30 miles south.

Image: BBC News

C.4 The New Town developed around the Old Town of Stevenage, and enveloped small pockets of rural settlement. The original Masterplan for the town was inspired by the Garden Cities movement, and incorporated a number of distinctive urban design features which made the development of New Towns a revolutionary stage in planning history.

C.5 Owing to its identity as Britain's first New Town, the inception of Stevenage has a prodigious place in development history in the United Kingdom. It is, therefore, crucial that the individuality of Stevenage is preserved, and enhanced. Once Stevenage's original features are lost they can never be replaced.

C.6 The Borough is broadly urban in its nature and is made up of a number of residential neighbourhoods. These neighbourhoods make Stevenage distinct in that they are individual and separate from the town's industrial areas of Gunnels Wood, adjacent to the A1(M), and Pin Green, to the north of the town.

C.7 Some of the neighbourhoods have ancient historic cores from which the neighbourhood has grown, such as Shephall, Symonds Green and Chells Manor. Historically, these small original settlements developed along the Great North Road because Stevenage was a significant staging post with inns catering for travellers heading to and from London.

C.8 Many of the New Town principles have led to the creation of a successful place; however, some have not worked so effectively, in the way they were planned.

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Understand and relate well to the site, its local and wider context

C.9 Since the town was developed, revised and nationally recognised principles of 'best practice' design have been produced. For the existing urban fabric of Stevenage there are opportunities to improve design through the integration of new schemes and the development of public realm improvements.

C.10 Generally accepted principles of good urban design should be adhered to in all new developments, but there are particular elements relevant to this New Town which require specific attention. In order to do this successfully, it is important that an understanding of the existing character of the town is formed, and that we learn from what has been successful and what has been less successful within the town.

C.11 A Stevenage Urban Character Assessment (Appendix A) was produced in 2008, which details the main characteristics of the residential areas within the town. This indicates the key features of the different neighbourhoods and highlights any relevant development considerations; providing details of both positive and negative aspects of the localities. This evidence is useful in providing a broad basis for site character appraisals and should be used as such when creating development proposals. It is important to note that the study covers neighbourhood areas as a whole and it is essential that each site is further assessed, on an individual basis.

C.12 An important part of considering development in Stevenage is to demonstrate a clear link between the appraisal of the context, any applicable planning designations, the character of the site, physical constraints and opportunities and the development proposals. This rationale will need to be explained through the Design and Access Statement that will accompany the planning application.

C.13 Stevenage's environment is protected by a number of local and national designations including Local Wildlife Sites, Conservation Areas, Listed Buildings and Scheduled Ancient Monuments which seek to preserve the area's natural and built environment for future generations. Applicants should check the SBLP Proposals Map and carry out their own desktop analysis, referring to the Council's website for further details.

C.14 A substantial amount of new housing is now required in Stevenage in order to meet the Objectively Assessed housing figures produced by Central Government. This provides the opportunity for Stevenage to learn from any past mistakes, make a real impact in terms of urban design, by modernising the town and preserving and enhancing the existing surroundings and historical attributes of Stevenage, where appropriate.

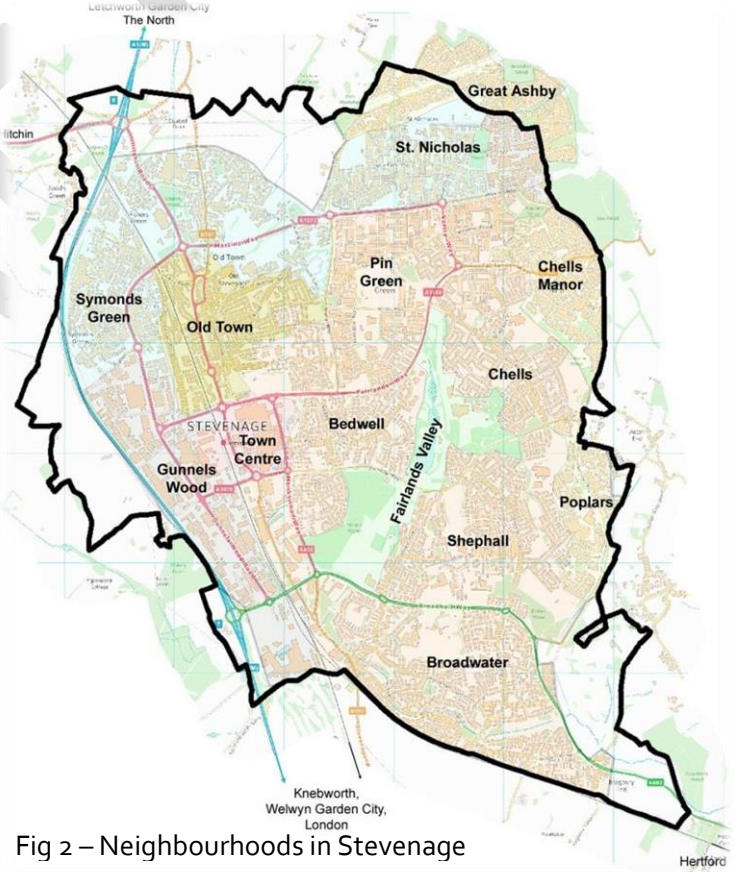

Fig 2 – Neighbourhoods in Stevenage

Image: Stevenage Borough Council

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Fig 3 - Stevenage Borough Local Plan Policies Map

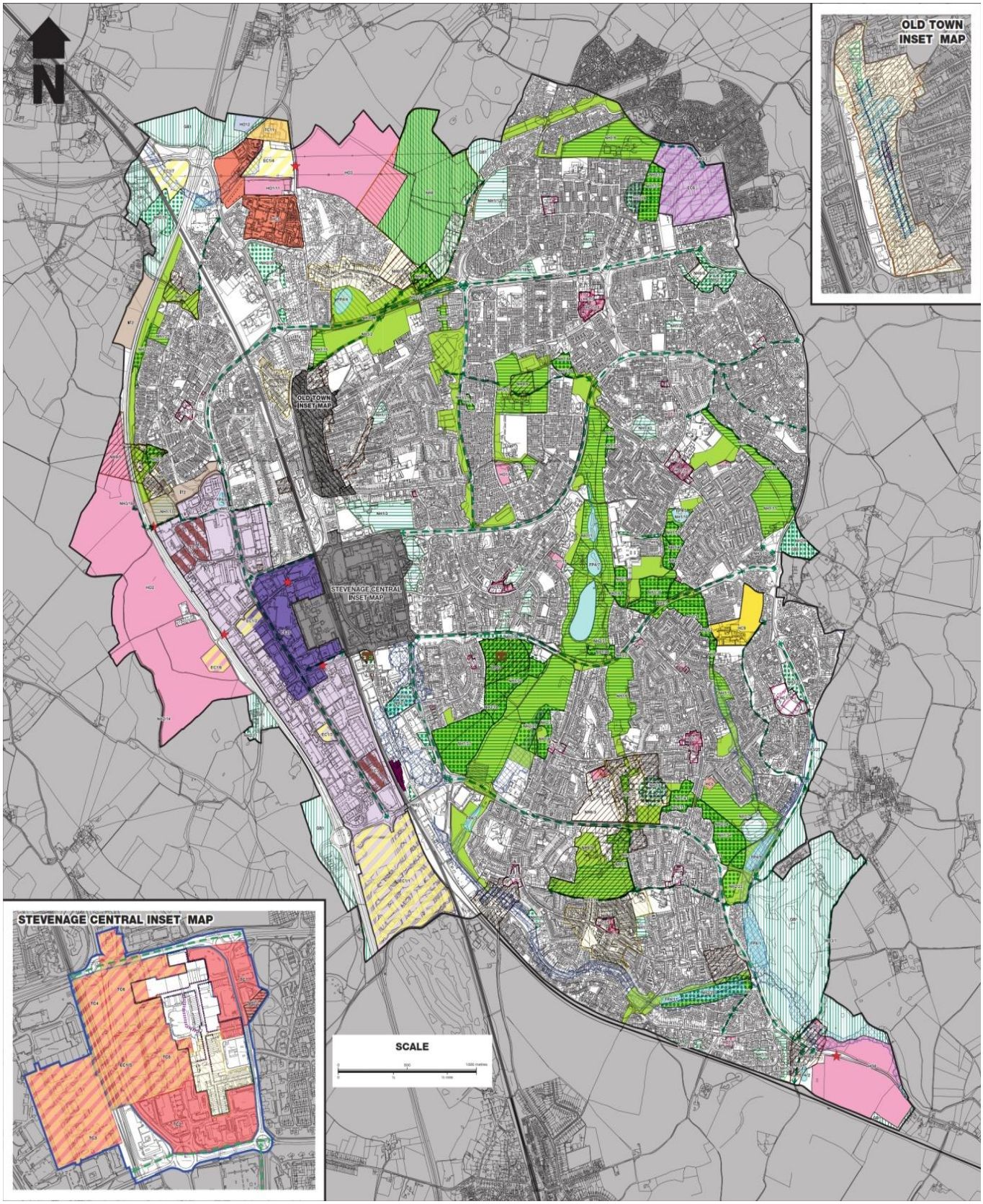


Image: Stevenage Borough Council

C.15 A high quality environment is essential for providing a good quality of life for residents. A well designed and managed space not only provides a visually attractive environment, but can also help to ensure that a place is easy to move around and within, is safe and secure, and is useful for all members of the community.

C.16 An understanding and analysis of the original New Town design concepts led to some key issues becoming apparent. These have been used as key themes, which run throughout the entirety of this guidance. Considering these concepts at all stages of the development process will provide a good basis for the creation of a successful place; based on the recognised principles of urban design, but also building on the existing fabric of the town without taking away from Stevenage's history as Britain's first Mark One New Town. The themes have been identified as follows:

- ✓ Sustainability – incorporate principles of sustainable development from a town-wide perspective to measures incorporated into an individual property.
- ✓ Increasing densities – encourage high densities in accessible locations.
- ✓ Respecting existing characteristics – respect local characteristics and preserve and enhance existing features, where appropriate.
- ✓ Legibility – provide landmark developments at nodal points.
- ✓ Design innovation – showcase Stevenage as an exemplar of high quality design; creating safer places through urban design techniques.

C.17 One of the key aspects of the original Masterplan for Stevenage was self-containment; on a town-wide scale, a balanced ratio of jobs and houses were provided, housing was allocated to people who had jobs in the town, reducing the need for residents to commute to work outside Stevenage. On a more local level, residents were accommodated within six distinct neighbourhoods, each containing their own Neighbourhood Centre; accommodating shops, pubs, schools, community centres and other services essential for facilitating self-containment. The aim was to reduce the need to travel into the Town Centre, enhance community relations and facilitate the success of local businesses.

C.18 These self-containment objectives are directly in line with the National Planning Policy Framework as well as healthy living aspirations. Although Stevenage is not completely self-contained, the Neighbourhood Centres have proved to be a particularly popular and well-used element of the town. With flats provided on the upper levels of the developments, they also provide multi-functional areas, which are now regarded as an important feature of good design; in terms of providing an active environment for natural surveillance and encouraging community spirit.

C.19 Sustainable development runs as a theme throughout this guidance and key ideas are highlighted within appropriate sections. However, the main principles for sustainability in design are listed within this chapter.

C.20 This is not a fully comprehensive guide for sustainability, as there is a vast amount of information already available within the public realm. In addition, technologies are constantly being updated; therefore, it is essential that evolving guides are used.

C.21 Planning is crucial in the management of sustainable development, and with sustainability now at the heart of the government agenda, Local Authorities produce policies and guidance which supports these principles.

C.22 Our SBLP ensures that all new developments incorporate methods for encouraging sustainable transport, maintain and enhance biodiversity, minimise resource usage and reduce the overall environmental impacts of the development. Our policies also promote the use of renewable energies.

C.23 Planners, designers and developers need to work together to ensure climate change is taken into account at all stages of the development process.

C.24 With the amount of new development required in the town, there is the opportunity to make substantial gains in fostering sustainability. All new developments should minimise their carbon footprints. And existing homes and buildings can embrace retrofitting technologies to make a significant contribution to sustainability and climate change objectives. Government grants remain available for home owners to install energy efficient technologies.

C.25 Sustainable development not only helps tackle climate change but also provides benefits for communities including improved health and well-being and an enhanced quality of life.

Image: HouseSimple

C.26 Developers benefit from offering developments which are built sustainably. Consumers are more environmentally conscious and want to reside in eco-friendly homes, which reduce their impact upon the environment, as well as minimising household bills.

C.27 Corporate Social Responsibility is being seen as an increasingly important part of a company's reputation.

C.28 Comprehensive sustainability guidance can be found within Hertfordshire's sustainable development guide '[Building Futures]'. Specific information on methods, techniques and best practice case studies, as well as expanding on the main principles put forward within this SPD are included in this guidance.

C.29 Another feature of the town's development was the relatively low density of housing. This was a result of the aspiration to provide an 'open town', following the principles of the Garden Cities movement; with high levels of open space, an extensive network of green corridors and wide roads throughout the town. Most of the residential areas have a high prevalence of two storey, terraced, properties, each with its own private garden.

C.30 Housing is an area of weaknesses across the town. One of the main issues is the lack of an appropriate mix of housing sizes, types and tenures. There is a high proportion of three bedroom properties, and a lack of one and two bedroom properties, although this has been helped by the recent office to residential conversions that having been taking place in the Town Centre, as well as larger

Fig 4 – Principles of the Garden City Movement

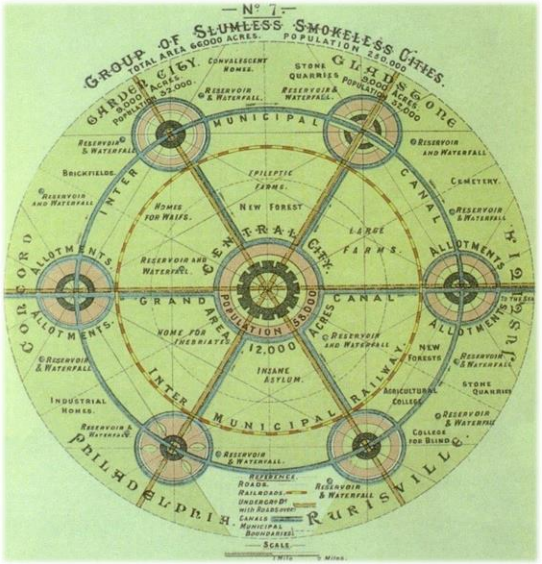


Image: Groundsure.com

homes. The lack of housing mix is exacerbated by changes in demographics leading to an increase in the number of single person households and couples needing homes.

C.31 Due to growth requirements for the town, there is a need to provide a substantial number of additional homes in Stevenage. Higher density development is set out as a key requirement of National guidance, and, where appropriate, densities will need to be raised in order to meet these targets for new homes. This will need to be carefully balanced with the need to retain open space provision within the urban area as access to open space was a key original feature of the town.

Identity

NPPF Chapters 8, 12, 15, 16

I. 1 The identity or character of a place comes from the way that buildings, street and spaces, landscape and infrastructure combine together and how people experience them. It is not just about the buildings or how a place looks, but how it engages with all of the senses. Local character makes places distinctive. Well-designed, sustainable places with a strong identity give their users, occupiers and owners a sense of pride, helping to create and sustain communities and neighbourhoods.

Respond to existing local character and identity

I.2 As a result of the prevalence of two storey, terraced properties, a reasonably continuous building height is broadly provided across the residential areas of the town. However, the Neighbourhood Centres do generally contain three storey buildings, helping to demonstrate their importance within the locality.

I.3 Although much of the original housing is similar in style, subtle differences exist between the housing in each of the residential areas, mainly attributable to the materials used. Since the initial development of the New Town, further neighbourhoods have been created, which follow the same basic principles, but also allow for modernisation.

I.4 The character of the town's housing varies more significantly between the original New Town housing, such as Bedwell and Shephall, and the modern estates built throughout the 1980's and 1990's, including Great Ashby, Chells Manor and Poplars. The more recent developments have respected the neighbourhood development strategy of the town but have strengthened the design and aesthetic value, by becoming a visible new extension with their own character.

I.5 There is a need to take this further in the future, as innovation in design, and contemporary architectural achievement is currently lacking in the town. Stevenage will benefit from landmark developments at key nodal points, which will assist in linking areas, as well as improving the legibility of the place, as set out in Policy EC5 of the SBLP. However, care should be taken to respect the existing characteristics of the town, and not to take value away from the New Town concepts.

I.6 Combining these ideas, contemporary buildings at appropriate locations will help achieve the higher densities required, as well as carrying forward and enhancing Stevenage's unique sense of place.

Well-designed, high quality and attractive

I.7 Places should be visually attractive and aim to bring pleasure to users and passers-by. They should cater for all users and be well-designed.

I.8 Well-designed places should appeal to all of the senses; its enduring distinctiveness, attractiveness and beauty are all effected by its looks, feels, sounds and even smells.

L.9 Buildings should:

- adopt typical building forms of the neighbourhood in which they are situated – developers should refer to Appendix A – Urban Character Assessments for more detail;
- draw upon the architectural precedents that are prevalent in the local area;
- use local building, landscape and topographical features, materials and plant types;
- introduce built form and appearance that adds new character and difference to places; and
- create a positive and coherent identity that local communities and residents alike can identify with.

Create character and identity

L.10 Character starts to be determined by the siting of development in the wider landscape, then by the layout. It continues to be created by form, scale, design, materials and details of buildings and landscape. In this way it creates a coherent identity that everyone can identify with, including the local communities and residents.

L.11 Where the scale or density of new development is very different to the existing place, it may be more appropriate to create a new identity rather than scale up the character of an existing place in its context. New character may also arise from a response to how today's lifestyles could evolve in the future, or to the proposed method of development and construction.

L.12 Where the character of an existing place has limited or few positive qualities, then a new and positive character will enhance its identity.

Built Form

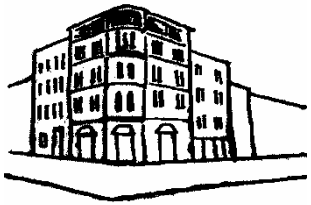
NPPF chapters 8, 9, 11, 12

B.1 Built form is the three-dimensional pattern or arrangement of development blocks, streets, buildings and open spaces. It is the interrelationship between all these elements that creates an attractive place to live, work and visit, rather than their individual characteristics. Together they create the built environment and contribute to its character and sense of place.

Compact form of development

B.2 The size and scale of a building, especially in relation to its context, is an important consideration when planning a development. Buildings and new developments should relate to their neighbouring buildings, 'stepping up' or gradually increasing from one height to another and they should not inappropriately dominate the street scene. Buildings should create landmark developments and incorporate taller buildings at nodal points, and in easily accessible locations.

B.3 Well designed, tall buildings can make a positive impact on a place, especially if they are to become identifiable landmarks at key nodal points.



Taller developments should gradually increase in height from their neighbours

B.4 Tall buildings should be carefully positioned to mark prominent landmarks, making it easier for people to find their way around, emphasising corners, particularly at important junctions or gateways, by curving the frontage, wrapping the fenestration around the corner or terminating the roof differently. Tall buildings can further emphasise corner building by raising the height of roof thereby creating visual interest and a distinctive identity, meaning that they can also be effective as landmark developments. These buildings should be designed to a high quality, as they are to become a prominent feature across the town, showcasing architectural innovation and best practice. Tall buildings help frame and define existing views, rather than blocking important features out and as such they should not appear out of place within the existing landscape or destroy existing views and reduce continuity.

B.5 Views of and from the public realm can also enhance legibility throughout the town, and should therefore be protected as far as possible.

B.6 The use of tall buildings can also be beneficial in accommodating higher densities within Stevenage. Higher densities buildings can support public transport facilities and use land resources in a more sustainable and efficient way. They need to be designed in an effective way so that problems of overcrowding and reduced space standards do not arise. Tall buildings will be encouraged in easily accessible areas, and where space has previously been used ineffectively.

Appropriate building types and forms

B.7 Buildings should follow the existing building line of the area and respond positively to the existing frontage of a street. A sense of enclosure should be created by reducing the number of blank frontages and underutilised space. This will all contribute to improving the quality of the street scene.

B.8 Setback distances should be minimised to ensure buildings interact effectively with the existing public realm. Variation from the building line will only be allowed where it would not have any substantial impact on the surrounding environment and street scene.

B.9 The concept of buildings defining and creating public spaces is extremely important. Buildings should be located so that a clear distinction can be made between their public fronts and private backs and they should actively add interest to the public realm. This can be achieved through design details such as a large number of windows and doors, evident internal uses, and narrow building widths creating a variety of different frontages and building functions. Frontages should create interest and add vitality at ground level and provide the opportunity for a busy social environment and a good level of surveillance. Active frontages should be visible on all publicly facing walls on multi-fronted buildings, where more than one side faces the public realm, thereby avoiding blank frontages being created and should use high walls or hedgerows to separate private gardens from the public space where back gardens face out onto the public realm.

B.10 The relationship between building heights and street widths is important in identifying the enclosure of a place. Building frontages should provide a sufficient sense of enclosure, allowing for natural surveillance and providing an acceptable density for the area. Building frontages should allow for sufficient natural light and ventilation into the buildings and the street below and create a balanced feel to the area by incorporating both sides of the street. Combining tall buildings with very narrow streets will not be acceptable as this creates passageways which are not overlooked and do not allow for enough natural light and air to impact upon a building.

Movement

NPPF chapters 8, 9, 12

M.1 Patterns of movement for people are integral to well-designed places. They include walking and cycling, access to facilities, employment and servicing, parking and the convenience of public transport. They contribute to making high quality places for people to enjoy. They also form a crucial component of urban character. Their success is measured by how they contribute to the quality and character of a place, not only how well they function.

An integrated network of routes for all modes of transport

M.2 The extensive transport network was an integral part of the New Town's original design and layout. Facilities are provided for all forms of movement, including walking and cycling. These allow residents easy access to the separated land uses within the town. Consideration was also given to safety, and routes for vehicular and non-vehicular traffic were separated in an attempt to reduce the occurrence of road traffic accidents.

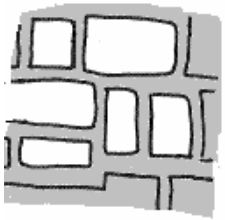
M.3 On the primary transport routes, routes for pedestrians and cyclists run alongside vehicular routes, but at junctions' vehicles are given priority and non-vehicular traffic is forced to travel under a series of underpasses in order to cross the roads. This makes it easier to travel by car, rather than promoting the benefits of sustainable transport. It also creates safety concerns, as some sections of routes receive no natural surveillance, and as people attempt to follow desire lines without appropriate pedestrian access provisions. In terms of pedestrian and vehicular access to homes, a large proportion of housing was built following Radburn layout principles; houses were built to face each other, with the front being only accessible on foot, and the provision for cars made at the rear. Again, this has led to a lack of natural surveillance, as well as rear parking courts being underutilised, and insufficient access for emergency services.

Image: Stevenage Borough Council

M.4 The separation of land uses is apparent throughout the town, with the residential areas being separated from employment areas, leisure uses and the Town Centre. This could be considered contrary to sustainability principles, as it increases the need to travel. However, the land use zoning has worked in Stevenage because of the ease of access to and from these areas by all modes of transport.

Organic block structure

Regular block structure



A clear structure and hierarchy of connected streets

M.5 Streets should be designed as public and social spaces and not just respond to engineering requirements. They should carefully consider what activities would like to be seen on streets i.e. walking safely within the neighbourhood without feeling threatened by traffic from nearby streets, cross the road easily, window shop, and socialise with friends in the outside areas of bars and restaurants. Streets should feature elements of community assets, such as open space, to evoke a better sense of community between residents of the street or visitors to the street. They should provide direct and attractive connections between key facilities that are suitable for all types of movement, particularly for pedestrians and cyclists.

http://www.stevenage.gov.uk/content/15953/26379/43876/Stevenage-Mobility-Strategy-December-2016.pdf

M.6 Streets should use a grid-type layout, which creates block sites for development. A variety of block sizes and shapes should be used to provide an effective balance and to promote diversity within a place. They should make use of existing infrastructure to minimise its impact upon the environment and take account of the existing routes around the site from the initial design stage. Existing routes should be improved where necessary, and consider accessibility for emergency services, delivery vehicles and refuse collection vehicles.

M.7 Places should be easy to get to and from, as well as easy to travel within, by all modes of transport. In line with sustainability and health objectives, movement on foot or by bicycle should be made as convenient as travelling by car. This should help to encourage physical activity.

M.8 A Mobility Strategy has been developed for Stevenage. Developers are encouraged to consult the Mobility Strategy to develop and enable the implementation of sustainable methods of transport for developments in Stevenage.

M.9 The cycling routes of Stevenage are extensive and the network was originally built into the fabric of the town as part of the vision of the New Town. New development should continue to extend the network as the town grows enabling the vision of segregated sustainable movement throughout the Borough to continue.

M.10 Walking and cycling provision should always be prioritised when designing access routes to, from and through developments.

M.11 Walking routes should be short, overlooked by surrounding buildings and activities, well-lit and not situated between blank frontages and they

Fig 5 – Cycle routes in Stevenage

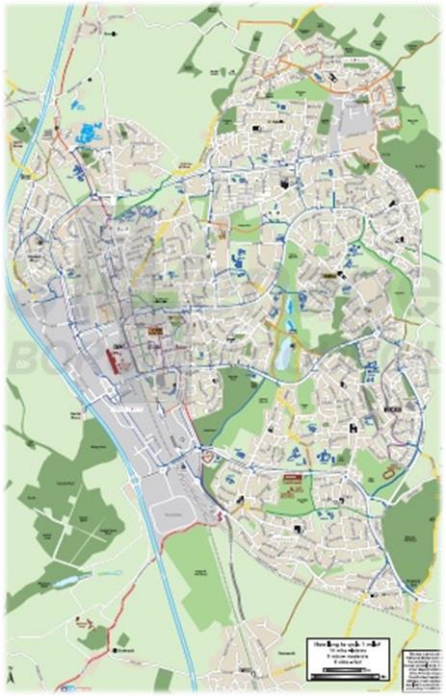


Image: Stevenage Borough Council

should make people feel safe when using them.

M.12 The inclination to walk is also influenced by the quality and attractiveness of the route. Routes should not be alongside a busy road as this can be unappealing and they should be convenient, direct and safe route through a town centre, residential area or an area of open space can encourage people to make extensive use of these facilities, helping improve the health of residents and the vitality of the town.

M.13 Where major traffic routes cross over major pedestrian routes, they should be defined by wide crossings on the same level, lighted and landscaped.

Image: Pauline Maryan

M.14 Implementing features which aim to aid pedestrian safety can inadvertently impede it. Introducing barriers around a main road can prevent people from crossing the road where they want to cross, and therefore hinder their direct route. This reinforces vehicle priority further.

M.15 Stevenage also comprises numerous subways where segregated footpaths and cycleways run under the main vehicle roads. Whilst being a useful way of ensuring the flow of traffic on both the cycle/pedestrian network and that on the road, these can cause safety concerns resulting in these routes being underutilised.

M.16 Encouraging the use of such conveniences by making them attractive and useful means of transit will discourage any antisocial behaviour in these areas.

M.17 Subways or footbridges should be well lit and as short and as wide as possible. They should be visible throughout (the exit should be visible from the entrance) and CCTV should be installed.

M.18 A number of underpasses in Stevenage feature public artwork, for example that which features in the Town Gardens and St Georges underpasses depict cast concrete reliefs of contemporary life by William Mitchell and were installed in 1973. Use of these areas for formal public art and cultural purposes will be encouraged.

M.19 Cycling routes should run alongside vehicular roads and be physically segregated cycle routes, rather than marked on the road. They should also connect to the already existing vast cycle network.

M.20 Providing a sufficient amount of appropriate parking for bicycle users is essential for promoting sustainable transport throughout the town and for encouraging a reduction in private vehicle usage. Both short and long term cycle

Fig 6 – Bus routes in Stevenage

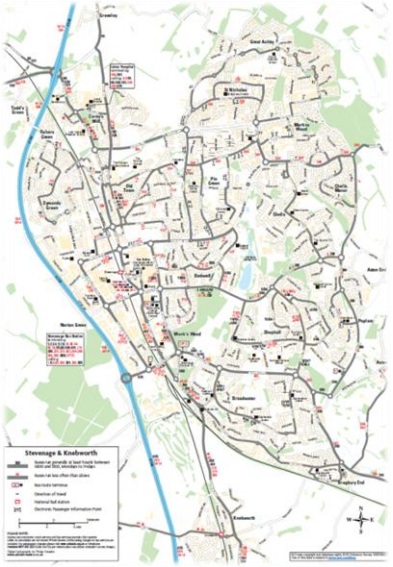


Image: Stevenage Borough Council

parking facilities should be provided. Storage for bicycles overnight should be provided as secure and covered, and should be integrated into the initial design of the development and not added as an afterthought. Cycle parking should ideally be accommodated within an individual site rather than as larger communal stores - larger stores can encourage crime if poorly lit and inappropriately sited.

M.21 Public transport provision is reasonably well provided for in Stevenage, with bus routes throughout the town, and a centrally located train station. However, people often have a preference for car use and so public transport needs to become a viable and attractive alternative option.

M.22 Road layout should ensure public transport is given priority and incorporate bus priority measures to reduce public transport travel times.

M.23 Higher density developments help to support public transport and vice versa. Higher densities should therefore be encouraged, in appropriate locations in order to support sustainability objectives. This can, in turn, bring about social benefits, such as improved health and fitness through people reducing their car use and walking to and from public transport provision.

M.24 Stevenage has a moderately extensive bridleway network around the town and it extends into the surrounding countryside. Whilst enabling transit by horse and pony, cyclists and pedestrian can also utilise them. Areas of disconnect in the network should be identified through development and appropriate connections should be designed into developments to facilitate the ongoing use of the network.

M.25 Streets should incorporate soft landscaping, in particular trees, to combat air pollution from vehicle emissions without creating a tunnel-like effect that will trap pollutants in the road corridor.

Fig 7 – Bridleway routes in Stevenage

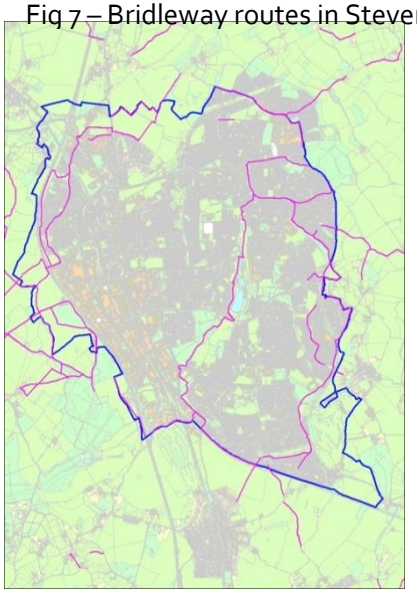


Image: Stevenage Borough Council

M.26 Tree species that should be considered are:

- Hackberry (*Celtis australis*)
- Common ash (*Fraxinus excelsior*)
- Norway maple (*Acer platanoides*)
- Ginkgo (*Ginkgo biloba*)
- Elm (*Ulmus minor*)
- Wild linden (*Tilia cordata*)
- Turkey oak (*Quercus cerris*)
- Broad-leaved linden (*Tilia platyphullos*)

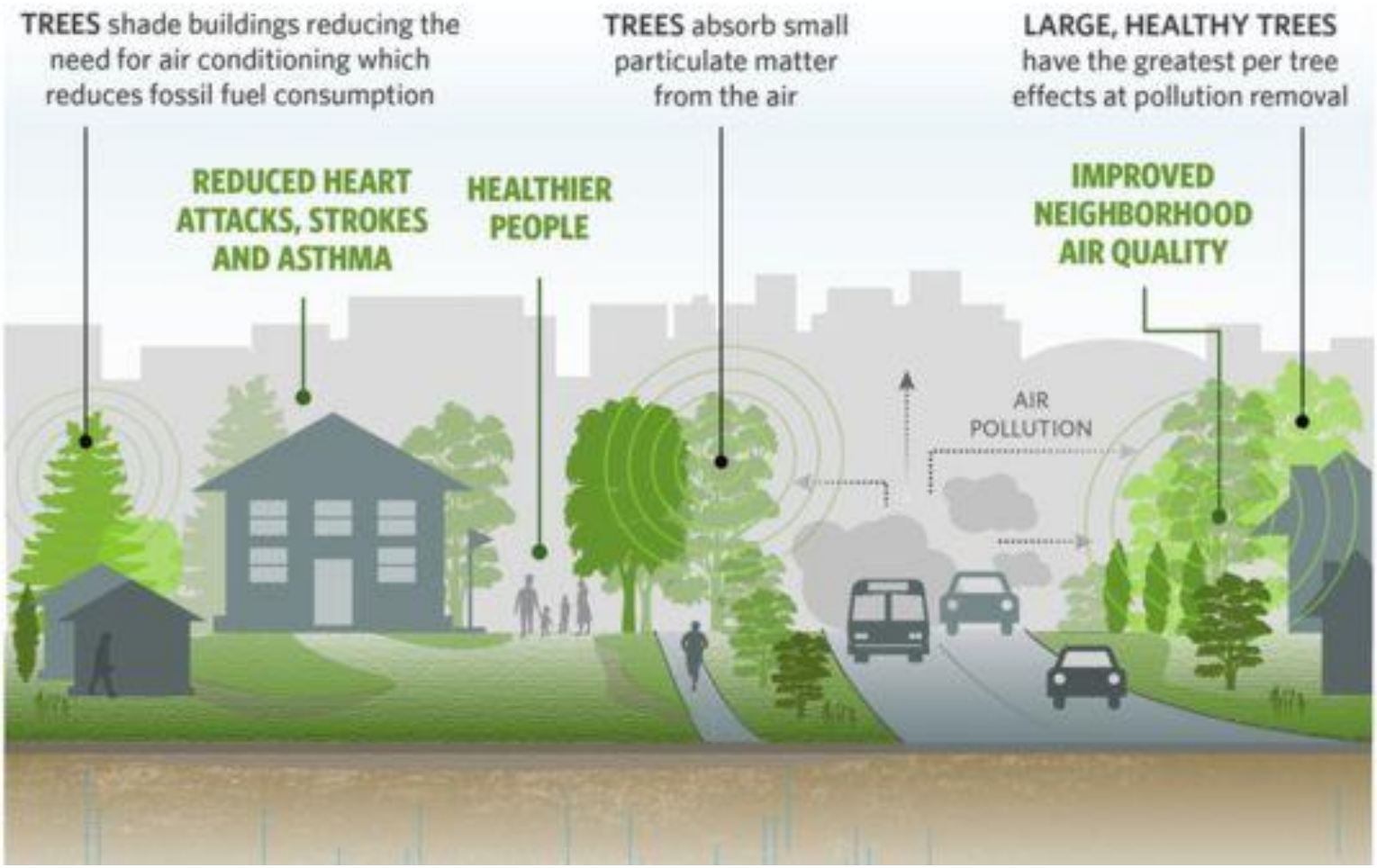


Image: BBC News

Well-considered parking, servicing and utilities infrastructure for all users

M.27 Car and cycle parking provision should be made in line with the requirements of our Parking Provision and Sustainable Transport SPD. Garages and carports should be set back from the street frontage and located close to the property that they serve, to avoid dead frontages. They should not be segregated blocks as these are not easily flexible for future change, do not allow spaces to be shared, and also suffer from a lack of natural surveillance.

M.28 Car parking in large developments should be creative; such as under croft or basement parking as this preserves street frontages and uses land more effectively. Landscaping should be used to minimise visual impact and, where security may be an issue, should be lit from dusk till dawn with energy efficient lighting and parking should be provided on several storeys and the visual impact reduced by 'wrapping around' single aspect apartments or other uses.

M.29 Traffic calming not only aids pedestrian safety, but by encouraging slower driving it can also help to reduce vehicle emission levels, and thus improve sustainability. Traffic speeds should be managed by the arrangement of buildings and spaces via simple, effective street design and not using barriers, unnecessary signage and traffic calming measures.

M.30 Streets should ensure that they cater for all levels of mobility. Steps and steep inclines should be replaced in favour of gentle inclines which enable mobility impaired people to use them fully as well as parents with pushchairs and young children. Narrow paths and road crossings should be avoided in favour of wide pathways which cater for wheel chairs, mobility scooters and pushchairs.

M.31 Ever improved technologies are being developed to help enable visually impaired individuals navigate streets such as Soundscape; the use of nodes allow the user to explore their environment and direct them to their destination. Such technologies have recently been piloted in Peterborough and we would support the implementation of the use of these technologies in Stevenage. Such technologies should be used alongside tried and tested methods of enabling visually impaired individuals to independently find their way around the town.

M.32 Residential developments should ensure that Mode 2 or Mode 3 electric vehicle (EV) charging points are installed for each residential unit. Where a garage is provided, the EV charging point should ideally be located at an accessible point near the entrance of the garage. Where resident parking is provided, EV charging points should be positioned in areas to serve the maximum number of residents at any one time.

M.33 In commercial and/or employment developments, Mode 3 and/or Mode 4 EV charging points should be provided to enable visitors and employees to utilise the facility. Again, the provision should be located in a suitable position to serve as many EV users as possible. Levels of requirement

Image: BBC News

will be dictated by the type of development and more information can be found in the Stevenage Parking Provision and Sustainable Transport SPD.

M.34 Commercial/employment EV charging points should be signed and marked for 'Electric Vehicle Charging Only' and Mode 4 charging points should be limited to 1 hour stay. The units should be protected from collision and positioned to avoid becoming an obstruction or trip hazard. Charging point controls, display and sockets or tethered plugs must be placed at a height of between 0.75 and 1.2 metres from the ground as per the British Standard on the design of buildings BS8300-1:2018 and BS8300-2:2018.

M.35 The level of provision must accord with the standards set out in our Parking Provision and Sustainable Transport SPD.

Nature

NPPF chapters 8, 12, 14, 15

N.1 Public open spaces are open to all. They provide opportunities for comfort, relaxation, stimulation and social interaction in a safe environment, to encourage interaction in an open space, its location and structure needs careful consideration along with its activities, versatility and how it can be used and accessed by all groups of people.

Fig 8 – Open Space in Stevenage

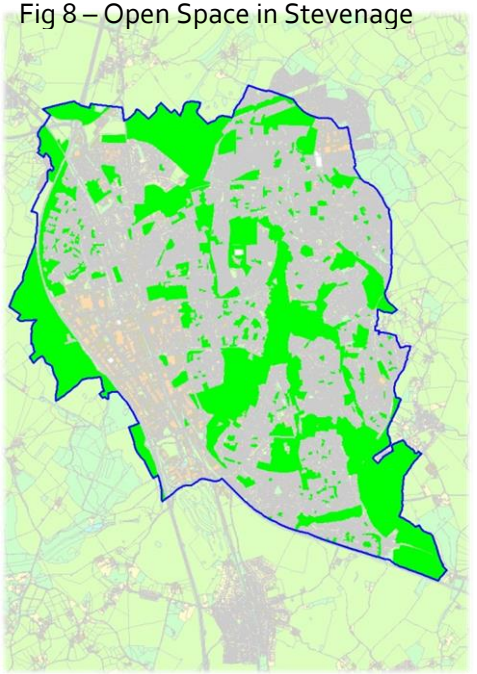


Image: Stevenage Borough Council

Provide high quality, green open spaces with a variety of landscapes and activities including play

N.2 Stevenage was designed to incorporate a network of open spaces and green corridors, which provide an important resource for biodiversity and recreation within the town. These are a key feature of New Town development and should be protected, maintained and extended as far as possible. Open space should be located so that it makes the most of existing natural features such as footpaths, trees and water as these can help to create attractive spaces, as well as encouraging biodiversity. Developments should consider existing open space features and include them within proposals and protect and enhance attributes and this can help a new development to integrate effectively into the existing area, as well as retaining important original features such as ancient lanes and associated hedgerows within the town.

N.3 Planting schemes should include wildlife friendly planting which allows for refuge for animals as well as a food source for insects and pollenators.

N.4 A range of different habitats should be provided in larger developments, for example trees, grassland and wetlands. Developers should refer to the Councils Amenity Tree Management Policy for more information.

N.5 Play spaces for children and young people should be provided across the borough and should include a range of larger and smaller open spaces which should include unequipped playscapes which provide an attractive landscape for young people of all ages, but also encourage informal/imaginative play through the provisions of features such as mounding, tree planting, at level maze etc. This should be done in a way that provides distinct areas for different age groups, but so that parents and carers are able to maintain visual contact with the young people.

N.6 Play spaces must be fully accessible for young people of all abilities and support inclusive play. Such areas should include suitable tree planting to allow for shading, combined with the provision of benches, litter bins, wider open space for picnics and low key kick about games for example. They should be highly visible and well overlooked with hard wearing, low maintenance equipment and suitable fenced to prevent access by dogs.

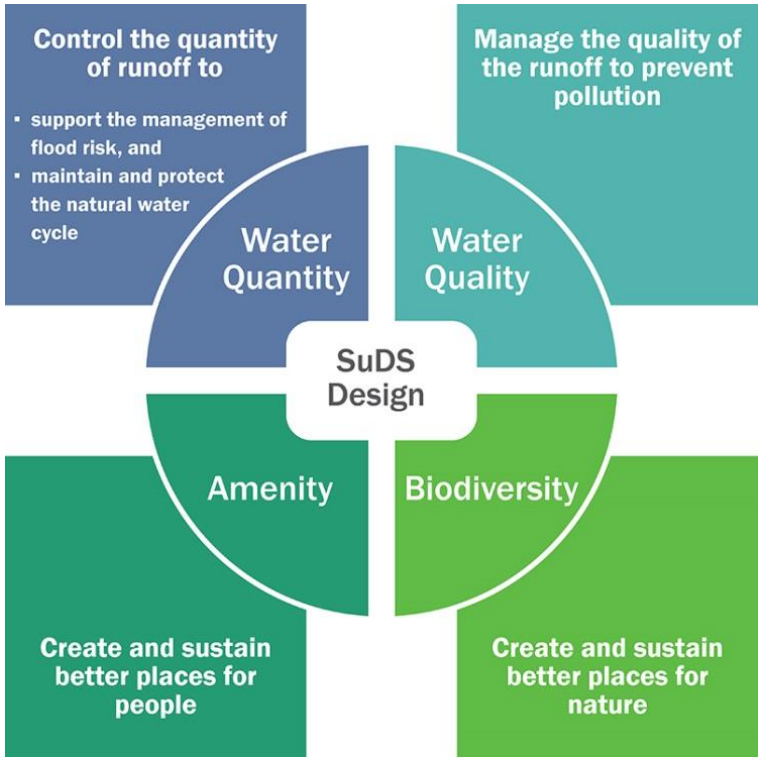
Improve and enhance water management

N.7 Stevenage suffers from surface water flooding, as evidenced in the Environment Agency's Surface Water Flood Maps. Flooding is likely to become more of a problem in the future due to climate change. As such, buildings and developments should maximise the use of Sustainable Drainage Systems (SuDS) techniques across development sites and individual buildings to allow rainwater to percolate into the ground. These SuDS features should provide sustainable solutions for flood and pollution reduction as well as landscape and wildlife benefit. Large scale SuDS schemes should be designed to ensure that they provide a valuable natural habitat and improve water quality, as well as reducing flood risk. The ongoing management of these schemes must also be considered at an early stage.

N.8 The Council are keen to promote the use of green roofs and walls, as well as blue roofs to achieve sustainable water management in the future.

Fig 9 – Areas of surface water flooding in Stevenage

Image: Environment Agency



Support rich and varied biodiversity

N.9 Stevenage benefits from high levels of open space and an extensive network of green corridors. This is a feature of the town that should be protected and enhance. As such, there is a requirement for all development to contribute towards improving the provision, quality and/or accessibility of local and strategic open space. This could be achieved through appropriate contribution or direct provision. Where direct provision is made, open spaces should form part of a green infrastructure network and make a positive contribution towards the townscape. They should be of high quality and have a primary role or function to prevent it becoming misused, unused or neglected. Open spaces should reflect the local context in the design of the local open spaces, which could be achieved through the use of materials, trees, planting, lighting and street furniture and thereby be multi-functional. Open spaces are ideal areas that can include provision for SuDS, benefit biodiversity and provide habitat, and they can also deliver high quality usable open and recreational space for residents to enjoy.

N.10 Developments should refer to Stevenage Borough Council's Impact of Development on Biodiversity Supplementary Planning Document and also the Council's Biodiversity Action Plan if they are likely to impact upon existing wildlife sites and other habitats in the town. SBC requires all new developments to take account of existing biodiversity, and to make all reasonable efforts to avoid habitat loss, fragmentation or disturbance of the ecosystem. Where this is not possible, excellent mitigation measures will be sought.

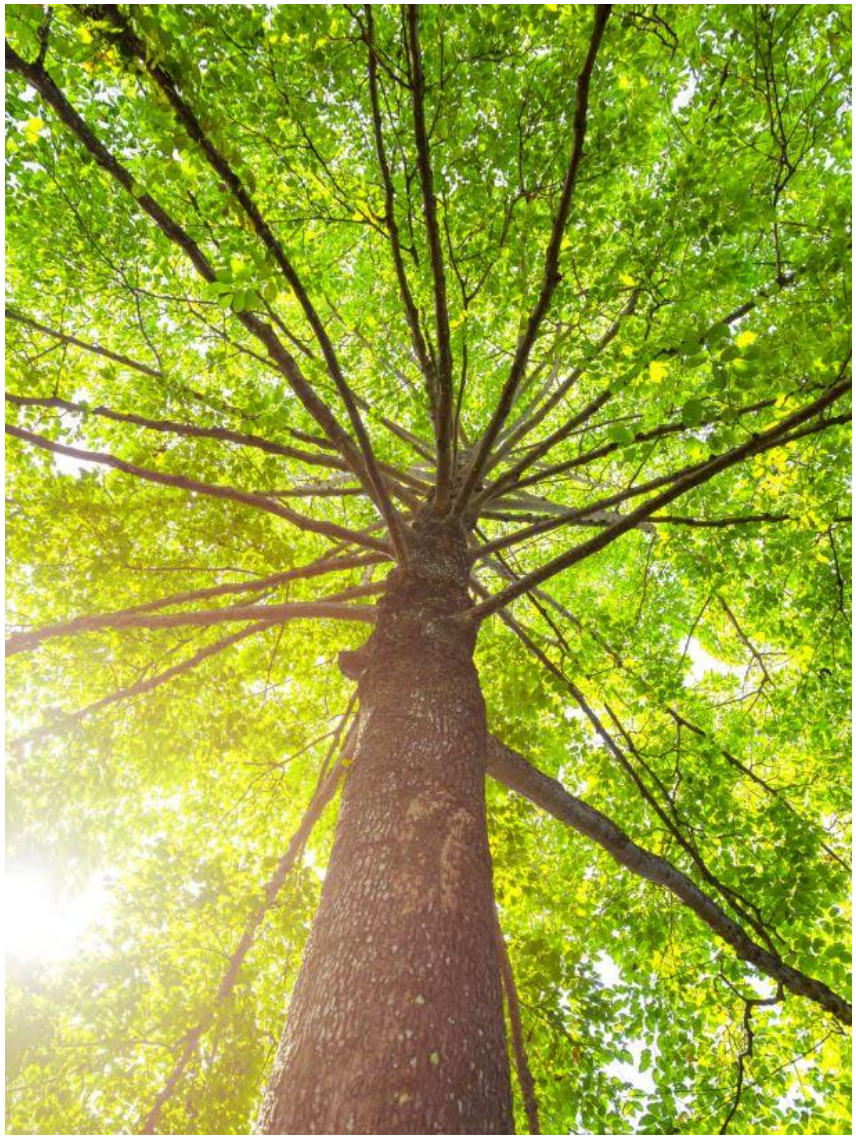


Image: Stevenage Borough Council

Public Spaces

NPPF chapter 8, 9, 12

P.1 The quality of the spaces between buildings is as important as the buildings themselves. Public spaces are streets, squares and other spaces that are open to all. They are the setting for most movement. The design of a public space encompasses its siting and integration into the wider network of routes as well as its various elements. These include areas allocated to different users – pedestrians, cyclists and cars – for different purposes such as movement or parking, hard and soft surfaces, street furniture, lighting, signage and public art.

Image: Pancras Square

Create well-located, high quality and attractive public spaces

P.2 Public spaces should be considered as part of the original design scheme and must not just be applied, as an afterthought, to leftover space. An expert should be consulted to ensure that the planting selected is appropriate to the scheme and the site context.

P.3 How attractive and well-maintained a place is can directly affect how people treat it; if a place is in good condition, people tend to treat it better and vice versa. Places should be designed for use during all seasons and by all members of the community. Landscaping of the public realm should be designed so that it is easy to maintain and manage, it should be wildlife friendly and include climate change tolerant planting in addition to providing year round interest, or can mature into a high quality space. It should ensure the long-term viability of street furniture to prevent some products creating eyesores and attracting crime. Street furniture should be made of a sustainable choice of materials, eg FSC timber or recycled/composite materials, it should have a small carbon footprint and have longevity of materials. Public realm should be uncluttered and should not reduce accessibility through the use of inappropriately sited street furniture pieces that can hinder access, especially for mobility impaired users and pushchairs.

P.4 Public realm should be coordinated and specifically designed to enhance the area and should include extensive soft landscaping, such as the planting of trees and shrubs, that is integrated into external areas of a development site in order to provide shelter and screen intrusive elements of the public realm but also provide green corridors for both people and wildlife that are aesthetically pleasing. Planting should be suitable to its location and, for trees, please refer to the Amenity Tree Management Policy. Suitable planting will also help moderate temperatures in an urban environment and contribute to the objectives set out in the Councils Climate Change Strategy.

Image: ANS Global – University of York, Environmental Building

P.5 Buildings surrounding public spaces should consider the installation of green walls and roofs as an alternative to traditional landscaping schemes, where space for green infrastructure and landscaping features is limited. These can help to improve the energy efficiency of buildings by retaining heat, and

have additional advantages such as helping to increase biodiversity levels and reducing surface water run-off.

Provide well-designed spaces that are safe

Lighting

P.6 Places should be well lit to provide a safe environment for pedestrians, and with particular attention being paid to key movement axes and desire lines across public spaces. However, light pollution, including glare, skyglow, light trespass and clutter, should be avoided to prevent energy wastage and reduce disruption to the natural day-night pattern and shifting the delicate balance of the environment.

P.7 Street lighting should be decorative as well as functional and enliven the whole of the area in a visually coherent and interesting manner. Street, building and advertisement lighting in the town centre should be creative and innovative but also ensure that streets and spaces are sufficiently well lit to promote personal safety. Lighting provision between adjacent developments should be coordinated to reduce clutter and does not overwhelm the space, particularly in predominantly pedestrian spaces;

Image: My Modern Met – spray-on solution for energy-free alternative to lighting

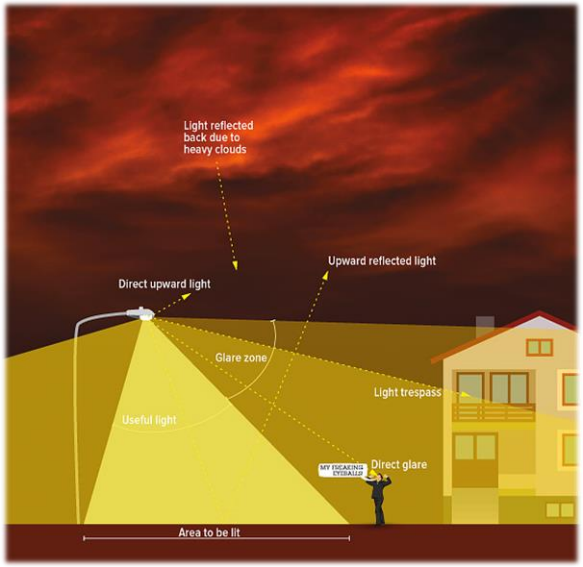


Image: www.Darksky.org

P.8 Parking area lighting should be appropriate for car drivers to see pedestrians and also be appropriate for pedestrians to see and be seen going to and from parked cars. The lighting should be mounted horizontally (0 degrees tilt) at a height of 4-5m. Luminaires with an Upward light Output Ratio (ULOR) of zero will achieve this and not include bollards as a primary source of lighting.

P.9 British Standards BS EN 13201-2:2015 and BS 5489-1:2013 make recommendations for lighting levels of areas with mixed vehicle/pedestrian usage. The application of these standards, and any associated design, should be design by competent lighting designers.

P.10 The design criterion is for horizontal illuminance. If it appears that light is going into windows of adjacent properties, vertical illuminance calculations may be required. Lighting class P5 would generally be appropriate for lighting design purposes. Average maintained illuminance (Eav) = 2 lux Minimum maintained illuminance (Emin) = 0.4 lux. This gives a minimum Uniformity of Illuminance (Uo) of 0.2.

Safety and surveillance

P.11 Public space should be safe for everyone to make use of, at all times of the day. Carefully designed and managed urban environments are effective in reducing levels of crime and vandalism, as well as reducing the fear of crime. Generally people feel more comfortable using public areas in which they can be seen and heard, and which look like they are not commonly affected by criminal activity. Creating spaces which are 'safe' is a key consideration for Stevenage.

P.12 Safety must be considered at every stage of the design process, and all principles should be incorporated as appropriate. Further information on the principles of designing out crime is put forward by 'Secured by Design', the UK Police flagship initiative.

P.13 Creating defensible space involves ensuring clear physical or symbolic boundaries are present between public and private spaces.

P.14 Spaces should be clearly defined in terms of ownership and use and include small, semi-private areas, provided behind a low wall, railing or fence, where the existing building lines allow for properties to be set back from the street. Spaces should ensure that boundaries are not too high; a balance needs to be achieved between the security of public and private spaces. Developments and buildings should maximise natural surveillance throughout the area including in areas of fully private space, such as back gardens. Natural surveillance should not be confused with formal surveillance such as CCTV.

Secured by Design
SBD
Official Police Security Initiative

http://www.securedbydesign.com/

P.15 All developments must increase the sense of security in an area and reduce crime and anti-social behaviour levels. Buildings should be orientated so that windows and doors face out onto streets, squares and footpaths and the internal layout of buildings should be organised so that the most used rooms are those which have windows overlooking public spaces. Entrances to buildings should be clearly visible and accessible from the street and visible from inside the building - recessed entrances should be avoided. All buildings should have a similar setback distance to ensure that overlooking is not limited by a building projecting too far out and blocking the view and landscaping should not block sightlines. Spaces should contain both daytime and evening functional uses and ensure a mix of residents by integrating different types and tenures of housing to support a range of household sizes, ages and incomes. Residents with different lifestyles can create a more active environment, as people are around at varying times of the day.

Image: Secured by Design

P.16 It is essential that a balance is achieved between the need to promote permeability and the need to prevent uncontrolled and unwelcome access to private space and buildings. Creative design is required

to ensure that places are both well-connected and secure. Buildings and developments should actively avoid public access to rear gardens and ensure routes for pedestrians and cyclists are well overlooked and are not in areas of limited levels of natural surveillance. Indoor, defensible cycle parking provision should be provided whilst car parking should avoid large, open and unsupervised areas of communal parking and communal garage blocks.

Image: Adam Styles Creative Metal

P.17 Properties with open access or easily climbable boundaries make easier targets for crime. The more difficult it is for a potential offender to access a property, the greater the deterrent to trespass. Natural crime reduction methods should be utilised where possible. Exceptions can be made where roads do not run through the development and dead frontages or dead ends cannot be avoided and if publicly visible security measures such as fences or gates are necessary, they should be designed as sculptures or art.

P.18 Clean and well-maintained environments are symbolically important as they give the message that people care about and area and exercise control over an area, not tolerating anti-social behaviour.

Make sure public spaces support social interaction

Image: Peter O'Connor

P.19 Stevenage is rich in public art across the town and we want to encourage the continuation of this culture through redevelopment. Public art can play a major part in giving a place a distinct character and identity. It can also attract people to a place; enhancing the economy and creating a sense of place. However, it needs to be integrated at the start of the design process and not put in as an afterthought.

P.20 Art can be incorporated in imaginative ways such as, within the floorscape and as a part of functional facilities like cycle racks, seating and signage. However, it should relate to the surrounding area, drawing from the historical significance or specific location of a place, and not just randomly selected.

P.21 Directional signage can clutter the public realm. However, it can also provide an opportunity to enhance the landscape, by ensuring design which is consistent and co-ordinated throughout a place, and which complements other elements of the street scene. Signage should be mounted on existing structures such as buildings, walls and posts, where possible and direct pedestrians and cyclists, as well as vehicle users. Signage should enable the easiest and most direct routes to encourage people to walk or cycle, in line with sustainability, health and environmental objectives; designers should start from a position of having no signs, and street layout should aim to make the environment self-regulatory

Uses

NPPF chapters 2, 5, 6, 7, 8, 12

U.1 Sustainable places include a mix of uses that support everyday activities, including live, work and play.

U.2 Well-designed neighbourhoods need to include an integrated mix of tenures and housing types that reflect local housing need and market demand. They are designed to be inclusive and to meet the changing needs of people of different ages and abilities. New development reinforces existing places by enhancing local transport, facilities and community services, and maximising their potential use.

U.3 Where there is rapid social and economic change, such as sustainable growth or diversification in rural communities or town centres, well-designed buildings and places are able to accommodate a variety of uses over time.

A mix of uses

Retail

U.4 Many of the shopfronts in the Town and Neighbourhood Centres are more modern looking. Modern interpretations of traditional shop fronts generally have less ornamental detailing than traditional shop fronts but they still create a 'frame' to the shop front. Modern shop front designs should generally follow the approach of traditional shop fronts albeit interpreted in a modern manner.

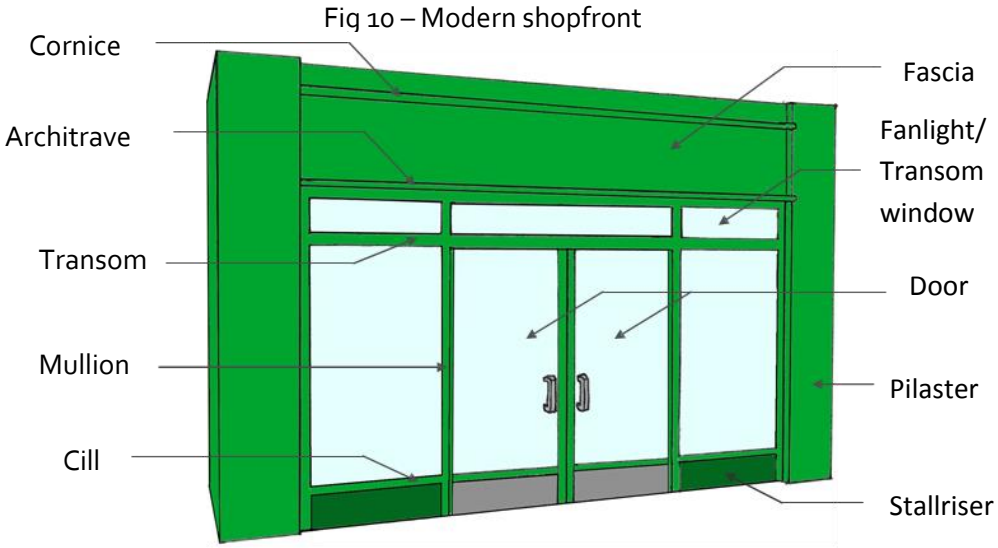
U.5 In order that these modern interpretations enhance the character and appearance of retail areas these should include well-proportioned components which also exhibit a level of depth and detailing to these.

U.6 The diagram illustrates the basic architectural features that make up modern shopfronts.

U.7 Shopfront alterations should respect the detailed design, materials, colour and architectural features of the shopfront and building itself, including the setting of the shop i.e. is it in the New Town area of Stevenage or is it situated in the historic setting of the Old Town.

U.8 Planning permission will generally be required for a new shopfront; alterations to an existing shopfront including awnings and canopies, external security shutters, blinds, grilles and security

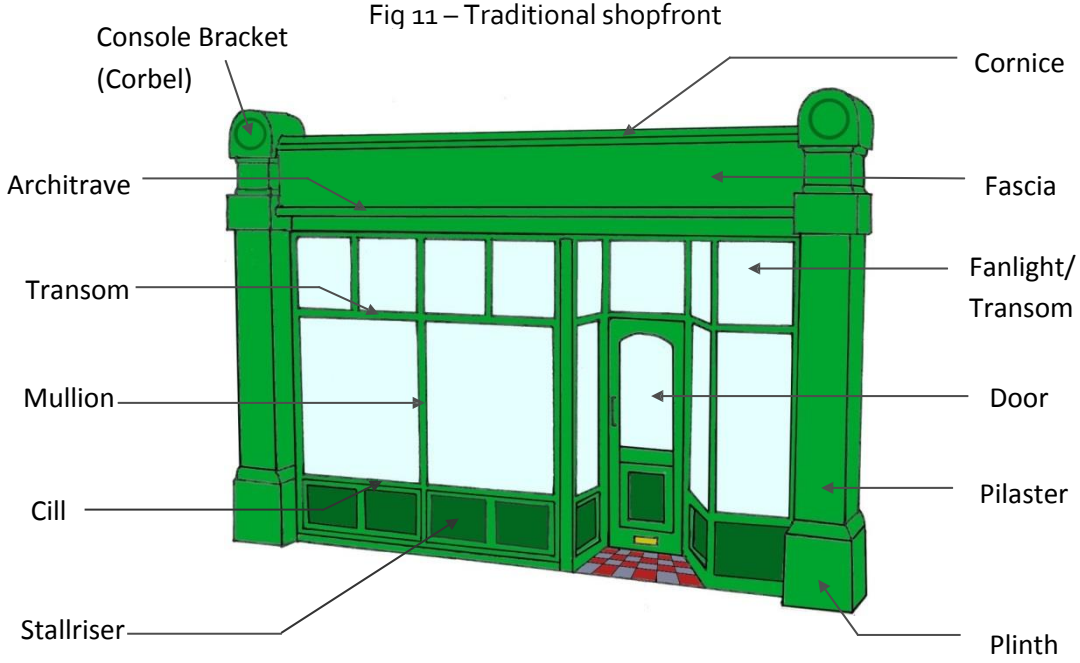
Fig 10 – Modern shopfront



measures; and change of use will generally require planning permission.

U.9 The more traditional shopfronts, such as those found in the Old Town, feature similar architectural features and these are illustrated below.

Fig 11 – Traditional shopfront



U.10 Each of these traditional elements of a shopfront has a practical purpose, as well as contributing to the character of the building.

U.11 Planning permission is not normally required for routine maintenance works, such as redecoration or straightforward repairs.

U.12 Any alterations (or replacement) of shopfronts that form part of a listed building will require Listed Building Consent and will need to be consistent with the age and style of the building. More stringent controls will apply for works including re-painting a shopfront in a different colour, installing a security alarm or extractor fan, altering the shop interior, installing blinds or shutters, and advertisements.

U.13 Conservation Area Consent is required for the proposed complete or substantial demolition of any building in a conservation area, including the removal of a shopfront or of any feature that gives character to a building.

U.14 In assessing applications to alter shopfronts within Conservation Areas special attention will be given to the desirability of preserving and enhancing the character and appearance of the Conservation Areas.

U.15 For shops in Conservation Areas, reference should also be made to the relevant Conservation Area Appraisal & Management Plan. These describe the area and its special character and include guidelines that provide the framework for development proposals in the area and the appraisals contain audits of shopfronts of merit.

U.16 Advertisement consent is a separate procedure that applies to the display of advertisements on shopfronts and Building regulations consent will be required for all work which alters the shop's structure, changes its fire escape, or would make access difficult for those with disabilities.

U.17 More specific detail regarding key shopfront components can be found in Appendix B.

A mix of home tenures, types and sizes

U.18 The aim of any residential development should be to provide a good living environment for occupants. Development should respect the surrounding buildings, in terms of their scale and massing, height, building lines, design and the materials used. However, it is accepted that housing layouts should take account of changing functional requirements. Occasionally, it may be appropriate to create pastiche developments. However, it is possible for a development to respect its local surroundings but still incorporate contemporary styles and new technologies.

U.19 Different types and tenures of homes should be well-integrated and support a range of household sizes, ages and incomes. They should be suitable for all members of the community and promote social diversity by reducing exclusion. They should enable residents to be able to move to smaller or larger homes without the need to leave their neighbourhoods and allow families to live close together. Houses should be indistinguishable from each other.

Privacy and scale

U.20 In order to ensure that a reasonable degree of privacy for residents is provided, both within their habitable rooms and garden areas, the position of dwellings, and the arrangement of their rooms and windows, should not create significant overlooking of other dwellings' windows or private garden areas and not lead to any overbearing impacts or adversely affect the residential amenities of existing dwellings.

U.21 The following minimum separation distances should be achieved:

No of Storeys	Type of Separation	Min. distance (metres)
Between existing and new 2 storey or a mix of 1 and 2 storey dwellings	Back to Back Back to Side	25m 15m
Between new 2 storeys or a mix of 1 and 2 storey	Back to Back Back to side	20m 12m
Over 2 storeys between existing and new dwellings	Back to Back Back to Side	35m 25m
Between new dwellings over 2 storeys in height	Back to Back Back to Side	30m 20m

U.22 In all cases a 1.8m high solid wall or fence should be provided between the rear gardens of properties which back onto each other. Where the boundary adjoins a footpath, a minimum of 0.5m setback should be provided to avoid the creation of an alleyway effect, or appear overbearing on the streetscape.

Residential extensions

U.23 Although some extensions are permitted development, others may require both planning permission and building regulation approval. All applications for extensions and alterations will be considered on their individual merits.

U.24 Extension proposals should respect the size, height, materials, features and layout of the building concerned, as well as the surrounding buildings. They should be built so that they look like a part of the main building rather than an obvious addition to it and not adversely affect the amenities of occupiers.

U.25 Further details of residential extensions can be found in Appendix C.

Socially inclusive

U.26 Places need to be able to adapt to changing circumstances. Towns and cities, for example, must change when industries rise and decline and houses need to be adaptable for when children get older and their requirements change. Places should be designed so that they are capable of being used for a range of activities; a public square, for example, can be used effectively for festivals, markets and events.

U.27 Residential buildings should be future proofed; building higher attic spaces for future conversions and ensuring ground floors can benefit from higher ceilings to be easily adapted for commercial uses later.

U.28 Sub-dividing large development parcels and allocating them to different developers can generate a wider range of building types, tenures and uses, which can encourage a more diverse community.

Homes and buildings

NPPF chapters 8, 12

H.1 Well-designed homes and buildings are functional, accessible and sustainable. They provide internal environments and associated external spaces that support the health and well-being of their users and all who experience them.

H.2 They meet the needs of a diverse range of users, taking into account factors such as ageing population and cultural differences. They are adequate in size, fit for purpose and are adaptable to the changing needs of their occupants over time.

H.3 Successful buildings also provide attractive, stimulating and positive places for all, whether for activity, interaction, retreat or simply passing by.

Healthy, comfortable and safe internal and external environment

H.4 All developments are required to make efforts to minimise energy usage and to incorporate methods of using renewable energy, including reducing energy demand, using passive environmental systems, e.g. natural ventilation, daylighting and passive solar gains, using high levels of insulation and air tightness in the fabric of the building, specifying energy efficient services, controls and appliances, implementing water recycling and the provision of water butts, using renewable energy, using low/zero carbon technologies to provide as much of the energy load as is technically and economically feasible, minimising use of fossil fuels, and using efficient fossil fuel technologies, such as Combined Heat and Power and condensing boilers.

H.5 For major housing schemes, the nationally recognised Building for Life criteria should be used to assess their functionality, attractiveness and sustainability. This is a national standard for well-designed homes and neighbourhoods. It promotes high quality design, as well as celebrating best practise in the house building industry. Building for Life is a partnership between several national agencies, led by CABE and the Home Builders Federation.

Noise

H.6 Noise can adversely affect peoples' quality of life and exposure to unwanted noise can affect our health and welfare. Protection against noise in the construction, design and layout of residential developments is essential to ensure that existing or future residents are not subjected to unacceptable levels of noise in their own homes. The likelihood of noise affecting future residents is a key factor in assessing the suitability of a site for residential use.

H.7 Residential development should be restricted to areas with low ambient noise levels and utilise noise control measures in order to make residential development feasible, wherever possible, to maximise the potential of previously developed land. They should employ solutions to technically complex acoustic problems through specialist advice. Delaying contact with such specialists until later in a project may result in avoidable additional costs being incurred at the design and construction stages.

H.8 Where it is unlikely that residents will be able to keep windows open or sit on/in a balcony/garden without being bothered by one or more external noise sources, such as traffic, industrial noise or customers of entertainment venues, noise will be a material planning consideration and, under these circumstances, a noise survey will be required.

H.9 New residential dwellings, exposed to noise from existing sources, will be assessed in accordance with National Planning Policy Guidance and BS 8233:2014. National guidance assesses sites according to a noise exposure hierarchy.

H.10 It is likely that many sites within Stevenage, suitable for new housing, will be exposed to existing noise levels contained within, or on the boundary of 'noticeable and not intrusive' and 'noticeable and intrusive'.

H.11 Developments shall require proposals to achieve acceptable internal noise levels. Ideally, with windows open. However, on some potentially noisy sites in the Borough, an alternative means of purge ventilation will be required. They should demonstrate that all other mitigation measures have been exhausted to reduce external/internal noise levels where internal noise levels can only be achieved with closed windows. Developments should ensure that garden areas are usable and not unduly impacted upon by noise. Ideally noise levels in these outside amenity areas shall not be above the 55dBLAeq (16hour) range 50-55dB. To achieve this level of exposure to existing noise it may be necessary to provide amenity areas carefully sited away from noise-exposed facades and/or the provision of acoustic screening. The assessment of the noise exposure of outdoor amenity space shall be included in a noise survey report. The layout of mixed flatted and housing developments should be orientated in such a way to create an acoustic barrier through the use of the flatted element of the development closer to the noise source. They should mitigate external noise affecting noise sensitive developments by including screen fencing, vegetation buffers, insulation in the walls and roof, the use of double glazing in windows and the use of intervening buildings or structures, such as garages. Development should include engineering solutions to reduce the impact of noise at the point of generation as well as limiting the noise within the building. The layout of the site and building layout, including screening and buffering, can mitigate against noise, as can limiting the operational hours and restricting activities that can occur on site.

Well-related to external amenity and public spaces

H.12 All dwellings, including flats, should have private open space. The only exception to this is where flats are developed in very central locations, where public open space is easily accessible and higher densities are required.

H.13 Private open space should be located conveniently for use by residents and in a position that is not overlooked by neighbouring buildings; normally to the rear of the building, and in the case of flats the private space will usually form part of the garden or communal amenity space, and not an area of landscaping.

H.14 For new houses the minimum standard garden space for terraced and semi-detached houses should normally be 50 square metres. Each dwelling should normally have a minimum rear garden depth of 10m.The shape and slope of the garden should ensure that it is useable. Larger detached houses will generally be required to provide a larger rear garden area. The garden should normally be enclosed by a 1.8m high close boarded fence or wall and direct access should be afforded to rear gardens for activities such as refuse storage, cycle parking and maintenance.

H.15 In new flatted developments where there is no communal space balconies or roof gardens should be provided for the occupants of these units. These should be located so as to afford privacy to the occupant, normally to the rear of buildings. However, they should not compromise the privacy of existing dwellings. SBC will normally aim to achieve a minimum useable communal area of 50 square metres for schemes up to 5 units, plus an additional 10 square metres per additional unit over 5. Garage courts, parking areas and bin storage areas are not considered as part of the useable garden amenity requirements.

H.16 All rear gardens and communal open spaces should generally enjoy a reasonable amount of sunlight and have a relatively open outlook.

Sunlight, daylight and orientation

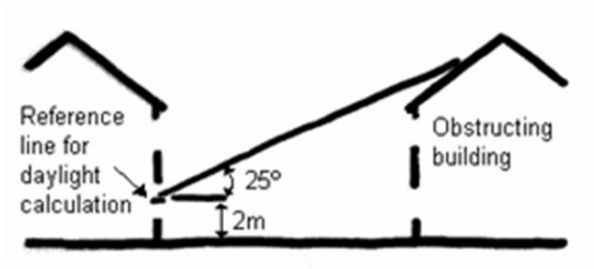
H.17 New developments should be designed to ensure that a satisfactory level of sunlight and daylight is provided for the occupants of both existing and proposed dwellings.

H.18 Where there is doubt that adequate sunlight and daylight will be achieved, indicators will be used to assess the amount of light reaching a new or existing window:

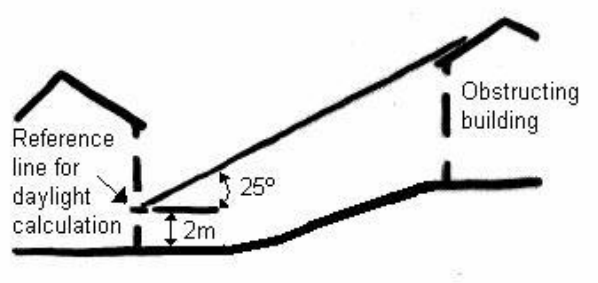
H.19 The Building Research Establishment (BRE) guidelines "Site Layout Planning for Daylight and Sunlight: A Guide to Good Practice" second edition, will be used. It provides guidance on avoiding unacceptable impacts and sets out non-mandatory targets for levels of daylight and sunlight within existing and proposed developments. In particular, account will be taken of the size and position of windows to neighbouring buildings. However, indicators will not be applied to all schemes; only to those where there is doubt that adequate lighting may be achieved. This can be established by undertaking a simple 25 degree 'rule of thumb' test using the BRE guidelines as identified in the diagram on the next page:

- From a point 2 metres above ground level at the horizontal centre of the protected window draw a line perpendicular to the window and at an angle of 25 degrees to the horizontal (see the drawing above). If the proposed development cuts this line then it is likely to interfere with the diffuse skylight enjoyed by the existing building. This being the case the proposal is likely to cause problems of loss of light and it will be necessary to undertake a detailed sunlight and daylight assessment.

BRE Guidelines: 25 Degree Test



Section in plane perpendicular to the main face of the building.



On sloping sites overshadowing is more of a problem and greater spacing is required to obtain the same access to daylight for buildings lower down the

H.20 Where possible dwellings should be laid out so that the main bedroom and the kitchen benefit from the morning sun and living rooms benefit from the afternoon and evening sun. Low building depths should be encouraged to reduce the amount of artificial lighting required and reduce energy consumption. Dwellings should be orientated to maximise 'passive solar gain' in order to provide environmental benefits and minimise the amount of fuel used. Primary frontages should broadly face the south in order to optimise the solar potential of the site and dwellings should maximise solar gain through the use of technologies such as solar panels and solar hot water systems. Their use is encouraged where appropriate.

H.21 However, the form and character of the area may dictate a particular arrangement of buildings which is at odds with these objectives. In such a case, it will be for the designer to creatively combine both constraints.

Attention to detail: storage, waste, servicing and utilities

Waste

H.22 Waste planning is the responsibility of Hertfordshire County Council; therefore any proposals will need to be in line with their requirements. The waste strategy for England sets a recycling rate target of 65% by 2035, and a target to reduce the amount of waste going to landfill to 10% within the same timeframe.

H.23 It is important that provision is made for the storage and collection of waste from a site. Waste storage should be designed into all new developments, and any extension to an existing dwelling should not remove waste storage facilities. New developments should take account of BS 5906: Waste Management in Buildings Code of Practice.

H.24 The visual impact of these areas should be minimal. Appropriate screening should be used to disguise these facilities, where necessary.

H.25 Waste storage should also be designed so that bins can be moved easily and safely to the collection point. The collection point must be located near a road which provides easy access for refuse vehicles.

H.26 Facilities for recycling and composting should follow the same principles as above, with minimal adverse impact on the surrounding area. They should ideally be located in close proximity to waste storage facilities, for ease of use.

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/765914/resources-waste-strategy-dec-2018.pdf

H.27 Buildings and developments should follow the waste hierarchy model:

- prevent waste as a first option;
- re-use, recycle and compost waste as a second option; and
- dispose of it as a last resort.

H.28 Developments should provide for onsite compost areas and for the storing of recyclable waste and also provide for recycling bins to be stored inside homes. They should provide sufficient waste container storage and design into the development how its subsequent collection will be achieved; and ensure level access so that waste receptacles can be accessed by the highway for collection.

Residential development of houses

H.29 Residential developments of houses are usually serviced by a kerbside waste and recyclables collection. The designs for waste and recycling facilities need to ensure that internal and external storage areas are designed into each dwelling and that internal space is provided for recycling storage, kitchens and utility rooms are generally the most appropriate locations. Storage for recyclables (in the case of SBC paper, glass, plastics and cans, and garden waste are all collected separately), organic kitchen waste and non- recyclable waste is provided and recycling waste storage comprises either a box or bag which are normally stored inside and taken to the kerbside on collection days. Organic waste (food) kitchen caddies are stored inside the property and emptied into larger external, free-standing organic waste receptacles. External space for the storage of garden waste should be provided and external storage for both waste and recyclables outside the buildings within the curtilage (for waste collector).

Residential development of flatted dwellings

H.30 Collection services for flatted developments vary depending on the individual circumstances of the premises. However, a kerbside collection is preferred. Developments need to ensure that internal storage is located in an accessible and communal area inside each dwelling and is easily accessible, but secure, from external storage areas, near to areas of high waste production, and hard wearing and washable - kitchens and utility rooms are generally the most appropriate. Internal storage areas where recyclables can be separated at the source should be provided, and dwellings should be provided with capacity for receptacles for each recyclable component (including food waste), according to the separation at the relevant "bring" facility e.g. glass, cans, plastic bottles, paper (single banks for mixed collections), etc, and for non-recyclable waste. They should provide for both mixed recyclables, organic kitchen waste and non- recyclable waste, and, for recyclables must have at least twice, if not three times, the capacity of storage for non-recyclable waste to account for the separation requirements and the frequency of removal from the dwelling.

External Bins for waste and recycling storage:

H.31 Bins for waste and recycling storage vary in size and an appropriate combination must be provided to accommodate the needs of the development.

H.32 The following is a summary of the bins currently used in waste and recyclables storage to provide a guide to the space requirements.

Bin Type	Use	Domestic / Trade	External Dimensions mm H x L x D (H + open lid)
180ltr Wheelie Bin (Black)	General Waste	Domestic	1070 x 580 x 730
240ltr Wheelie Bin (Brown)	Green & Food Waste	Domestic	1100 x600 x800
60ltr Bag (Black)	Recyclables - Plastic & Cans	Domestic	490 x 350 x 350
60ltr Bag (Blue)	Recyclables - Paper & Card	Domestic	490 x 350 x 350
23ltr Caddy (Red)	Glass	Domestic	405 x 320 x 400
23ltr Caddy	Food Waste	Domestic	405 x 320 x 400
240ltr Wheelie Bin (Black)	General Waste	Domestic	1100 x 600 x 800
360ltr Wheelie Bin	General Waste / Recyclables	Domestic / Trade	1120 x 630 x 890
660ltr Eurobin	Recyclables	Trade	1400 x 1300 x 720
1100ltr Eurobin	General Waste / Recyclables	Trade	1400 x 1300 x 1000

(NB: This list, including the bin dimensions, is subject to change. It is only to be used for preliminary design purposes)

External storage area features:	Housing developments	Flatted developments
Should be located within 10 metres of an external access but not near ground storey windows.	✓	✓
Storage and collection points must be as close as possible to, and preferably within 10 metres of, a place suitable for a collection vehicle to stop.	✓	✓
Must be at or near street level, and should be accessible via appropriately sized and graded ramps to allow bins to be wheeled to and from the collection point easily.	✓	✓
Must be safe for users by being well lit and visible from public vantage points and nearby dwellings / tenancies.	✓	✓
Should be unroofed, unless they are fully enclosed and secured (ideally inaccessible to animals).	✓	✓
Should be accessible for collection purposes and not impede pedestrian or vehicular access on public thoroughfares or to and from buildings.	✓	✓
Should be located as close to the front property boundary as possible, preferably behind the front boundary wall, without detracting from the street scene.		✓
Consideration should be given to the • allocation of additional external storage space in the future, e.g. additional bins, • composting facilities - in residential development with a garden or landscaping, • provision of onsite storage for bulky waste (i.e. furniture) items and potential opportunities for re- use of these items.		✓

Servicing and utilities

H.33 Building services equipment, whether it is used for heating and cooling, communications, power, plumbing, ventilation, access or security, if not considered appropriately, can cause significant visual blight and nuisance for neighbours.

H.34 The necessary building services equipment should be incorporated into development, while having minimal impacts on their environment. Impacts that are likely to require minimisation or mitigation include visual blight, light nuisance, noise nuisance and vibration, odour, and other environmental pollutants or nuisance.

H.35 In new development, all building services equipment must be integrated within the building or development structure and should not be a dominant feature of the building. It must be incorporated into the external building design where, because of its nature, it cannot be integrated within the building;

H.36 In refurbished development, plant and machinery should be accommodated within the building structure, or incorporated into the design of external modifications.

H.37 Other design considerations for building services equipment include screening or other techniques to minimise the impacts of plant, machinery and ducting must, in themselves, not cause visual blight. Plant and machinery on roofs should not be visible from the street, public vantage points or from immediately adjacent buildings. The design and materials used for plant, machinery and ducting, as well as for ancillary structures such as screening, where located on the exterior of the building, must be consistent with those of the building and, where possible, plant and machinery should be designed in such a way that does not lead to issues of safety and security.

H.38 Where building services equipment is required on the outside of a building, it must not obscure access to daylight and sunlight, or provide any nuisance for occupants of the development or adjacent buildings. It should be separated or insulated from occupants and neighbours who are likely to sensitive to noise disturbance if plant and machinery has moving parts. Techniques to achieve this separation include the use of flexible ducting, or resilient mountings for structure-borne plant and machinery. Plant and machinery must ensure that where mechanical or passive ventilation is required to remove odour emissions, the release point for odours must be located above the roofline of the building and, where possible, adjacent buildings.

H.39 In addition, plant and machinery, particularly where located on roofs, must not preclude the installation of required onsite renewable energy facilities in the proposal and due consideration must also be given to the possibility of future renewable energy installations.

H.40 Special consideration should be given to the installation of plant, machinery and ducting on listed buildings and in conservation areas as fewer external solutions are likely to be appropriate in these locations. Installations must be in keeping with the design and materials of the building and listed building consent is likely to be required for works to a listed building.

H.41 Access to plant and machinery must be provided to allow for convenient and safe servicing and replacement of installations. Machinery must be properly installed and maintained to ensure that impacts are properly mitigated and the situation does not deteriorate over time with continued

operation. Plant and machinery should be located as close as possible to their end use, e.g. boilers should be located near to the hot water or heating users, to minimise use of ducting materials, loss of resource and visual blight. Whilst disused plant, machinery and ducting must be removed from the exterior of buildings before replacements can be installed. Only in exceptional circumstances will these be allowed to remain.

Resources

NPPF chapter 12, 14

R.1 Well-designed places and buildings conserve natural resources including land, water, energy and materials. Their design responds to the impacts of climate change. It identifies measures to achieve:

- mitigation, primarily by reducing greenhouse gas emissions and minimising embodied energy; and
- adaptation to anticipated events, such as rising temperatures and the increasing risk of flooding.

R.2 A compact and walkable neighbourhood with a mix of uses and facilities reduces demand for energy and supports health and well-being. It uses land efficiently so helps adaptation by increasing the ability for CO_2 absorption, sustaining natural ecosystems, minimising flood risk and the potential impact of flooding, and reducing overheating and air pollution.

Follow the energy hierarchy

R.3 Energy efficiency should be is considered at the earliest stages of design and buildings should reduce energy demands required to heat, cool, light and run buildings, thereby reducing carbon emissions and energy bills. They should improve energy efficiency using a variety of passive design measures and create innovative, high-quality urban environments.

R.4 There are many different energy efficiency options. Their application depends on the type of project, and, in particular, whether it is a new development or a refurbishment project. However, buildings and developments should utilise the waste heat produced when fuel is burnt to generate electricity through CHP systems, to heat homes and water. Individual homes should install micro-CHPs as an alternative to the traditional gas central heating boiler, while also providing electricity. Furthermore, they should utilise biomass fuels from a local sustainable source using:

- stand-alone stoves providing space heating for a single room; and/or
- boilers connected to central heating and hot water systems.

Selection of materials and construction techniques

R.5 The standard of design in new developments has a major impact upon the quality of the environment. Good design can enhance the appearance of places and our use and enjoyment of them. Well-designed buildings should function well and should be able to adapt to changing circumstances. They should use appropriate materials and design details to achieve and maintain character and distinctiveness. Building features should vary throughout the different areas of the town whilst following the same basic design principles. They should draw on the scale, texture and colour of the building materials used throughout the surrounding area and use innovative design approach other than pastiches appropriate to the new town. Materials can be innovative and contemporary but should relate to the existing palette of colours and textures. Buildings should use locally sourced materials to effectively retain local

distinctiveness. This will also help reduce the impacts of transportation on the environment, thus conforming to sustainability objectives. It can also reduce development costs. They should use environmentally friendly materials and generally arrange windows and doors symmetrically; however, random arrangements can be appropriate when they form part of an organised and distinctive effect, and when they fit in with the surrounding character of the buildings. Buildings should include chimneys as appropriate to help create varied and interesting rooflines, and provide a visual connection with the architectural style of the existing area. They should ensure boundary fences, parking provision and landscaping are in-keeping with the surrounding area. Careful attention should be paid to decisions such as whether fences or hedgerows should be used, whether paving a currently green area would cause it to stand out unacceptably, and where parking provision should be made.

R.6 These factors need to be considered at the initial design process, as they can all make a significant difference as to whether a building fits in with the surrounding context of the area or not, and whether a place is successful.

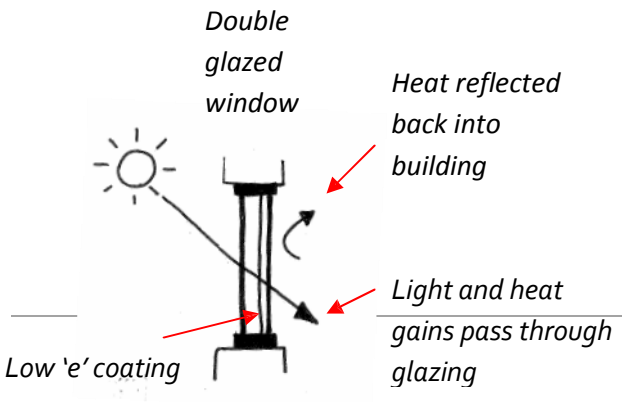
R.7 Buildings should use high thermal mass materials, such as concrete, brick and stone, to absorb and retain solar heat during the day and maximise insulation to reduce heat loss; the rate of heat transfer through building elements is measured as a 'U-Value'. The lower the U-Value is, the less significant the heat losses are, and the more energy efficient the building materials are. U-Values listed in Building Regulations should be considered as a minimum standard and should always be improved upon where viable and technically practicable.

R.8 Buildings should have high energy efficiency appliances installed at the development stage and use control systems, such as motion or light detecting sensors, to increase energy efficiency.

Maximise resilience

Wind

R.9 Buildings should incorporate natural ventilation ensure air quality is maintained and use atria and courtyards in an effective way to maximise natural ventilation. They should ensure voids between groups of buildings to encourage natural ventilation in the centre of deep plan developments whilst minimising heat loss through air leakage and ensure junctions between different building materials do not allow air to leak in or out of the building. Wind turbines (of varying scales) should be employed as a viable form of energy generation where appropriate.



Sunlight and daylight

R.10 Buildings should provide an adequate level of daylight and sunlight and reduce the amount of artificial light required. They should have low building depths to reduce the amount of artificial light; a depth of 9-13m provides maximum flexibility for natural lighting and ventilation. Buildings should employ techniques to bring light into the building if building depths are high. This would include design features such as atria, courtyards and sun tubes and they should ensure that any new

extensions do not affect the amount of natural light being received by existing buildings. Buildings should be located far enough apart to not cause overshadowing. Although, buildings which are too far apart can result in continuity and enclosure objectives not being achieved. They should maximise the benefits of 'passive solar gain' to provide environmental benefits and minimise the amount of fuel used. Buildings should be positioned carefully so that their primary frontages are orientated broadly to the south, in order to maximise the opportunity for passive solar gain and they should capture solar energy using Photovoltaic (PV) cells or solar water heating panels on south facing, unshaded roofs

Ground and air source heat pumps

R.11 Buildings should utilise the constant below ground temperate through ground source heat pumps and transfer heat from below the frost line into the building. In addition, they should extract the heat from the air using air source heat pumps.

Water consumption

R.12 Stevenage is in a region which receives one of the lowest levels of rainfall in the UK and, in recent years, the amount of water being consumed is steadily increasing. Reducing the amount of water needed for day-to-day activities is, therefore, essential for maintaining a sustainable lifestyle.

R.13 Buildings should reduce water consumption to 110 litres per person per day and collect and reuse rainwater for activities such as washing clothes, toilet flushing and garden irrigation. Care should be taken to ensure that elements of these schemes are designed into buildings effectively and are not visually intrusive

Lifespan

NPPF chapter 10, 12

L.1 Well-designed places sustain their beauty over the long term. They add to the quality of life of their users and as a result, people are more likely to care for them over their lifespan. They have an emphasis on quality and simplicity.

Well managed and maintained

L.2 Developments should be well designed to ensure that they are robust, durable and easy to look after. They should be designed to ensure that the maintenance and management responsibilities are clearly defined and these roles are agreed by the necessary parties in advance.

L.3 Management of local waste, cleaning, parking, internal common spaces, shared spaces and public spaces should all be considered from the outset and these regimes should be considered from the early stages of the design process.

Adaptable to changing needs and evolving techniques

L.4 Consideration should be given to the changing needs in terms of health and mobility of the user. This is particularly relevant to private users of homes and gardens; such places should be designed to be flexible and able to adapt to the changing needs of the user.

L.5 This is also relevant to potential changes in lifestyle due to developing technologies i.e. electric vehicles, remote working etc.

L.6 Consideration should be given to the provision of high-speed digital connectivity in order to ensure the provision of options and information for education, health, leisure, social interaction, businesses and home working. Something that has become evident over the past year.

A sense of ownership

L.7 Well-designed places clearly define the boundaries for private, shared and public spaces; as such, occupants will place more value and take ownership of those spaces.

L.8 Shared spaces should be visible and easy to get to so that they are accessible to all users. They should also ensure that they are flexible so that they can be used for a variety of activities.