

Place shaping

a guide to undertaking development in Broadland



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Place shaping: a guide to undertaking development in Broadland

Executive Summary

This guide was produced by the Building Research Establishment (BRE) in 2012 on behalf of Broadland District Council. It is intended to help developers, officers and communities in their role as place shapers of new sites. It is in effect a reference document that provides advice on how new development can be undertaken in a sustainable, well-designed and cost effective way that contributes to the economic, environmental and social health of Broadland's community.

What is place shaping?

There are a number of definitions of place shaping and the following is a useful way to describe what it does. *"Place-shaping' is now widely understood to describe the ways in which local players collectively use their influence, powers, creativity and abilities to create attractive, prosperous and safe communities, places where people want to live, work and do business"*. The place shaping practitioner, Stephen Hill, explains that place shaping has a number of sustainability attributes. Place shaping, he says, includes the following components:

- *Building and shaping local identity;*
- *Managing co-existence in a shared space;*
- *Representing the community;*
- *Maintaining the cohesiveness of the community and supporting debate within it;*
- *Working to make the local economy more successful while being sensitive to pressures on the environment;*
- *The public space (the 'outside') is important. The relation between the inside and the outside is crucial;*
- *Understanding local needs and preferences and making sure that the right services are provided to local people.*

Developers, communities and council officers all have essential roles in influencing development and creating the best possible places when developing new sites in the district.

Focus on new development

The focus of this guide is on **new development** rather than existing sites so it covers both housing and other buildings and areas around them. The guide provides advice about both larger scale and smaller scale sites and reflects the work that the council has undertaken to identify likely development sites. In developing these sites, the right level and kind of stakeholder engagement is important, so there is advice in this guide on techniques for working with local communities and other stakeholders. The guide also gives some suggestions about the process of developing a design proposal for a site and submitting a planning application.

Critical Sustainability Challenges

The role of place shaping is key to addressing the critical sustainability challenges that Broadland district and the Norfolk region in general face now and in the future. Therefore with place shaping it should always be remembered that sustainability in terms of water, CO₂ emissions, green infrastructure, biodiversity and access should be at the forefront of the thinking of officers, developers and communities. This is aligned to both local and national policy and is something that the guide strives to signpost the reader to.

How the guide is organised

This guide is in four main parts with supporting appendices.

Section 1 explains the guide's **purpose** and structure as set out above.

Section 2 is about assessing the **character** of new development sites. Understanding a site's character is the first step any good place shaper will take in the development process. Broadland's work on landscape character areas provides a basis of evidence for conducting a thorough site assessment process that ensures the development:

- Uses land efficiently and is sympathetic to its physical and social context;
- Reduces the development's carbon footprint and improves biodiversity;
- Develops a place that is attractive, safe, convenient and healthy; and
- Fosters a sense of place and local distinctiveness.

Section 3 is about applying sustainable **place shaping best practice** to new development sites. Over recent years the focus on shaping good places based on good design principles has become increasingly important to national and local governments. A range of guidance suggests that compact, mixed use, human-scaled, public transport-focused developments tend to make sustainable places to live, work and play. The place shaping principles that help underpin these places reflect best practice and relate to both physical design and the financial and social processes related to development. In developing new sites best practice place shaping principles would be:

1. Places for people – places must be safe, comfortable, varied and attractive. They also need to be distinctive, offer variety, choice and fun.
2. Enrich the existing – places should enrich the qualities of existing urban places. Whatever the scales new developments should respond to and complement its setting;
3. Make connections – places must be easy to get to and well integrated both physically and visually with their surroundings so people can move around without effort;
4. Work with the landscape – places should use the site’s intrinsic resources – climate, landform, landscape and ecology – to minimise energy use;
5. Mix use and forms – stimulating, enjoyable and convenient places meet a variety of demands from the widest possible ranges of users, amenities and social groups;
6. Manage the investment – for places to be successful they must be economically viable, well managed and maintained; and
7. Design for change – places must be flexible enough to respond to future changes in use, lifestyle and demography

Section 4 is about **community engagement and design**. Effective place shaping will require community engagement. This needs to proceed in an efficient and timely fashion; including those elements required by regulation. This section looks at a number of engagement elements and techniques that go to making sure the place shaping process works well to produce environmentally sustainable, socially inclusive and economically vibrant places. These include:

- Front-loading the engagement process;
- Methods for community engagement;
- Specific engagement methods for individual sites;
- Who to involve;

- The Community Infrastructure Levy;
- Higher levels of engagement: communities as planning decision makers;
- The Community Right to Build: engagement aspects;
- Design and Access Statements;
- Masterplanning;
- Design codes and guides; and
- Community trusts in the masterplanning process;

The appendices cover **preparing and submitting a planning application** and details about the broader **context** for new development i.e. context being the character and setting of the area within which a proposed scheme will sit.

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Hertfordshire
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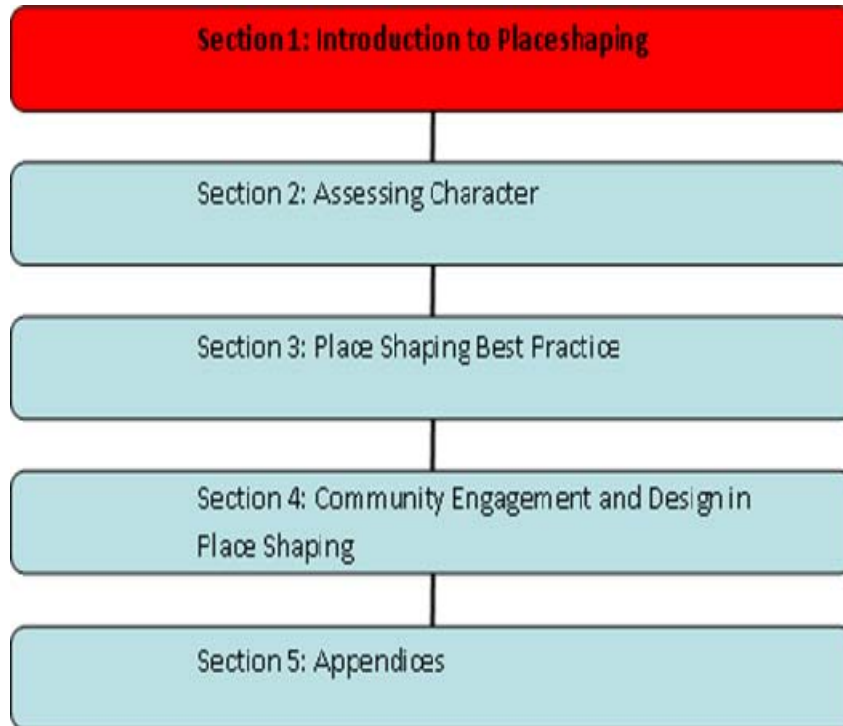
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1. Introduction to place shaping



1.1. Who is this guide for?

This guide is intended to help developers, officers and communities in their role as place shapers of new sites. It provides advice on how new development can be undertaken in a sustainable, well-designed and cost effective way that contributes to the economic, environmental and social health of Broadland's community.

1.2. What is place shaping?

There are a number of definitions of place shaping and the following is a useful way to describe what it does. "Place-shaping' is now widely understood to describe the ways in which local players collectively use their influence, powers, creativity and abilities to create attractive, prosperous and safe communities, places where people want to live, work and do business" ([Future Communities](#)). The place shaping practitioner, Stephen Hill, explains that place shaping has a number of sustainability attributes. [Place shaping](#), he says, includes the following components:

- "Building and shaping local identity;
- Managing co-existence in a shared space;
- Representing the community;
- Maintaining the cohesiveness of the community and supporting debate within it;
- Working to make the local economy more successful while being sensitive to pressures on the environment;
- The public space (the 'outside') is important. The relation between the inside and the outside is crucial;
- Understanding local needs and preferences and making sure that the right services are provided to local people".

A number of [councils](#) around England are promoting a place-shaping approach that “*recognises that individual areas have their own particular character, needs and priorities that may need to be managed and addressed in different ways*”. Developers, communities and council officers all have essential roles in influencing development and creating the best possible places when developing new sites in the district.

1.3. Place shaping context

Nationally, the government’s [Decentralisation and Localism Bill](#) and the National Planning Policy Framework provide an important context for shaping places. The [National Planning Policy Framework](#) gives a presumption in favour of sustainable development, focuses on supporting economic growth, and sets out the important role of local and neighbourhood plans in shaping new development. The Framework (2012: 15) says that “planning policies and decisions should aim to ensure that developments:

- will function well and add to the overall quality of the area, not just for the short term but over the lifetime of the development;
- establish a strong sense of place, using streetscapes and buildings to create attractive and comfortable places to live, work and visit;
- optimise the potential of the site to accommodate development, create and sustain an appropriate mix of uses (including incorporation of green and other public space as part of developments) and support local facilities and transport networks;
- respond to local character and reflect the identity of local surroundings, while not preventing or discouraging appropriate innovation;
- create safe and accessible environments where crime and disorder, and the fear of crime, do not undermine quality of life or community cohesion; and

- are visually attractive as a result of good architecture and appropriate landscaping”.

More locally, Broadland has developed the [Joint Core Strategy](#) with neighbouring councils, Norwich City Council and South Norfolk Council. This shows environmental, economic and social factors and opportunities that need to be taken into account in developing new places to live and work in Broadland. Broadland DC itself has done substantial work to gather evidence about environmental, social and economic conditions that are relevant to new development. The next section of this guide summarises evidence that developers, communities and the council need to keep in mind in their place shaping work.

1.4. Focus on new development

The focus of this guide is on **new development** rather than existing sites so it covers both housing and other buildings and areas around them. The guide provides advice about both larger-scale and smaller scale sites and reflects the work that the council has undertaken to identify [likely development sites](#). In developing these sites, the right level and kind of stakeholder engagement is important, so there is advice in this guide on techniques for working with local communities and other stakeholders. Site developers are encouraged to sign up to Broadland’s Community Involvement Protocol. The Protocol sets commitments which aim to ensure that communities, and other stakeholders, are provided with genuine opportunities to shape development proposals. The guide also gives some suggestions about the process of developing a design proposal for a site and submitting a planning application.

1.5. Critical sustainability challenges

Several issues have been identified as being critical sustainability challenges. These have impacts on the scale and location of development and are:

Water

The Environment Agency identifies the Anglian Region as being the driest region of England and Wales. The region on average receives just under 600mm of rainfall per annum. Evaporation from vegetation reduces this by approximately 450mm a year, to give only 150mm per annum of 'effective rainfall' to replenish aquifers and to maintain river flows.

The East of England is unique as most of its water supplies come from rivers and groundwater abstraction (60% and 40% respectively). Anglian Water data indicates that winter rain is vital to refill reservoirs and increase river flows and groundwater recharging. This has led the Environment Agency to classify the region as water stressed. Current consumption in the region is on average 150 to 160 litres per person per day (l/p/d) and additional development will place greater pressure on water supplies.

According to the Audit Commission, Broadland consumption averages 131 l/p/d. Promoting high standards of building design and changes in individual behaviour and expectations is crucial to keep water use within environmental limits. A progressive reduction of water use leading to water neutrality in developments is one of the key challenges for the region in general. To address some of these issues, Broadland District Council has commissioned the North East Norwich Water Cycle Study, being prepared for them by Hyder Consulting.

CO₂ Emissions

Greenhouse gas emissions, particularly carbon dioxide, are responsible for human induced climate change. In the UK each person produces approximately 12 tonnes of CO₂ emissions per annum, and a large percentage of this is generated from energy use in homes and buildings. Around 27% of the UK's total carbon emissions come from the domestic housing sector through energy use for heating, hot water, lighting and appliances. New buildings should use less energy than their existing counterparts and offer a real opportunity for the

construction industry to identify transferable practices and technologies to improve the existing building stock.

Broadland's rural geography contributed, through things like increased car reliance, to 6.4 tonnes of CO₂ emissions per capita in 2006. This gives an ecological footprint that is more than three times the size of the 'sustainable world footprint'; 5.76 global hectares per capita.

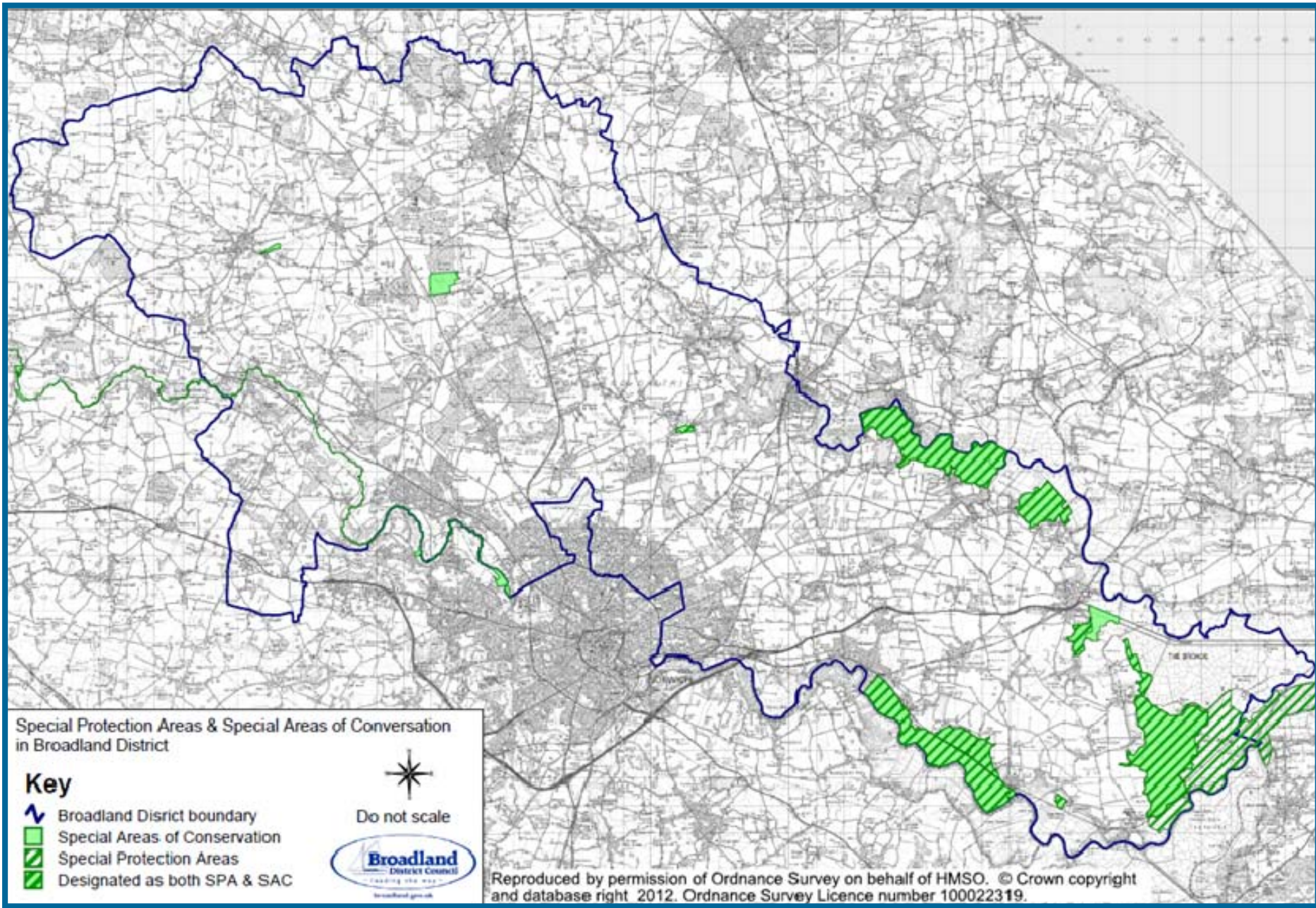
Green Infrastructure

Natural England has defined green infrastructure as a strategically planned and delivered network of high quality green spaces and other environmental features. It should be designed and managed as a multifunctional resource capable of delivering a wide range of ecological benefits for biodiversity in its broadest sense, whilst improving quality of life for local communities. Green Infrastructure includes parks, open spaces, playing fields, woodlands, allotments and private gardens.

Research undertaken by Natural England and the Landscape Partnership (*Analysis of Accessible Natural Greenspace (ANG) provision for Norfolk, July 2010*) has revealed significant gaps in green infrastructure locally. The report concludes that within Broadland District Council currently none of its households are meeting all of the Accessible Natural Greenspace standards, and that access for 23.4% of households meets none of the standards. Therefore, it would be expected that opportunities for enhancing green infrastructure would be actively pursued and supported on new sites.

Biodiversity

To maintain biodiversity, the character and quality of natural and built environments needs to be preserved and enhanced. Broadland has a number of sites recognised for their biodiversity value, including 137 sites of county importance for wildlife (CWS), 18 sites of national importance (SSSI), component units of five sites of international importance (SPA, SAC and RMASAR) including the River Wensum Special Area of Conservation (SAC) and Valley Fens SAC. There are three



national nature reserves and two local nature reserves in Broadland. There is also considerable semi-natural habitat that at a local level that contributes greatly to the ecological quality of the area.

The Broadland district allows access to the Broads National Park, and therefore has a major role in promoting tourism. It can enhance this role through the preservation of character and protection of the local environment through its spatial policies. The Broadland Special Protection Area (see opposite) is already vulnerable, having suffered from management neglect and natural succession. The site also suffers from eutrophication (a process where water bodies receive excess nutrients that stimulate excessive plant growth), brought about through the build up of nutrients over a long period, primarily through sewage outfalls and agricultural practices.

The region as a whole is a centre for tourism and recreation, which can negatively affect biodiversity. The Broads Plan (2011), produced by the Broads Authority, seeks to sustainably manage the range of activities, land uses and habitats across the Norfolk and Suffolk Broads area.

To locate developments close to already vulnerable habitats could damage the biodiversity of these sites further through an increase in sewerage and water abstraction. Careful siting of new developments and the delivery of high environmental standards will be crucial to protect and enhance biodiversity.

Access

Access to jobs, training and services is important for residents and can be difficult to provide at the district level due to the rural nature of the area. Increasing public transport and reducing traffic congestion have been identified as the two main priorities for local residents. As the population grows and ages, the need to ensure adequate facilities and services, and in particular access to them in rural areas, will become increasingly pressing.

Moreover, for sustainability and cost reasons, reliance on the car should be reduced through improved access to public transport and better cycling and walking links to local facilities and services. Creating balanced and integrated communities will be an essential aspect of providing new development, and a focus on excellent access arrangements will be expected to underpin plans for new development sites.

1.6. How this guide is organised

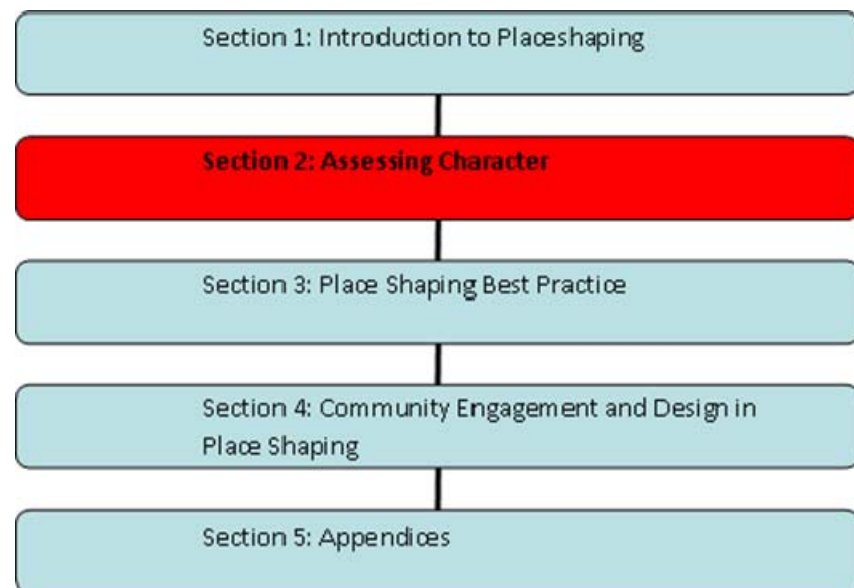
This guide is in four main parts with supporting appendices:

- This section explains the guide's **purpose** and structure;
- Section 2 is about assessing the **character** of new development sites;
- Section 3 is about applying sustainable **place shaping best practice** to new development sites;
- Section 4 is about **community engagement and design** aspects for new development sites; and
- Appendices cover **preparing and submitting a planning application** and details about the broader **context** for new development.

References and links

- The National Planning Policy Framework can be seen at <http://www.communities.gov.uk/planningandbuilding/planningsystem/planningpolicy/planningpolicyframework/>
- For information on Future Communities see <http://www.futurecommunities.net/why/place-shaping-0>
- The Joint Core Strategy for Broadland, Norwich and South Norfolk, adopted on 24 March 2011 can be viewed at <http://www.gndp.org.uk/our-work/joint-core-strategy/>
- On place shaping, see [Future Communities](#)
- For information about Broadland's likely development sites see <http://www.broadland.gov.uk/>

2. Assessing character – understanding site and setting



2.1. Overview

An important first step in undertaking new development is appreciating and assessing the character of development sites and their setting. A considerable amount of work has been done nationally on [best practice approaches to character assessment](#) and [understanding context](#). The Council has produced useful evidence and advice on the [character of different local areas in Broadland](#). The 2008 work on landscape character shows that there is a range of landscape and built form elements that have development planning implications. These relate to built development, infrastructure, small scale and incremental change, settlement patterns, recreation and tourism, and climate change.

Taken together Broadland's Landscape Character Assessment (2007) and the landscape character framework provided by the Joint Core Strategy are good sources of information and advice for informing place shaping activities like site master planning and building design for specific sites. In particular these documents give useful advice on specific ways that new development can protect and enhance landscapes and would be expected to be referred to in detail. The advice on character assessment in this section summarises key points for those involved in the application of good place shaping principles and effective place shaping process for specific sites.

2.2. *Doing character assessment for new development sites*

All sorts of small scale and incremental changes – such as suburbanisation and the extension of rural settlements - can have a profound effect on landscape quality that is sometimes negative in its overall effects (Landscape Assessment Conclusions and Recommendations, 2008: 117). Among the landscape character issues the Assessment identified that new development sites would be expected to take into account are:

- Built environment problems caused by the expansion of development of a suburban character and pattern;
- Standardised housing designs;
- Inappropriate building materials and details that ignore local vernaculars;
- Expansion of industrial, leisure and retail developments on the edges of settlements; and
- Pressure on the open character of the countryside.

Equally, new developments would be expected to avoid problems caused when that development severs the relationship between the settlement core and its landscape, and where new development is unsympathetic to the original settlement pattern and relationship with its landscape.

New development would also be expected to find ways to mitigate and adapt to the effects of climate change. Broadland's Landscape Assessment Conclusions and Recommendations (2008: 117) shows how understanding landscape character can help in reducing the causes of climate change and deal with its effects in a number of practical ways:

- Through energy conservation and efficiency;
- Increasing the use of renewable energy; and
- Adapting to the consequences of climate change in relation to flood risk and sea level rise.

The Broadland Landscape Character assessment identified six landscape character types and sixteen landscape character areas. New development sites would be expected to support these by careful place shaping. These character types and areas give each part of Broadland a unique sense of place and provide environmental, social and economic assets which new development can build on. The emphasis is on diversity and distinctiveness. The character assessment points out that the *"the diversity and local distinctiveness of the*

District's landscapes are considered to be a major environmental asset, making a significant contribution to the quality of life for Broadland's communities".

It offers guidance which new development sites would be expected to take into account: *"Protecting landscape features and patterns that contribute to landscape diversity, including enhancing their quality, character and function where necessary, should be a key aim for planning and land management policy in Broadland"* (2008: 2.)

At a sub-regional scale, there is landscape assessment direction for place shaping through the Joint Core Strategy (2011). The Joint Core Strategy uses this landscape character evidence to help ensure an environmentally conscious approach to new development on greenfield sites. The Joint Core Strategy points out that the approach needs to be one of **making environmental gains** through new development. It says that: *"The scale of development we have to accommodate will require the development of some significant greenfield areas, which will affect the existing landscape"*.

The Joint Core Strategy (2011) spells out the specifics of reflecting landscape character and using this to make environmental gains:

"Where this is necessary, development must provide environmental gains through green infrastructure, including allotments and community gardens. Biodiversity, geodiversity and locally distinctive landscapes will be protected and enhanced. Linkages between habitats will be promoted, helping to enable adaptation to climate change. Sustainable access to the countryside will be promoted. Efficient use will be made of minerals, energy and water resources, and the production of waste will be minimized".

2.3. Character assessment in summary

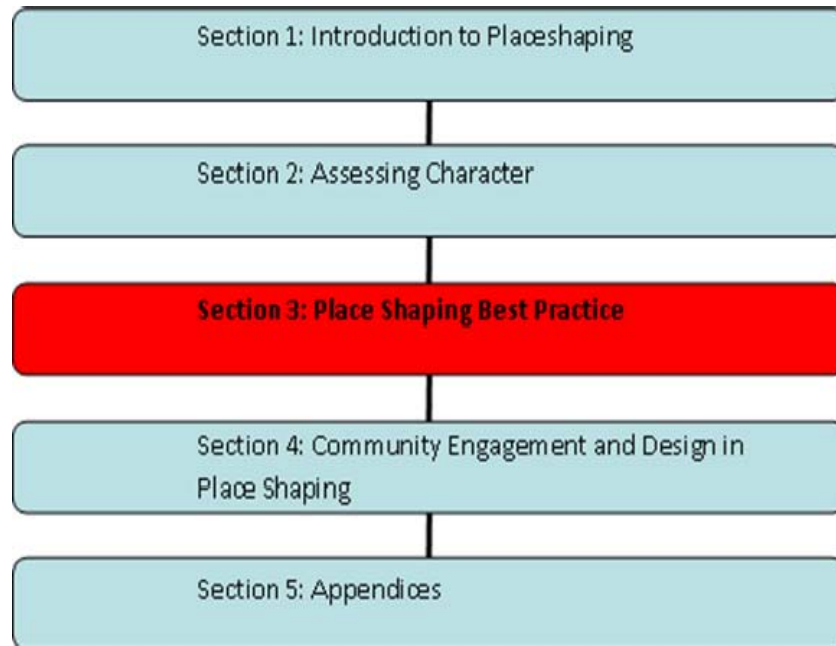
Understanding a site's character is the first step any good place shaper will take in the development process. Broadland's work on character areas provides a basis of evidence for conducting a thorough site assessment process that ensures the development:

- Uses land efficiently and is sympathetic to its physical and social context;
- Reduces the development's carbon footprint and improves biodiversity;
- Develops a place that is attractive, safe, convenient and healthy; and
- Fosters sense of place and local distinctiveness.

References and links

- Information at national level about [best practice approaches to character assessment](http://www.naturalengland.org.uk/ourwork/landscape/englands/character/default.aspx) and [understanding context](http://www.naturalengland.org.uk/ourwork/landscape/englands/character/default.aspx) can be found at <http://www.naturalengland.org.uk/ourwork/landscape/englands/character/default.aspx>
- For Landscape Character Assessment see: http://www.broadland.gov.uk/housing_and_planning/618.asp
- There is useful guidance in The Urban Design Compendium 2 on nature of character assessment related to the scale of development <http://www.urbandesigncompendium.co.uk/order>
- Broadland's Design Guide (pages 7-13) gives detailed advice on undertaking character assessment [http://www.broadland.gov.uk/PDF/Design_Guide_\(website\).pdf](http://www.broadland.gov.uk/PDF/Design_Guide_(website).pdf)

3. Achieving excellence – best practice in sustainable place shaping



3.1. Applying principles of place shaping

Over recent years the focus on shaping good places based on good design principles has become increasingly important to national and local governments. A range of guidance (see references) suggests that compact, mixed used, human-scaled, public transport-focused developments tend to make sustainable places to live, work and play. The place-shaping principles that help underpin these places reflect best practice and relate to both physical design and the financial and social processes related to development. The importance of good design is summed up in the new National Planning Policy Framework, which says that:

“The Government attaches great importance to the design of the built environment. Good design is indivisible from good planning and should contribute positively to making places better for people.” (National Planning Policy Framework, 2012: 14)

In developing new sites best practice place shaping principles would be:

1. Places for people – to be loved places must be safe, comfortable, varied and attractive. They also need to be distinctive, offer variety, choice and fun. Vibrant places provide opportunities both to socialise and to watch the world go by.
2. Enrich the existing – places should enrich the qualities of existing urban places. Whatever the scales new developments should respond to and complement their settings.
3. Make connections – places must be easy to get to and well integrated both physically and visually with their surroundings so people can move around without effort.
4. Work with the landscape – places should use the site’s intrinsic resources – climate, landform, landscape and ecology – to minimise energy use.
5. Mix use and forms – stimulating, enjoyable and convenient

places meet a variety of demands from the widest possible ranges of users, amenities and social groups.

6. Manage the investment – for places to be successful they must be economically viable, well managed and maintained.
7. Design for change – places must be flexible enough to respond to future changes in use, lifestyle and demography (Source: The Urban Design Compendium 1, 2000, [principles](#))

When it comes to the specifics of design for new sites, the Joint Core Strategy treats the Building for Life principles developed by CABE and partners as requirements. It states (2011: 31), *“To ensure the required high standards are achieved, residential development will apply the Building for Life model of residential design excellence, produced by CABE and the Home Builders Federation. At least a ‘silver standard’ will be expected”*. The Criteria are shown in the box (opposite).

In applying these principles and criteria it is important to remember that place shaping is not only about design – although that is obviously critical. Shaping places also means covering ‘process’ aspects, like ensuring social vitality, focusing on economic health, ensuring excellent ongoing management and undertaking successful engagement of communities – topics which are dealt with later in this guide.

Overall, achieving a good sense of place and local identity means successfully melding together these design and process aspects through a robust place shaping approach. The rest of this section works through a series of practical areas for getting the design aspects right.



Aylsham Market Place

Source: Broadland District Council

Building for Life criteria

Environment and community

01. Does the development provide (or is it close to) community facilities, such as a school, parks, play areas, shops, pubs or cafes?
02. Is there an accommodation mix that reflects the needs and aspirations of the local community?
03. Is there a tenure mix that reflects the needs of the local community?
04. Does the development have easy access to public transport?
05. Does the development have any features that reduce its environmental impact?

Character

06. Is the design specific to the scheme?
07. Does the scheme exploit existing buildings, landscape or topography?
08. Does the scheme feel like a place with distinctive character?
09. Do the buildings and layout make it easy to find your way around?
10. Are streets defined by a well-structured building layout?

Streets, parking and pedestrianisation

11. Does the building layout take priority over the streets and car parking, so that the highways do not dominate?
12. Is the car parking well integrated and situated so it supports the street scene?
13. Are the streets pedestrian, cycle and vehicle friendly?
14. Does the scheme integrate with existing streets, paths and surrounding development?
15. Are public spaces and pedestrian routes overlooked and do they feel safe?

Design and construction

16. Is public space well designed and does it have suitable management arrangements in place?
17. Do the buildings exhibit architectural quality?
18. Do internal spaces and layout allow for adaptation, conversion or extension?
19. Has the scheme made use of advances in construction or technology that enhance its performance, quality and attractiveness?
20. Do buildings or spaces outperform statutory minima, such as building regulations?

Source: <http://webarchive.nationalarchives.gov.uk/20110107165544/http://www.buildingforlife.org/criteria>

References and links

- Principles are found in the UDC which can be downloaded at <http://www.urbandesigncompendium.co.uk/keyaspectsofDesign>
- Guidance on how to design according to these place shaping principles can be found at <http://www.academyofurbanism.com/>
- The Building for Life criteria can be found at <http://webarchive.nationalarchives.gov.uk/20110107165544/http://www.buildingforlife.org/criteria>
- For place shaping advice from US based practitioners who have undertaken a large number of developments see <http://www.newurbanism.org/newurbanism/principles.html>

3.2. Shaping sustainable structure

Introduction

Shaping a sustainable structure in new development sites is vital to a sustainable future for the district. This section explains the broad range of place shaping elements that go to making a robust structure in new development sites, including:

- Movement network;
- Land-use mix;
- Block and plot structures;
- Role of landmarks, vistas and focal points;
- Character, scale, density and profile of buildings;
- Their energy and resource efficiency; and
- Relationship between built form and landscape.

These elements are introduced here and then discussed in more detail in later sections.

How to create a sustainable urban structure

Developing a sustainable structure in a new site is the first step any place shaper needs to undertake in achieving a robust place. Good place shaping gets the space structure for the site right *before* detailed work on aspects like traffic engineering is undertaken.

This site structuring activity includes achieving the best arrangement of building blocks, streets, buildings, open space and landscapes to create positive outdoor space. Each new site needs to be well connected to, and integrated with, its surrounding area in an environmentally sensitive way. Each site must also be efficient, including in relation to energy, and be commercially viable. Getting all these aspects right will help new development sites to function well (socially, environmentally and economically) and create their own local identity.

The movement framework

The first element of the site structure that place shapers need to develop is the movement framework. How much of the movement framework they need to cover will depend on the scale of the site. For bigger sites they will first need to think about elements like main roads, while for smaller sites they will focus in on the local street structure.

A movement assessment will provide the basis for developing a neighbourhood based on 'walkability catchments' (sometimes called ped-sheds, these are discussed in more detail in the next section). It is important that the structure makes the street and footpath network convenient for walkers, cyclists, and people using public transport, as well as drivers and service vehicles.

The street network also needs to connect well to the existing streets and provide direct and attractive connections to key facilities. Often grid based street networks work best for achieving a good spatial structure and effective movement framework. More details are provided in the 'shaping sustainable access' section.

Land use mix

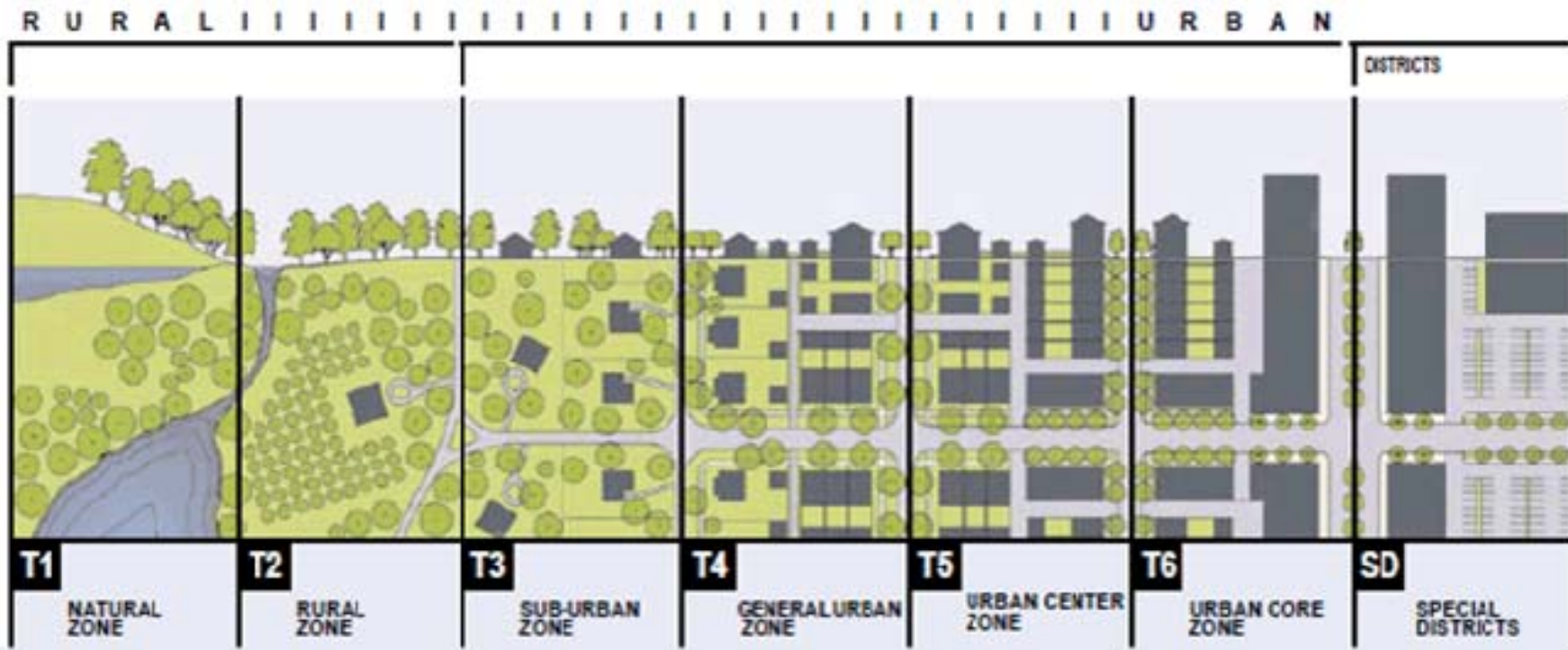
The next aspect to consider is the land use mix for the site, which needs to be both diverse and compatible, with primary activities combined, housing types and tenures well mixed, and the character and grain right. Transect based approaches to density, building and street types, (see box) can help develop the structure of sites, especially in rural and semi rural locations or on urban peripheries.

As described in more detail later in this guide in 'Shaping a vibrant place', it is best practice that public space should take precedence over private in the initial place shaping work that creates the spatial structure.

If the site includes the need to develop a new centre, this should focus on a public transport node, generally located on a crossroads, and it should include housing as well as services and facilities as part of a

The transect hierarchy

The 'transect' deserves special mention because it is such a useful tool for shaping site structure in places where there is a transition between rural and urban space. The Transect is an analytical system that "integrates environmental methodology for habitat assessment with zoning methodology for community design". It helps place shapers to develop an urban-to-rural 'transect hierarchy' that has appropriate densities, building and street types for each area along the transect continuum. The diagram below shows a transect visualisation, and more information about transect approaches is found in the *References and Links* to this section.



Source: http://dpz.com/pdf/Plan_Magazine.pdf

diverse land use mix. Thinking about how to create a walkable neighbourhood focused on a public transport node is a good place to start when mixing land uses.

If the development site is on an urban edge location in Broadland, to make it sustainable, it is important to avoid creating single land uses like office, industrial and retail parks. The 'Sprawl Repair Manual' (see References and Links) shows how these kinds of places have previously undermined sustainable place making. In shaping new sites design approaches that create mono-functional areas should be avoided.

If 'big box' land uses (like large supermarkets or other retail stores) need to be included in the site it is important to bring them back into town centres from out of town locations and find ways to 'wrap' them with smaller buildings to disguise their bulk and avoid the problem they pose of 'dead' frontages.

A number of development sites are in places that are neither town centres nor more residential edges of settlement space but in the 'transition zone' in between. These sites offer interesting opportunities for mixing land use in compatible but economically vibrant ways and creating distinctive local character that place shapers will want to take advantage of. There is a strong need in sustainability terms to develop thriving local economies (most recently reflected in the National Planning Policy Framework). Place shaping for these kinds of sites, would be expected to focus on reducing the need to commute to work, allow land uses like live-work units to be included, and can potentially support place shaping for niche retailing, specialist quarter development, and schools and colleges.

Whatever the site's location, it is always important to recognise all the services and facilities a community will need. Different sized developments will be expected to consider what spatial and population catchments their development needs to reflect for services and facilities (for more on catchment 'rules of thumb' see the guidance documents listed in the References and Links).



Aylsham shops and businesses
Source: Broadland District Council

Buildings and density

The density of the buildings and their profile, including where they concentrate into activity nodes needs to be right. Site developers will need to be made aware that this is in part because there is an increasingly urgent requirement to reduce the need to travel, to minimise consumption of energy and resources, and to reduce the amount of waste produced.

Mixed land uses - Rules of thumb

Overview: Mixed land use promotes active transport to and between different activities by co-locating destinations. A range of activities in a development encourages social interaction as people are able to meet and also undertake other activities in the one trip. There is consistent research evidence that mixed land use (ie. the presence of multiple destinations) is a key factor influencing a neighbourhood's walkability.

Avoid: Development that is not serviced by or integrated with transport networks or activities required for daily living (supermarket, newsagent). Areas with no public open space or play areas to accommodate the needs of children and carers. Not integrating access and movement networks within the design and funding of the mixed land development. Single use developments such as regional centres that contain only retail and commercial development.

Encourage: Adequate open space and recreation areas especially for children and their carers. Developments located within walking distance of bus or tram stops (400 metres) or train stations (up to 800 metres).

How to achieve: Provide a range of development types and densities (including residential) that allow for a mix of day and night time activities including safety and surveillance considerations. Ensure that surrounding transport networks and adjoining development is integrated with the new development. At the more detailed design stage pay attention to lighting, street furniture, signage, footpath treatment and safe road crossings to ensure a safe and convivial space is provided for all users

Rule of thumb: A mix of land uses, including residential, and access to the shops and services required for daily living that is well integrated with public transport, designed to maximise surveillance and designed to be safe from traffic will support the use of active forms of transport.

Source: http://www.healthyplaces.org.au/site/mixed_land_use.php

This is not about overcrowding or cramming too many people in to one place. Getting the densities right helps cater for different housing tenures, lifestyles and affordability options. In urban places 3-4 storey housing can achieve a good balance between sufficient density for sustainability reasons and avoiding overcrowding. The density matrix chart (see information box) shows the results of research into what house types and what densities work best together.

Research by the DETR in 1998 found there was no correlation between density and design quality. Instead site developers need to relate the density of their development site to the intended sustainability outcomes. A well-designed place is likely to include a range of densities for homes, mixed use buildings, and other non residential buildings but these will be determined by land use needs rather than creating a bland average density across the development.

Resource efficiency

Whatever their size, development sites need to contribute to energy and resource efficiency (the role of individual buildings in this area is described later in this guide). Achieving good solar access through orientation, building heights and using the site topography will need to be a central consideration. Place shapers need to maximise water collection, storage and recycling, make use of available wind and thermal energy sources and ensure that the project plan reflects the [waste hierarchy](#). In some sites more innovative options may be available such as water treatment by reedbed filtration systems and site level rainwater distribution systems.

Relating to landscape

Site developers will need to think carefully about the relationship between buildings and the surrounding landscape, including attention to microclimatic effects created by the structure of the development. It is expected they will base their approach on a well handled landscape character assessment which identifies intrinsic landscape characteristics and then moves on to specifics such as green infrastructure, protecting biodiversity and habitats, and open space

		Option 1	Option 2	Option 3
Car Parking Provision		High 2-1.5 spaces per unit	Medium 1.5-1 space per unit	Low Less than 1.5 space per unit
Redominant Housing Type		Detached & linked houses	Terraced houses & flats	Mostly flats
Location	Setting			
Site within Town Centre "Ped-Shed"	6 Central			240-1100hr/ha 240-435u/ha Ave.2.7hr/u
	Urban		200-450hr/ha 55-175u/ha Ave.3.1hr/u	450-700hr/ha 165-275u/ha Ave.2.7hr/u
	Suburban		240-250hr/ha 35-60u/ha Ave.4.2hr/u	250-350hr/ha 80-120u/ha Ave.3.0hr/u
Sites along Transport corridors & Sites close to a Town Centre "Ped-Shed"	3 Urban		200-300 hr/ha 50-110 u/ha Ave.3.7hr/u	300-450hr/ha 100-150u/ha Ave.3.0hr/u
	Suburban	150-200hr/ha 30-50u/ha Ave.4.6hr/u	200-250hr/ha 50-80u/ha Ave.3.8hr/u	
Currently Remote Sites	2 Suburban	150-200hr/ha 30-65u/ha Ave.4.4hr/u		
	1			

Source: Urban Design Compendium, HCA



network design. All these aspects need to be considered early in the development planning process before detailed design responses including traffic engineering are undertaken. The 'Shaping a Sustainable Landscape' section discusses these aspects in more detail.

In developing their site's structure, site developers will be expected to ensure that existing assets (special trees, heritage buildings, other landmarks) can be worked in to the new development. This is something local communities will want to have an input in and these process aspects are discussed in the section on community engagement and design for new sites.

Landmarks, vistas and focal points

Site developers will be expected to include elements that both give their development identity and help people find their way around. Designers sometimes talk about the qualities of 'legibility' and 'permeability' in a place. Is it easy to understand what's where and how to get to it? Landmarks like important buildings, key corners, church towers or statues define important places, make it easier for people to find their way around and help make clear the hierarchy of a place. A series of focal points in a development can define entrances and gateways to a place as well as making paths clearer. Vistas of key buildings help make places memorable and connect up paths and networks on a site.

Along with the movement framework, the block and plot structure is one of the basic components of place shaping that site developers will be expected to focus on. As detailed in the section on 'Shaping a Vibrant Place', getting block scale, shape and size right is likely to mean site developers will need to place buildings at or near the building line of the block and create active frontages.

Site developers will generally be expected to avoid very large blocks because these can undercut the accessibility of buildings, the internal flexibility and overall adaptability of buildings over time, and the capacity to include a variety of different building types and land uses. This means it is important to shape blocks which allow for building at a



Emphasising the route from the train station to the seafront in Hove.
Source: Urban Design Compendium, HCA



Reepham Parish Church provides a key focal point
Source: Broadland District Council

fine grain. The guide says more about the details of shaping blocks and plots in the section on ‘Shaping a vibrant place’.



Use of outside seating creates an active frontage. This ensures that the life of the building helps animate the street making it feel safer and more welcoming.

Source: Broadland District Council

References and links

- Urban Design Compendium 1 and 2 Downloads available at <http://www.urbandesigncompendium.co.uk/order>
- Shaping Neighbourhoods: Health, Sustainability, Vitality (Richard Guise, Hugh Barton, Marcus Grant, 2002) <http://www.rudi.net/node/6592>
- Sprawl Repair Manual (Galina Tachieva et al, 2010) <http://www.sprawlrepair.com/>
- For information about the waste hierarchy please see <http://www.defra.gov.uk/publications/2011/06/15/pb13530-waste-hierarchy-guidance/>
- For more on greywater see <http://www.thehouseplanner.co.uk/greywater.html>

3.3. Shaping sustainable movement

Overview

The national context for the accessibility and movement aspects of place shaping are an increasing focus by government on actively managing patterns of growth to support public transport, walking and cycling: *“Plans and decisions should ensure developments that generate significant movement are located where the need to travel will be minimised and the use of sustainable transport modes maximised.”* (National Planning Policy Framework, 2012: 10).

Moreover, the government has made strong policy links between transport as a facilitator of economic growth and a key element in sustainable place shaping, saying that: *“Plans should protect and exploit opportunities for the use of sustainable modes for the movement of goods or people.”* (National Planning Policy Framework, 2012: 10)

Policies and design principles

Site developers will need to take into account a number of policies and design principles in shaping well-organised movement structure for their sites. As the Department for Transport’s Manual for Streets 1 (2009: 11) points out *“Streets make up the greater part of the public realm. Better-designed streets therefore contribute significantly to the quality of the built environment and play a key role in the creation of sustainable, inclusive, mixed communities”*. The Joint Core Strategy (2011: 43) meanwhile contains a considerable number of policies in relation to more sustainable transport which site developers would be expected to take note of including *“significant improvement to the bus, cycling and walking network, including Bus Rapid Transit on key routes in the Norwich area”*.

Moving people and goods

Site developers will need to focus on allowing people and goods to move about as easily as possible and the National Planning Policy Framework (2012: 10) gives direct guidance on this. *“Developments*

should be located and designed where practical to:

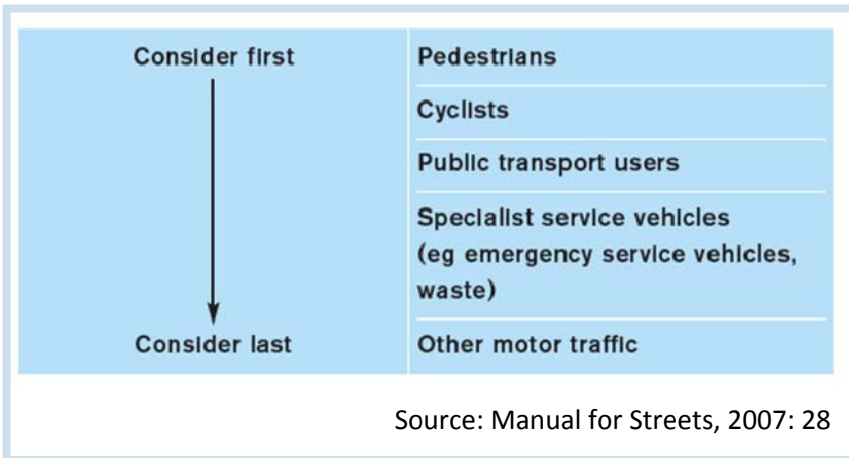
- Accommodate the efficient delivery of goods and supplies;
- Give priority to pedestrian and cycle movements, and have access to high quality public transport facilities;
- Create safe and secure layouts which minimise conflicts between traffic and cyclists or pedestrians;
- Incorporate facilities for charging plug-in and other ultra-low emission vehicles; and
- Consider the needs of disabled people by all modes of transport”.

In establishing a good movement structure, site developers will need to show how roads, footpaths, public transport and utilities connections:

- Link to existing routes and systems;
- Give people good, safe movement choices which build in walkability;
- Fit with the development’s buildings to help make a great ‘sense of place’;
- Provide good parking options; and
- Help manage traffic in an integrated way without ugly extra infrastructure.

The movement hierarchy: putting walking first

Traditionally movement structures have been focused primarily on vehicular transport but it is increasingly understood that this approach is unsustainable. For site developers this means turning the movement hierarchy on its head. The diagram drawn from the Manual for Streets (DfT: 2007) shows how this works (see overleaf).



The Manual for Streets 1 (2007: 13) points out that *“In the past street design has been dominated by some stakeholders at the expense of others, often resulting in unimaginatively designed streets which tend to favour motorists. When it comes to detailed design, site developers will be expected to avoid design that favours motorists over other street users. The Manual for Streets proposes that inclusive design approaches (see Links and references) should be used in designing streets as places for people not just movement corridors for vehicles. To improve safety Ministers are now supporting [20 mile an hour speed limit schemes](#) and site developers would be expected to ensure their design contributes positively to giving drivers the right cues to slow down.*

In line with this approach, site developers would be expected to consider the walkability of their site design as early as possible, rather than design for walking being ‘tacked on’ to road design. It is increasingly agreed that street design that supports 20 mile an hour speeds will allow different road users to mix safely. Equally, the rule of thumb for walking catchments is that people are likely to walk up to 500 metres to go to local shops and these ‘walkability catchments’ or ‘ped-sheds’ can be built in. Site developers would be expected to refer to these rules of thumb and the ‘Five C’ principles (see box) to guide

their approach to shaping streets that work for pedestrians and cyclists.

‘Five C’ principles

- **Connections -**

Do good pedestrian routes connect the places where people want to go?

- **Convenience -**

Are routes direct, and are crossings easy to use? Do pedestrians have to wait more than 10 seconds to cross roads?

- **Convivial -**

Are routes attractive, well lit and safe, and is there variety along the street?

- **Comfortable -**

What is the quality and width of the footway, and what obstructions are there?

- **Conspicuousness -**

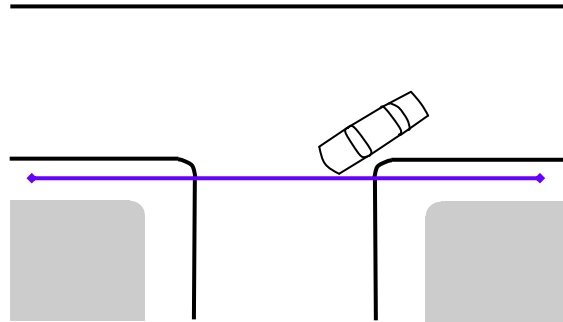
How easy is it to find and follow a route? Are there surface treatments and signs to guide pedestrians?

Source: Urban Design Compendium, 2000.

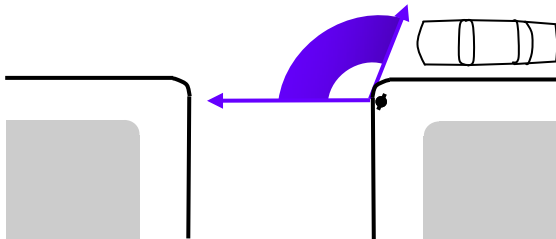
Context sensitive movement design

At the bigger development scale, on large sites, place shapers should work in partnership with agencies responsible for designing and engineering major roads, once the movement framework has been designed. CABE explains that improving the quality of streetscapes has often been *“compromised by the rigid application of highway engineering solutions”* (*Paving the Way: How we Achieve Clean, Safe and Attractive Streets*, 2002: 36). Site developers would be expected to avoid approaches which treat major local roads as simply highways, with no pedestrian and cyclist provision, as these are no longer considered best practice or appropriate to meet sustainability needs in new settlements. Instead, site developers would be expected to respond to the international trend towards [‘context sensitive’](#) solutions.

Small radius (eg 1metre)

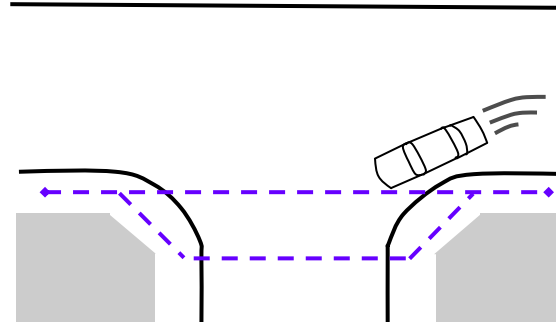


- Pedestrian desire line (—) is maintained
- Vehicles turn slowly (10-15 mph)

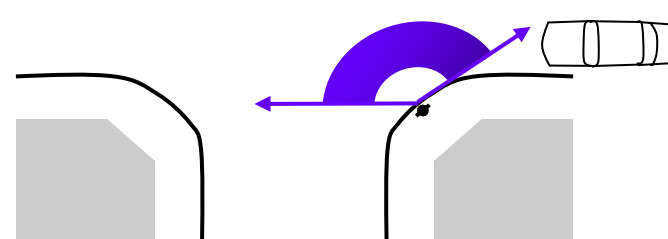


- Pedestrian does not have to look further behind to check for turning vehicles
- Pedestrian can easily establish priority because vehicles turn slowly

Large radius (eg 7metres)



- Pedestrian desire line deflected
- Detour required to minimise crossing distance
- Vehicle turns faster (20-30 mph)



- Pedestrian must look further back to check for fast turning vehicles
- Pedestrian cannot normally establish priority against fast turning vehicles

Devon County Council

Example of how road junctions could be designed to ensure the safety of pedestrians and help in the restriction of vehicular speeds.

Source: *A Manual for Streets*

Shared space

Site developers would also be expected to take note of another recent innovation in street design is the '[shared space](#)' approach, which provides more up-to-date techniques for traffic calming than the ugly, intrusive calming devices used in some areas. This approach advocates removing signs and guard rails, obliging drivers and pedestrians to become more alert to each other, which in turn leads to more responsible driving. These approaches can be built into movement design for new sites.

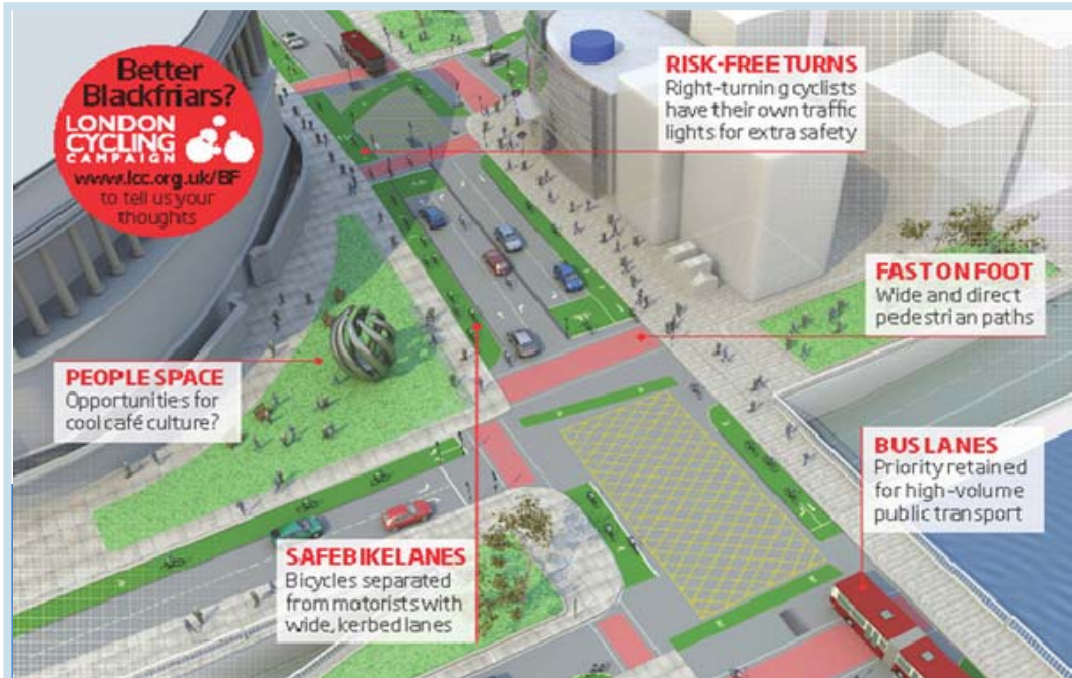
Cycling

Site developers would be expected to focus on making cycling a more attractive option by building in clear, direct routes for cyclists, ensuring there are parking bays that allow cyclists to avoid parked car hazards. In some cases – such as major roads where traffic speeds are hard to reduce – they would need to build in designated cycle lanes which must be coherent and well designed at junctions. Raised kerbs too can help separate pedestrians from cyclists. Good cycle security is a consideration and needs to be designed in early including communal indoor storage.



Converting car parking bays to cycle storage encourage cycle and ride.

Source: Urban design Compendium, HCA



An example of a well designed urban junction that shows how even in these circumstances all users are considered. It includes fast and wide pedestrian routes, segregated, kerbed cycle lanes and dedicated bus lanes.

Source: London Cycling Campaign



A more typical example of good practice that is appropriate for Broadland, illustrating shared space in a modern development in Aylsham.

Source: Broadland District Council

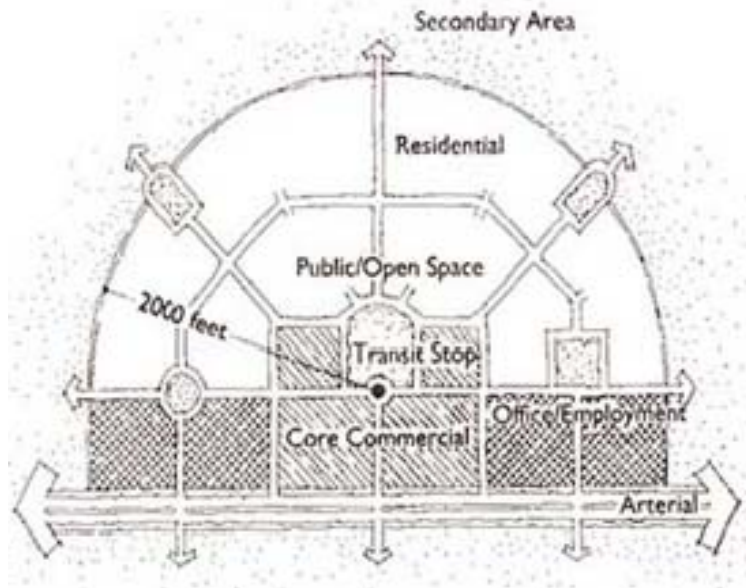
Public transport

Public transport links are equally important for site developers to reflect in their site designs. There are existing rail lines through the district, and on the Bittern Line, new halts are proposed at Rackheath and Broadland Business Park linked with new bus rapid transit routes.

It is important that site developers make sure that their development focuses on public transport links. This fits in with approaches like 'Transit Oriented Development' (or TODs for short) which describe the

place shaping principles that help reinforce good access arrangements (see box).

One related aspect important to Broadland is that bus routes should link with local centres and railway stations. It should be easy and convenient to catch the bus. The rule of thumb is that viability for a route occurs if there are sufficient people within 400 metres (a five minute walk) of a bus stop. The densities and catchment areas for bus provision are explained in the Manual for Streets (see the References and Links).



Transit Orientated Development Diagram

Source: *The Next American Metropolis*, Peter Calthorpe (1993)



Dedicated busway in Leeds

Source: *Urban Design Compendium*, HCA

The social role of streets

As vital public spaces, streets in new development sites need to be defined by their capacity for movement of all kinds, but as the best practice approaches to movement show, capacity is not their only important function. New streets are also important because they contribute to the character and 'enclosure' of the public realm being created on site. New developments will need to have residential streets with a strong building line and shared space, and high streets with active frontages and mixed uses. (More guidance on this is found in the Reference and Links).

For larger roads, the application of best practice approaches described above suggests these can be designed as formally landscaped avenues providing 'routes through'. These will connect up neighbourhoods and main roads that connect to other parts of Broadland and the Norwich sub-region. It is important that site developers do not begin their design work for main roads with highway engineering but with arranging buildings and the enclosure of space. These roads need to be treated as social spaces for pedestrians, cyclists, public transport users, service vehicles and private cars. Excellent guidance for detailed street and junction design is found in both the *Manual for Streets* and the *Urban Design Compendium*.

Pedestrian friendly Street in Hove

Source: Urban Design Compendium, HCA



Limiting car access to improve the pedestrian experience in Bury St Edmunds

Source: Broadland District Council

Cars and car parking

Site developers will be expected to ensure cars are properly provided for but minimise any negative impacts on local areas – including dominating the public realm, creating an unacceptable intrusion of noise and pollution, excessive land take or encouraging the use of unsustainable travel modes. Cars can have both positive and negative roles in place shaping. For example, cars parked on street can help slow traffic speeds by narrowing the carriageway but parking on pavements is a problem that needs to be avoided.

Car parking, service vehicle parking and cycle parking are all important aspects of street functioning, that site developers would be expected to reflect in their design approach. Because *“the availability of car parking is a major determinant of travel mode”* (The Manual for Streets, 2007: 103), it has become clear that ‘predict and provide’ approaches to car parking encourage unsustainable travel behaviour. This in turn means that site developers would be expected to find clever design solutions for parking which meet real need but avoid undermining a sustainable movement structure.

The semi-rural settlement pattern of the district makes limiting car parking especially difficult to achieve but trying to reach a sustainable outcome is still very important. It is possible to provide less than typical amounts of parking when development sites are close to public transport nodes, or for certain kinds of housing where residents want less parking. For mixed use residential developments car parks can be grouped in well overlooked, secure, rear courtyards rather than undermining the enclosure of the street frontage. Similarly, commercial car parks should not be placed on street frontages, but should feature extensive gridded planting and softened surfaces for good drainage. The *Sprawl Repair Manual* (see References and Links) shows alternative designs to avoid unsustainable designs for car parks.

Part of the effort to reduce the demand for parking is about making different ways of getting around more attractive, and site developers would be expected to offer solutions including travel plans and car



Limiting forecourt parking ensures building thresholds are not dominated by car parking (top however parking areas in the rear are still well overlooked (bottom)

Source: Wick Village, Hackney, London

sharing. The Department for Transport has produced a useful guide to local authorities on [Delivering Sustainable Low Carbon Travel](#), which focuses on travel plans, and other methods for helping support people to share cars, go by public transport, and walk and cycle more. (One good example of a local car-sharing scheme is the Norfolk Car Club, initially started as part of the Reepham Low Carbon Communities Challenge).

Servicing arrangements

Developers will be expected to make sure that servicing arrangements for both small and larger development sites are as far as possible undertaken from the street. Where rear courts are necessary, they can be enclosed by buildings.

The principle with utilities routes is that services need not dominate the development's layout, but flow from the design of the development site. The conventional layout for services tends to follow road patterns but this isn't always the most sensible and cheapest route. Utilities can be routed away from main streets if this is more direct, and placed together away from trees and other landscape features important to protect for character and biodiversity reasons.

With good management and co-ordination with service providers, it may be possible for site developers to improve on the conventional approach and to combine services in shared strips. The advent of electric vehicles and new charging point infrastructure potentially adds to equipment boxes in streets, so it is important to make these accessible, but avoid blighting the street by disguising equipment boxes and grouping cluttered satellite dishes. Excellent detailed guidance and examples of well organised car parking and servicing arrangements are provided in the References and Links.

References and links

- The Manual for Streets 1 and 2 can both be downloaded at <http://www2.dft.gov.uk/pgr/sustainable/manforstreets/>
- For more on 'shared space' see <http://www.rudi.net/node/19277>
- The Guide to Sustainable Low Carbon Travel can be accessed at <http://www2.dft.gov.uk/pgr/sustainable/guidelocalauth/>
- DfT view on 20 mile an hour streets is available at <http://www.dft.gov.uk/news/press-releases/ministers-cut-traffic-signs-red-tape-for-local-councils>
- Urban Design Compendium 1: detailed guidance, principles and case studies can be seen at <http://www.urbandesigncompendium.co.uk/> and a copy can be downloaded. See pages 69-83.
- For material about context sensitive design from the US see http://contextsensitivesolutions.org/network/one?party_id=7103
- For more on inclusive design see *The Principles of Inclusive Design (They Include You)* (CABE: 2006)
- For information about TODs see "The new transit town: best practices in transit-oriented development" Hank Dittmar, Gloria Ohland (2004)
- Information on car clubs: <http://www.norfolkcarclub.com/> and <http://www.reephamchallenge.org/>
- For information on travel plans see <http://www2.dft.gov.uk/pgr/sustainable/guidelocalauth/>

cont....

- For excellent advice on creating boulevard style major roads see *The Boulevard Book* (Jacobs, Macdonald and Rofé)
- For design ideas for car parks and other elements of place shaping, see the Sprawl Repair Manual (Galina Tachieva et al, 2010) <http://www.sprawlrepair.com/>

3.4. Shaping a vibrant place

Overview

The National Planning Policy Framework states that:

“There are three dimensions to sustainable development; economic, social and environmental. These dimensions give rise to a need for the planning system to perform a number of roles:

- *An economic role—contributing to building a strong responsive and competitive economy, by ensuring that sufficient land of the right type is available in the right places at the right time to support growth and innovation; and by identifying and coordinating development requirements including the provision of infrastructure*
- *A social role—supporting strong, vibrant and healthy communities, by providing the supply of housing required to meet the needs of recent and future generations; and by creating a high quality built environment, with accessible local services that reflect the communities needs and support its health, social and cultural well-being; and*
- *An environmental role—contributing to protecting and enhancing out natural, built and historic environment; and, as part of this, helping to improve biodiversity, use natural resources prudently, minimise waste and pollution, and mitigate and adapt to climate change including moving towards a low carbon economy.”*

(National Planning Policy Framework 2012, 2)

Broadland is an economically and socially diverse and active place with a strong rural economy and growing settlement edge to Norwich, and the council supports place shaping for vibrancy through a number of planning, economic development and design initiatives and policies. The area’s new developments should maximise

opportunities to contribute to Broadland future as a socially vibrant and economically thriving place; recognising that this is about both physical shaping and other place shaping ‘process’ actions. Involving the community in place shaping is discussed further in section 4.

Economic growth

Site development will be occurring in the context of a strong national commitment to economic growth. The growth emphasis of national policy is now very pronounced through the National Planning Policy Framework (2012) which says a number of things very relevant to place shaping.:

- *Plan proactively to meet the development needs of business and support an economy fit for the 21st century (paragraph 20);*
- *Planning policies should be positive, promote competitive town centre environments and set out polices for the management and growth of centres over the plan period (paragraph 23); and*
- *Planning policies should support economic growth in rural areas in order to create jobs and prosperity by taking a positive approach to sustainably new development.*

Site developers will be expected to emphasise the economic vitality aspects of place shaping, given its role in supporting strong urban and rural economies. When siting residential development they should note that:

- *“residential development can play an important role in ensuring the vitality of (town) centres” (NPPF, 2012:8).*
- *“in rural areas housing should be located where it will enhance or maintain the vitality of rural communities” (NPPF, 2012:14)*

Building healthy communities

Site developers equally need to reflect the community facets of place shaping “*facilitating social interaction and creating healthy inclusive communities.*” (NPPF, 2012:17)

To deliver the social, recreational and cultural facilities and services the community needs, planning policies and decisions should:

- *Plan positively for the provision and use of shared space, community facilities (such as local shops, meeting places, sports venues, cultural buildings, public houses and places of worship) and other local services to enhance the sustainability of communities and residential environments;*
- *Guard against the unnecessary loss of values facilities and services, particularly where these would reduce the community’s ability to meet its day-to-day needs;*
- *Ensure the established shops, facilities and services are able to develop and modernize in way that is sustainable and retained for the benefit of the community; and*
- *Ensure an integrated approach to considering the location of housing, economic uses and community facilities and services* (NPPF, 2012, 17).

Public realm focus

Site developers will need to ensure that the public realm ‘trumps’ private space and is thought about and given structure before private buildings are designed. Making good ‘outdoor rooms’ is crucial for creating vibrant streetscapes and building local character. Each site developer also needs to be clear about where their site fits into the hierarchy of public space in the place where the site is located. This will reflect the function of the site’s public realm as a ‘go to’ or a ‘go through’ space or a mix of the two: this might be as a transport node, a town square, a marketplace, or simply a local street.

Buildings’ relationship to public space

Site developers will be expected to ensure that buildings make a positive contribution to the street by facing towards it and providing an edge that people will want to use. Public spaces need active frontages that are fine grained and provide lively interiors and ‘eyes on the street’. Developers have a range of opportunities to develop a vibrant public domain on their site, including how buildings relate to public space. Building lines on the site need to help create a mostly contiguous frontage to streets because this helps define public space and give it enclosure. Good rules of thumb have been developed for the right building setback distances (see opposite). The table below shows these setback distances.

Indicative set-back distances according to locational setting		
Location	Set-back	Purpose
Core commercial	Adjacent to areas pavement edge	Direct commercial frontage
Inner urban areas	1.5m to 3m semi-private strip between residential garden, or commercial building fronts and public pavement	<ul style="list-style-type: none"> • Amenity space for a small bicycle stand or seating • Functional space for residential rubbish-collection or meter-reading • ‘Spill-out area’ for pavement cafes or shops
Outer urban areas	‘Tolerance zone’ of about 5m	Adjacent to busier arterials, providing a more substantial buffer for houses. Avoid car hardstandings, which create a divisive barrier between building and street

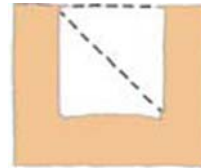
Source: *Urban Design Compendium, HCA*



It is also important for site developers to make sure that public spaces are overlooked so they feel safe to be in and help foster local identity and a sense of ownership. Buildings provide physical bulk (mass) that contributes to this 'enclosure'. Getting this right is important to making space feel good to be in and relies on particular height to width proportions. Again, there are good rules of thumb for this for different sized streets and spaces (see diagrams).

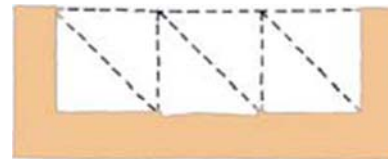
The fronts of buildings need to be made active, lively and 'fine grained' so they contribute to the vitality of the public realm they connect to. It is best to avoid long expanses of blank wall without windows and doors that make 'dead' frontages, by designing in narrower buildings which help to activate frontages.

Equally site developers need to focus on making the 'edge space' where the building meets exterior space feel three-dimensional. This can be done through 'articulation' of frontage elements; in other words giving them thickness. It is also important to make buildings interconnect with the street by creating facades that offer views into and out of buildings. This supports 'eyes on the street' which help make public space safer. If the building has some functions that have public aspects like a café, shop or office it is important to make sure these are on the frontage so they can add to public space liveliness. There is good detailed advice on how to do this through the References and Links section.

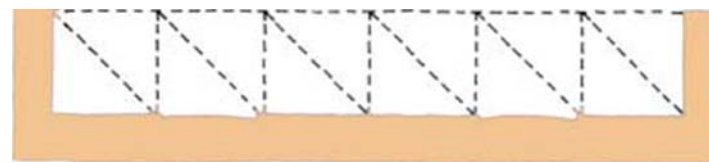


Mews 1:1 ratio

Height to width ratios		
	Maximum	Minimum
Mews	1:1.5	1:1
Streets	1:3	1:1.5
Squares	1:5	1:4



Generally effective 1:3 ratio



Maximum Squares (+ very wide streets) 1:6 ratio

Relating to landscape, building identity

Local character assessment work shows that there is a strong landscape and townscape context for new development. Site developers would be expected to ensure that new buildings respond to that context through good design in order to enrich the places where they are sited. Respecting the context means maintaining the building line; achieving continuity with the widths, heights and depths of neighbouring buildings; reflecting the local street and block pattern; and responding to vernacular materials and building styles.

Making new places distinctive is always important. Site developers will find it is easier to achieve distinctiveness if there are a number of different designs and designers involved in place shaping a site, and buildings reflect local vernacular traditions of design, craft and materials. Otherwise Broadland's new developments could end up looking and feeling bland or out of place and lacking a strong local identity. In practical terms this means site developers would be expected to develop plots and land parcels within a development site that are small enough to allow this diversity to occur. Sometimes a striking building composition from a distance looks crude and under-detailed when viewed from nearby. So site developers need to design and construct buildings which appear well detailed at each viewing distance.

Buildings scale and height

The character assessment and existing design guidance both give some strong cues about the right scale for buildings, based on those in existing settlements. Site developers would be expected to make use of this evidence base for getting building heights, depths and widths right, and making their corners work well in new sites. Site developers would need to strike the right balance between putting bigger and taller buildings at central activity nodes (rather than on settlement edges as the 'transect' approach described earlier explains) and limit the wind and overshadowing effects they could cause.

In less central sites the building heights are likely to be lower but



The market square at Reepham



A typical street near the centre of Aylsham

corners are good places to make somewhat bigger buildings which respond to the corners' important space enclosing and place shaping role. There are some very useful rules of thumb about building depth which help to make sure that buildings work in environmental terms for important aspects like ventilation and sunlight. On building width, spaces around 5.7metres wide are thought to be much more able to be flexibly used and easier to change over time than wider or narrower buildings.

Mixing land uses

As discussed in the section on 'Sustainable place structure', wherever possible site developers would be expected to consider the feasibility of building in mixed use at the single building scale as well as between different buildings. The particular mix will depend on local needs and opportunities and reflect the best place-shaping approach to the site in question. This mixed use needs to be at a 'fine grain' with different but compatible uses close to one another.

Some parts of a site and some buildings will offer the most opportunities for mixing land uses in new developments. Corner buildings for instance provide greater opportunities for mix because they have two fronts to the street. Site developers would be expected to make mix work across a site, including adding in mews buildings at the back of main frontages; work units within or at the back of residential frontages; live-work units; and temporary uses in suitable places. Where buildings are multi storey it is possible to have the more active uses on the ground floor and the more passive ones above – as in traditional settlements.

Public space design

To shape a vibrant place in Broadland, each site developer would be expected to focus on the design of the public realm as sociable space. For bigger sites, developers will need to group activity into nodes, while the need for areas of quieter, more reflective public space will be a consideration for all sites. Traditionally settlements grouped important buildings and spaces for the civic and economic life of the

town - like churches, town halls, and market halls - at the centre, and related these to quieter spaces like gardens and parks. Site developers will need to pay careful attention to the kinds of civic land uses, and services and facilities people need, and how these can contribute to making a vibrant place.

Creating a vibrant place in Broadland also means providing well oriented, shaded and wind protected places for people to sit and talk. It means places for children to play; the young and the elderly to socialise and where everyone feels safe, welcome and engaged. Well designed, direct paths that follow where people want to go; good use of local materials for ground surfaces; excellent street furniture, infrastructure and lighting that avoids clutter; opportunities for public art; and planting that supports local biodiversity. In a related way, place shapers need to ensure their site designs produce places that respond to sensory needs, and feel and smell nice as well as looking good.

All of these elements can help contribute to building a 'sense of place' in Broadland's new developments, and for new developments the process of achieving local identity is especially important.

References and links

- Building for Life, see <http://webarchive.nationalarchives.gov.uk/20110107165544/http://www.buildingforlife.org/about>
- Building for life criteria, see <http://webarchive.nationalarchives.gov.uk/20110107165544/http://www.buildingforlife.org/criteria/>
- Urban Design Compendium 1 and 2 <http://www.urbandesigncompendium.co.uk/order>
- The Manual for Streets 1 and 2 can both be downloaded at <http://www2.dft.gov.uk/pgr/sustainable/manforstreets/>
- For details about obtaining the guide 'Shaping Neighbourhoods', see <http://www.bne.uwe.ac.uk/who/shapingneighbourhoods.asp>
- For Lifetime Homes criteria see <http://www.lifetimehomes.org.uk/>
- See more on the waste hierarchy at <http://www.defra.gov.uk/publications/2011/06/15/pb13530-waste-hierarchy-guidance/>

3.5. Shaping sustainable buildings

Overview

In the course of the last two decades there has been significant stress on changing the way we design and build houses and other buildings in the UK to reduce demand on fossil fuels, reduce waste and to improve performance. The crucial planning context for this aspect of place shaping is the government's objective to increase the delivery of new homes that are affordable and well designed. This is given emphasis in the new National Planning Policy Framework (2012: 13) which says *To deliver a wide choice of high quality homes, widen opportunities for home ownership and create sustainable, inclusive and mixed communities, local planning authorities should:*

- *Plan for a mix of housing based on current and future demographic trends, market trends and the needs of different groups in the community (such as, but not limited to, families with children, older people, people with disabilities, service families and people wishing to build their own homes);*
- *Identify the size, type, tenure and range of housing that is required in particular locations, reflecting local demand;*

Meeting local building policies

Site developers would be expected to respond to the Joint Core Strategy policies that are relevant to building aspects of place shaping. These cover areas including energy, responsible sourcing of materials, recycling and water, which reflect the fact that the region is water stressed. These policies are summarised in the information box.

Types and tenures of housing

Site developers would be expected to ensure that their site contributes to a good mix of types and tenures of homes that meet the local population's profile and offer compact, mixed use, accessible and affordable housing opportunities. These homes will generally contribute to existing and new settlements rather than being sited

Information Box:

Relevant policies of the Joint Core Strategy

- Policy 1: Addressing climate change and protecting environmental assets (page 25)
 - Provision for recycling
 - Use of locally sourced materials
- Policy 2: Promoting Good Design (page 30)
 - Sustainable construction
- Policy 3: Energy and Water (page 32).
 - The Design and Access Statement must address sustainable construction for all developments of 10 or more houses or 1000m² or more of non-residential floorspace.
 - Major developments with 500 or more than 50,000m² or more of non-residential floorspace to demonstrate through the design and access statement how they are maximising the use of "decentralised and renewable or low carbon energy" and providing at least 10% of the schemes' expected energy requirements
 - Water use to meet Code Level 4 or Code Level 6 for more than 500 homes

individually in rural locations. It follows that the design of building is crucial to shaping good places in keeping with these expectations. Part of this might include consideration of “universal design” ideas such as [Lifetime Homes](#).

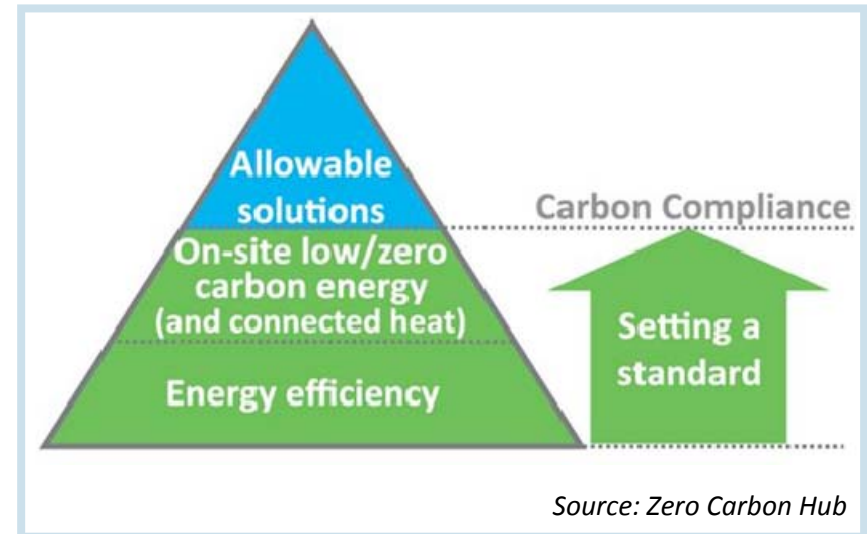
Changing building regulations

Future Building Regulation changes have been anticipated through the government’s [Code for Sustainable Homes](#) and in the case of non-domestic buildings; [BREEAM](#). The issue that has been most taxing for developers has been in relation to carbon dioxide emissions and energy efficiency (covered in Part L of the Building Regulations), supported by associated changes to Part F (ventilation). These will be revised in stages over the next few years until “Zero Carbon” is achieved in 2016 for homes and in 2019 for non-domestic buildings

For homes this is expected to be achieved through the methodology developed by the [Zero Carbon Hub](#). The principle they have adopted is one of “fabric first”. This means that buildings need to achieve a minimum of energy efficiency, before low and zero carbon energy sources are specified, in order that they can reach a minimum carbon compliance level. Zero Carbon is then achieved by “offsetting” the balance of the carbon through allowable solutions.

Approaches to low carbon building

Developers are strongly encouraged to exceed the Building Regulation standards for fabric energy efficiency and carbon compliance. Good building design will adopt a fabric first approach as recommended by the Zero Carbon Hub (see above). Fabric first approaches deliver carbon savings for the lifetime of the fabric and are often more cost effective to construct and tend to be easier for the occupants to manage.



Where developments are required by the Joint Core Strategy to use renewable and low carbon sources of energy, this should be used to improve carbon performance and not as a means to minimise the specification of the fabric.

One of the most popular methods for designing energy efficient housing is the Passivhaus performance standard. This method combines very high fabric efficiency with exceptional airtightness and mechanical ventilation. Much work on Passivhaus has been carried out locally by the University of East Anglia, as part of the EU wide Build with CaRe project.

As buildings become more carbon efficient in their use, their embodied carbon becomes increasingly significant. The Joint Core Strategy asks that materials are locally sourced and that construction is sustainable. Site developers would need to focus on locally sourced materials, with low embodied carbon, which are responsibly sourced (e.g. from relevantly certified companies). Examples of such Sustainable Homes Technical Guide).

Canolfan Hyddgen – Passivhaus Office development



Canolfan Hyddgen was the first office development to meet the Passivhaus standard. Funded by the Welsh Assembly Government and Powys County Council this development also achieved a BREEAM Excellent rating.

As with many new non-domestic buildings today the main thermal concerns were in relation to internal heat gains from occupants and IT equipment. Efficient lighting systems were specified to reduce these heat gains. Airtightness reached 0.37m^3 ($\text{h}\cdot\text{m}^2$) and a unique thermal bridge free junction had to be developed. High thermal mass and secure night cooling options ensure the building could provide comfortable internal temperatures without the need for mechanical cooling.

Source: <http://www.wlqa.gov.uk/english/climate-change-case-studies/powys-county-council-future/>

Reducing Overheating in Low Energy Homes – the Barratt Green House:



The Barratt Green House has a highly energy efficient fabric, which if unaddressed could have exacerbated overheating. Steps were taken to reduce peak temperatures by between $4\text{-}6^{\circ}\text{C}$ through exposing the underside of the hollow core concrete slabs, using a mechanical ventilation and heat recovery system with a summer bypass, being able to open the insulated shutter by the side of the front door to provide stack ventilation and the use of external shutters.

Source: *BRE Information Paper IP 3/09 Lessons Learnt from the Barratt Green House*, Gavin Summerson, IHS BRE Press 2009

The Prince's House – one way to reach Code Level 4



The Prince's House at BRE's Innovation Park at Garston demonstrates the use of low-impact natural materials. The house achieves Code for Sustainable Homes Level 4 – the energy element of which may become Building Regulations in 2013. It does not rely on mechanical ventilation or airtightness for these results. Instead, its materials (aerated clay block, lime-based plaster and renders reduce the risk of Volatile Organic compounds). Air quality is maintained by a passive ventilation system.

Source: www.princes-foundation.org/our-work/princes-house

True Zero Carbon—Trinity Close, Rackheath



These twelve properties have been designed and constructed to achieve Code for Sustainable Homes Level 6, amongst other things these are true zero carbon homes in that the calculated annual emissions for the dwelling, including cooking and appliances are zero over the year.

The structure includes structurally insulated panels that help the external wall achieve a U-value of $0.1\text{W}/\text{m}^2\cdot\text{K}$. A roof U-value of $0.1\text{W}/\text{m}^2\cdot\text{K}$. Triple glazed timber framed windows with a U-value of $0.7\text{W}/\text{m}^2\cdot\text{K}$. All the houses achieved an airtightness of less than $2\text{m}^3/(\text{h}\cdot\text{m}^2)\text{@}50\text{Pa}$.

The heating is provided by air source heat pumps and there is approximately 61kWp of roof mounted PV across the site. Each home has an MVHR (mechanical ventilation with heat recovery) unit.

Source: Dove Jeffery Homes Ltd

Site developers will need to be aware that the tightening of building regulations in the area of energy efficiency, while clearly necessary, has increased the risk of designing homes and other buildings that have a greater tendency to overheat and possibly poorer indoor air quality. To minimise these site developers would be expected to consider thermal mass, external shading, window light/heat transmittance, the provision of external planting, ceiling heights and effective ventilation (natural and possibly mechanical as well).

Water consumption

Broadland District receives only just over half of the average rainfall for England and site developers will need to address this issue. The Joint Core Strategy states that all new homes must achieve Code for Sustainable Homes Level 4 for water consumption and in developments of over 500 dwellings, must reach Code Level 6. In general, Code Level 4 can be achieved with the use of low flush toilets and low flow fittings (maintaining the flow rates recommended by the NHBC) while not having to resort to rainwater or greywater recycling. This approach is to be encouraged because it is low technical risk and low maintenance.

As the scale of development increases the issues become more complex. For this reason, where Code Level 6 requirements are specified, it would be prudent for site developers to commission an independent water study. This would address how the further reduction in water use from Code Level 4 to Code Level 6 can be addressed by site wide initiatives without having to build in rainwater and greywater harvesting systems at the individual building level with all the increased technical risk that this entails.

Resource efficiency of buildings

Resource efficiency, recycling and responsible sourcing have also become increasingly important in the construction process, and in the building once it is in use.

In the construction phase nearly all sites are now required to have

Site Waste Management Plans. It would be expected that these should contain procedures and commitments to reduce the waste generated and where it is generated to sort it and divert it from landfill. For housing development more information can be found in Was 2 of the [Code for Sustainable Homes Technical Guide](#).

When thinking about the design and planning of buildings in new sites, developers will be expected to be able to show how reuse, recycling and composting opportunities will be designed into buildings. For the inside of houses there is very useful guidance in Was 1 and Was 3 of the [Code for Sustainable Homes Technical Guide](#).

Building Design

Additionally, a number of building design elements mentioned in the last section (3.4) are important for site developers to keep in mind. These include building elevations, rooflines, doors and windows, materials, and way they 'address' the street and relate to their context (see section 3.4. for more details).

When designing buildings developers will be expected to show how internal spaces and layout have been designed to:

- maximise daylight, whilst maintaining thermal efficiency and not creating an overheating problems
- to allow for adaption, conversion or extension

Reference and Links

- Lifetime Homes: www.lifetimehomes.org.uk
- Code for Sustainable Homes Technical Guide: <http://www.planningportal.gov.uk/buildingregulations/greenerbuildings/sustainablehomes/technicalguide>
- BREEAM: www.breeam.org
- Zero Carbon Hub: <http://www.zerocarbonhub.org>
- Passivhaus: <http://www.passivhaus.org.uk/>
- Further information on new build best practice can be found at www.nhbcfoundation.org
- The reference for Build with Care is: <http://www.buildwithcare.eu/>

3.6. Shaping a sustainable landscape

Overview

At a national level the new National Planning Policy Framework focuses on a range of sustainable landscape aspects that are relevant to new sites.

“The planning system should contribute to and enhance the natural and local environment by...protecting and enhancing valued landscapes, geological conservation interests and soils...”

(National Planning Policy Framework, 2012: 25).

Sustainable landscape will be about:

- Minimising impacts on biodiversity, geodiversity and agricultural land;
- Maintaining natural and historic landscapes;
- Securing the role of the green belt and local green spaces including
 - ensuring the provision of leisure facilities;
 - avoiding risks including from flooding and coastal erosion; and
 - preventing unacceptable risks from pollution, noise and land instability.

Respecting the historic environment

Site developers would be expected to reflect the context of the historic environment in shaping their site. As noted in the National Planning Policy Framework, *“Local planning authorities should set out in their Local Plan a positive strategy for the conservation and enjoyment of the historic environment..”* (2012: 30). *“The landscape, development block and movement framework are the three main design elements of an urban project of any scale”* Urban Design Compendium 1 (2000: 53).

Reflecting landscape quality

The district’s identified character areas offer valuable evidence for site developers to keep in mind when focusing on the landscape elements of their site. The Joint Core Strategy (2011: 31) makes strong points about the importance of recognising and reflecting intrinsic landscape qualities in new development, and site developers would be expected to respond to these policies in site design.

The local landscape

“The Norwich area is of unusual landscape complexity where five distinct countryside character areas converge. A number of areas are of special historic and cultural significance. The urban edge is particularly sensitive and extensions to urban areas, whether of Norwich or the market towns, should take account of the need to enhance its character, appearance, recreational potential and biodiversity value. The ‘gateways’ are places where landscape and townscape changes, such as where the countryside and urban area meet, or main entrances into the city centre and town centres, for example, and on the River Yare where the Broads landscape and the Norwich built up area meet at Whitlingham and Trowse”.

Source: *The Joint Core Strategy, 2011: 31*

Site developers would be expected to analyse the existing topographic, climatic, hydrological and ecological aspects of the landscape of the site and setting. They can then work to reflect its intrinsic qualities such as slope contours and watercourse directions early in their development, *before* undertaking design aspects such as traffic planning and engineering. Existing landscape assets should be recognised in the landscape structure developed for the site.

Site developers would need to work with landscape at a number of levels: the intrinsic landscape of the site and its setting including its topography, the way open space is planned, the landscape structure for the site and detailed landscape treatments for individual elements. Equally, protecting soil quality and enhancing biodiversity including

valued habitats are important aspects to think about in considering landscape. Specifically, there will be both natural and built conservation aspects to take into account. This will include existing trees and hedges, watercourses, and heritage items and conservation areas, which site developers need to incorporate in their design and planning work for new sites.

Using existing resources

The National Planning Policy Framework (2012: 5) says that planning should “*encourage the reuse of existing resources, such as through the conversion of existing buildings, and encourage, the use of renewable resources (for example, by the development of renewable energy)*”. This reinforces the point that all site developers will need to focus on minimising energy and making the most efficient use of resources. Solar design, for instance, offers opportunities for developments to maximise sunlight potential through daylight, passive solar gain, photovoltaics and solar panels. Wind energy sources can be exploited and the wind also offers substantial opportunities to ventilate and provide energy. While important for summer ventilation of buildings, the wind can create unpleasant microclimate effects like updrafts. These should be avoided through careful design.

Open space

The range and variety of open space types will relate to the size of the development, and reflect an open space hierarchy and the relevant ‘catchments’ for different open space facilities. Within this hierarchy, site developers would be expected to create an open space network that has both habitat and social value. A great stand of trees, a pond, or a beautiful hedgerow, say – can be integrated into the landscape design, becoming features of areas of open space. As well as focusing on nature conservation, site developers may also find they are working within conservation areas with listed buildings, and these areas need particular attention as a whole.

Site developers would be expected to focus on ensuring public access to open space on site and to the wider open space network to which

the site contributes, but this needs to be balanced with its biodiversity role. It is useful that meeting biodiversity needs by, for instance, incorporating local meadow planting or ‘urban forest’ elements also tends to cut maintenance costs. Good open space design *with* landscape can also contribute to better microclimates in a development, making places that provide shelter, shade and sunlight, but avoid undue overshadowing.

Environmental aspects: water

The environmental challenges facing Broadland were summarised in Section 1 and its landscape characteristics are described in more detail in the Appendices. Site developers would be expected to take account of the ‘environmental’ aspects of place shaping as these are particularly important to making sure that new development supports rather than undermines sustainable natural and built landscapes. Many of the topics covered in this section reflect these circumstances in relation to soil, biodiversity, energy, water, air quality, food, and waste.

Given the problems of water stress in the region it is particularly important that site developers make best use of water resources and additionally keep the costs of pumping and drainage infrastructure down. This means keeping surface water on site where possible using sustainable drainage (SUDs) systems that also help create good habitats for wildlife. Site developers will need to make sure they follow best practice in collecting, storing and recycling rainwater. Water management can be conducted under the best practice approach outlined in the National Standards for Sustainable Drainage (and associated regulations). The likelihood of flood risk must be taken into account when considering development and PPS25 (Development and Flood Risk) provides useful guidance.

Food and waste

Increasingly issues of food resilience are coming to the fore in place shaping, and on new sites an emphasis will be expected on localising food growing for health, economic, and environmental sustainability

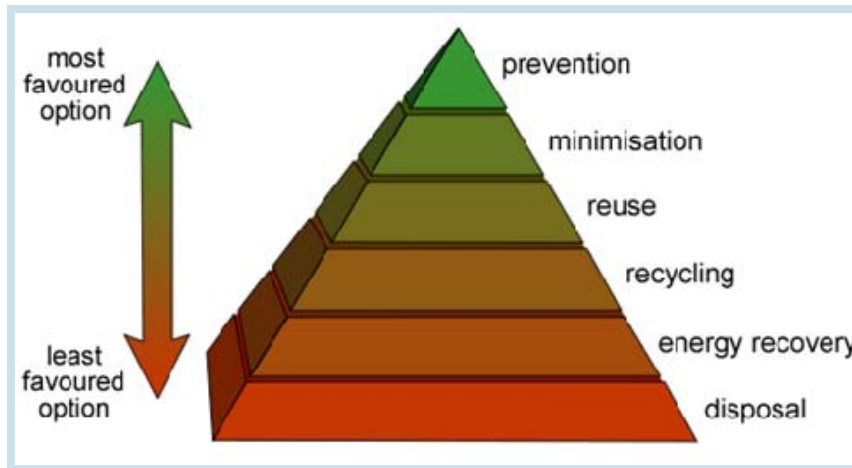
Principle open space types	Character and Function
Greenway	A network of spaces encompassing cycle and footpath routes, but also acting as 'wildlife corridors' – enabling wildlife to travel through urban areas. Typically these follow streams or disused railways, for example, with green fingers penetrating from the countryside, through the town/city edge and into the urban core.
Waterway	Includes lakes, ponds, rivers, canals and streams, which provide rich wildlife habitats, offer recreational value and can be used as movement corridors.
Meadow	A public space for informal recreation, located on the edge of a neighbourhood. Often part of a flood plain comprising natural grasses and wildflowers.
Woodland/ Nature reserve	A wood or coppice of trees left in the natural state, interlaced with internal footpaths, sometimes designated as a nature reserve, with restricted access to areas rich in wildlife.
Playing Field	Open spaces formally laid out for active recreation, such as football or rugby- including golf courses. Management / ownership can be shared between schools, clubs and the wider community to ensure facilities are well used.
Churchyard/cemetery	Located adjacent to a church and often providing a green oasis at the heart of a community.
Allotments	A semi-public agglomeration of gardening plots rented to individuals by the local authority.
Park	Various sizes and types, including Regional, District, Metropolitan, Local and Linear open spaces
Green	An informal grassed public space associated with the focal point of village life that sometimes incorporates a football or cricket pitch.
Square	A formal public space, no larger than a block and located at focal points of civic importance fronted by key buildings, usually hard paved and providing passive recreation.
Plaza	A public space associated with the extended forecourt of commercial (office / retail) buildings, with formal landscaping.
Communal garden	A semi-private space not accessible to the general public, usually located within the interior of a perimeter block, providing a centrally managed green space for residents.
Private Garden	A private space located within the plot of an adjacent building.
Playground	A small area dedicated for child's play that is fenced and located within close walking distance to nearby houses, overlooked by residents.
Courtyard	A private open space often for vehicular servicing/parking
Atrium	A glass covered semi-public or private space serving as a thoroughfare, seating area and sun trap for building occupants or visitors.

Source: Urban Design Compendium, HCA



reasons. Where possible, site developers should take up opportunities for local food production, including allotments and community orchards.

Attitudes to waste have shifted dramatically in recent years, broadly from a throw away culture to an understanding that communities need to avoid wasting land and energy resources as well minimising personal waste. Site developers would be expected to respond to the [‘waste hierarchy’](#) (see diagram), which reflects this more enlightened thinking. New developments offer interesting possibilities in areas of waste prevention and minimisation including in relation to energy, materials and food.



Waste needs to be thought about in two ways in relation to new development in Broadland. First, site developers are expected to consider reducing any waste of resources in undertaking their development, by careful design of the landscape to reduce the need for water and fertilizer; infrastructure to minimise service and waste pipes; and buildings, through excellent fabric efficiency.

Second, site developers are expected to deal sustainably with waste issues on site, including reducing sewage infrastructure load (possibly through reed beds); reuse of excavated or recycled local materials; and composting organic material. CHP (Combined Heat and Power) schemes meanwhile can be considered for larger scale, higher density sites.

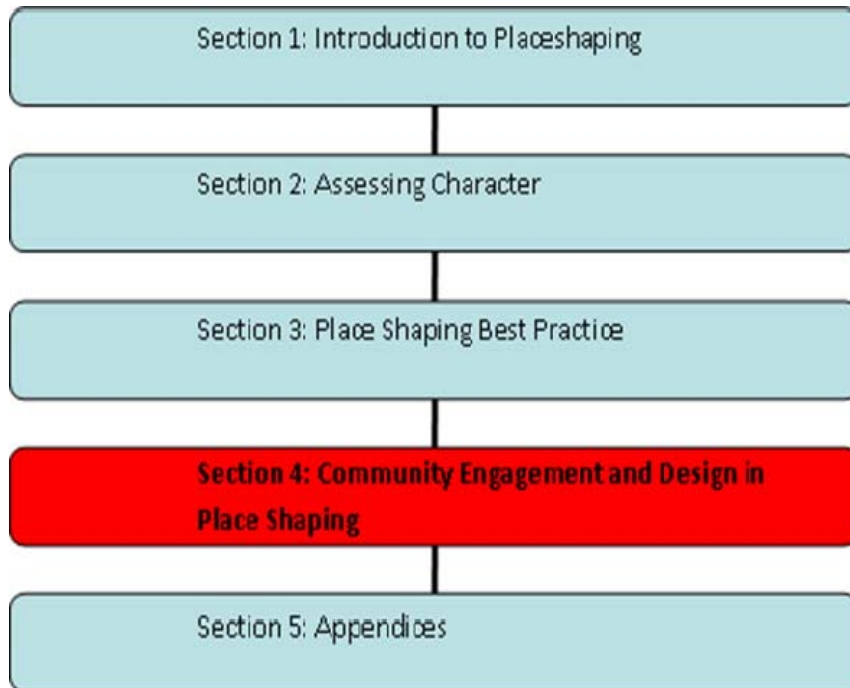
Further information on managing waste generated by construction can be found in section 3.5.

References and links

- Planning Advice Note: PAN 65 Planning and Open Space <http://www.scotland.gov.uk/Publications/2008/05/30100623/5>
- SUDs systems <http://www.ciria.com/suds/>
- Shaping Neighbourhoods: <http://www.rudi.net/node/6592>
- Agrarian Urbanism (Andres Duany, 2011)
- Design for allotments, a recent example: <http://www.clintondevon.com/content/news/new-plans-for-exemplar-homes-and-allotments-are-un.ashx>
- Waste hierarchy <http://www.environment-agency.gov.uk/business/regulation/129223.aspx>

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4. Involving people - community engagement and design in place shaping



4.1. Engaging with communities about new sites

Overview

Effective place shaping will require community engagement. This needs to proceed in an efficient timely fashion; including those elements required by regulation. The Joint Core Strategy for example undertook a great deal of consultation in shaping the District's development strategy and notes as an objective (12) *to involve as many people as possible in new planning policy*. It states that,

"All sections of the community will be actively encouraged to express their own vision of the future through this strategy, further plans and planning applications. There will be a particular focus on involving people who have not previously had a say in planning. As many people as possible should play a part in the ambitious long-term plans for growth across the whole area. This will help make planning more inclusive, and give confidence that the benefits of growth are felt more equally across existing and new communities in and around Norwich".

And as the National Planning Policy Framework indicates, a critical element in the development process is engaging with communities on design and planning issues. Timely engagement can mean less opposition to a proposed development and offer opportunities for communities to play a bigger part in place shaping in the future ie: *"Applicants will be expected to work closely with those directly affected by their proposals to evolve designs that take account of the views of the community. Proposals that can demonstrate this in developing the design of the new development should be looked on more favourably"* (National Planning Policy Framework, 2012: 16).

This section looks at a number of engagement elements and techniques that go to making sure the place shaping process works well to produce environmentally sustainable, socially inclusive and economically vibrant places. There is a great deal of best practice knowledge available to help get right the consultative part of the process of developing a new place.

Front-loading the engagement process

The National Planning Policy Framework suggests that there should be strong connections between planning and development management and early engagement between developers and councils, as well as between developers and surrounding communities and statutory agencies. The new Localism Bill makes a higher level of early engagement compulsory. It would be expected that site developers 'front-load' the process of engaging with communities about their proposals, to make sure issues are ironed out with communities before planning applications are made. This reflects the best practice principle of engagement to start early before major development decisions have been taken (see information box).

More about the pre-application phase can be found in the section on 'Developing and Submitting a Planning Application'.

Methods for community engagement

There is now a wide range of techniques to help developers engage with local communities (and where appropriate broader communities and 'communities of interest'). Public participation in planning processes has moved from the edge to the mainstream, and this offers the chance to make sure communities are supportive of plans by being involved in developing them. Any good process needs to be about '[engagement](#)', which is "*the process of exchanging information, listening to and learning from stakeholders - with the goal of building understanding and trust on issues of mutual interest.*"

The Council has adopted a useful framework for planning community involvement, which sets out various levels of involvement. This framework was developed by David Wilcox in his 'Guide to Effective Participation' (1994). The 'ladder of participation' this is based on sets out five levels of community involvement or 'participation'. The further up the ladder one progresses, the greater the degree of control the community takes in whatever is being planned. At the individual development site level, the council has noted that "rather

Localism - engaging early on new development sites

The new Localism and Decentralisation Bill has some implications for the engagement aspects of place shaping.

"Many of the changes that affect places pass through the planning application system. Whilst local people can comment on applications, we know they often feel frustrated that they have not been able to contribute earlier on, when they would have had a greater opportunity to influence the proposals.

To address this, the Localism Bill introduces a requirement for developers to consult local communities, prior to the submissions of planning applications. This will:

- Increase community influence on planning applications and reduce frustration, by giving local people a chance to shape proposals from an early stage and
- Reduce the costs of the planning process and speed up the system, by improving the quality and sensitivity of developments and reducing refusal and appeal rates."

Source: Department for Communities and Local Government, 2011
<http://www.communities.gov.uk/planningandbuilding/planningsystem/preapplicationconsultation/>

than suggesting that those levels of involvement at the top of the ladder are more desirable than those lower down, the principle advocates that different levels are appropriate at different times, to meet the expectations of different interests". In planning involvement in relation to sites, it is important to be clear from the outset about the appropriate level for the consultation, the boundaries of any participation process and make known who will be taking key decisions. The Broadland Community Involvement Protocol (November 2010: 4) "commitments aim to ensure that communities in the district, and other stakeholders with interests in the area, are provided with genuine opportunities to shape development proposals that may affect their community before any planning applications are submitted."

Specific engagement methods for individual sites

Developers are expected to choose suitable methods for engagement from the broad palette of engagement techniques and apply these at appropriate stages throughout the development process. Engaging throughout the process helps with improving the quality of site design and often has a positive impact on other development aspects - social, environmental and economic – as was evident in the use of consultation responses to the Joint Core Strategy in shaping the final version. Not only will local knowledge improve development quality, but by involving rather than just informing local communities it is more likely that developments will be acceptable to individuals and organisations who might otherwise have reason to oppose them and who through effective involvement might actually work to help build up and support these new areas.

The right methods to use depend on the specific planning and design circumstances including site size and location. As noted the principle is to start consulting early, with the emphasis on real dialogue with stakeholders as well as information provision to them. Some examples used elsewhere - often in combination - are:

- Visioning and 'mind mapping' exercises
- 'Planning for real' type exercises
- Charrettes, Enquiries by Design and Master Plan processes
- Facilitated workshops, focus groups and other consultation events
- One-to-one and small group in-depth interviews with stakeholders
- Ideas exhibitions and forums
- Site visits
- Peer interviewing, vox pops, social surveys and questionnaires
- Online and social media based engagement processes (such as those already used by Broadland through the Objective consultation portal <http://broadland-consult.limehouse.co.uk/portal>)

Who to involve

For developing new places it is important to engage with people and organisations that might be affected by or have a legitimate interest in a development site, and may have concerns about any impacts on a local or wider area. The 'front loading' of engagement between developers and the Council mentioned above will be very important to delivering successful places. This will no doubt include early meetings and discussion with the council before applications are developed and submitted. It also generally means site developers starting to engage with communities (local and topic related) and other stakeholders on planning and design issues before plans have been developed and key design and other development decisions taken.

Site developers would be expected to consider statutorily required consultation as a starting point; with the principle being that they

consult with those who have legitimate interests in their site rather than only those for whom there is a legal requirement to consult. While the range of engagement will depend on the particular circumstances of a site, among individuals and groups whom it would be expected a developer might engage with are:

- The District Council
- Town and parish councils
- The Broadland Community Partnership (<http://www.broadland.gov.uk/bcp/>)
- Statutory agencies
- Adjoining residents
- Adjoining land owners
- Resident groups
- Church and other faith groups
- BME groups
- Disabled groups
- Older peoples' groups
- Young peoples' groups
- Environmental groups
- Local Nature Partnership
- Heritage and conservation groups
- Sports groups
- Arts and cultural groups
- Local businesses
- Local Enterprise Partnership
- Local services (eg school, GP surgeries)

Enquiries by Design (EbDs) and charettes

Although not appropriate in all circumstances, techniques like charrette processes and Enquiries by Design (EbDs) have been used successfully elsewhere in the UK and abroad to positively interconnect and manage the engagement and design process for new sites. These might be useful technique for site developers to consider using. An example is shown in the information box.

Prince's Foundation Enquiry by Design (EbD) Process

"A single event held over several days assesses a complex series of design requirements of a new or revived community. ...The EbD is usually staged over five days and varies according to the size and complexity of the site. The outcome is a vision that unifies everyone involved in the development, including those who will eventually give planning permission. This intense five-day workshop is normally preceded by one or more two-day scoping workshops, to gather technical information, conduct a thorough physical analysis of the site and its surroundings and produce a Pattern Book - a study of nearby villages, towns and neighbourhoods which identifies prevalent local spatial types which should be drawn upon for the design of the new development."

Source: <http://www.princes-foundation.org/index.php?id=33>

The Community Infrastructure Levy

The council is proposing to apply the new Community Infrastructure Levy (known as CIL) to development in the district.

As the Department for Communities and local Government explains, "The money can be used to fund a wide range of infrastructure that is needed as a result of development. This includes new or safer road schemes, flood defenses, schools, hospitals and other health and social

care facilities, park improvements, green spaces and leisure centres". More about the Levy is provided in the information box.

The Community Infrastructure Levy

"Using new powers introduced in the Localism Bill, the Government will require charging authorities to allocate a meaningful proportion of levy revenues raised in each neighbourhood back to that neighbourhood. This will ensure that where a neighbourhood bears the brunt of a new development, it receives sufficient money to help it manage those impacts. It complements the introduction of other powerful new incentives for local authorities that will ensure that local areas benefit from development they welcome.

Local authorities will need to work closely with neighbourhoods to decide what infrastructure they require, and balance neighbourhood funding with wider infrastructure funding that supports growth. They will retain the ability to use the levy income to address the cumulative impact on infrastructure that may occur further away from the development."

Source: <http://www.communities.gov.uk/documents/planningandbuilding/pdf/1897278.pdf>

The three councils of Broadland, Norwich and South Norfolk are working together as the Greater Norwich Development Partnership (GNDP) to adopt a co-ordinated approach to implementing CIL. It would be expected that once the agreed policy has been finalised for the use of CIL that developers will be expected to work with the council and local communities to develop the community infrastructure response on their site.

Higher levels of engagement: communities as planning decision makers

Through provisions of the new Localism Bill the Government promises to give communities more decision making powers in some circumstances in relation to building locally.

To this end, the government has recently published *An Introduction to Neighbourhood Planning*, which sets out the process for local communities to become more actively engaged in the development process. It has introduced the right to undertake neighbourhood planning through the Localism act and explains, "*Neighbourhood planning is a new way for communities to decide the future of the places where they live and work. They will be able to choose where they want new homes, shops and offices to be built, have their say on what those new buildings should look like, and grant planning permission for the new buildings they want to see go ahead*". The Government says there will be five key stages to this engagement process for local communities leading to planning decision making and these are shown in the information box (overleaf).

In Broadland there are currently four parishes that are working on producing Neighbourhood Plans under the Government's "frontrunners" scheme. These are Aylsham, Salhouse, Sprowston and Strumpshaw. The Council has produced Neighbourhood Planning Guidance to assist these and future Neighbourhood Plans.

The Community Right to Build: engagement aspects

The Government has also announced the "*Community Right to Build, which is a set of proposals that would give local communities the power to decide what is built in their area. The new powers would mean that where developments for new houses, community facilities or shops have the agreement of the local area through a 'community referendum', and meet a minimum criterion, communities will not need to go through the normal planning application process*". Given this change, early engagement with local communities could in some instances include working with community-based organisations on

Proposed stages in neighbourhood planning process

Stage 1: Defining the Neighbourhood

First, local people will need to decide how they want to work together.

Stage 2: Preparing the plan

Next, local people will begin collecting their ideas together and drawing up their plans.

Stage 3: Independent check

Once a neighbourhood plan or order has been prepared, an independent examiner will check that it meets the right basic standards.

Stage 4: Community referendum

The local council will organise a referendum on any plan or order that meets the basic standards. This ensures that the community has the final say on whether a neighbourhood plan or order comes into force.

Stage 5: Legal force

Once a neighbourhood plan is in force, it carries real legal weight. Decision-makers will be obliged, by law, to take what it says into account when they consider proposals for development in the neighbourhood.

Source: (<http://www.communities.gov.uk/documents/planningandbuilding/pdf/1985896.pdf>)

See the References and Links for more information on Community Right to Build.

development financing issues, and might result in structures like community land trusts playing a part in development funding and implementation on new sites. It would be expected that developers give thought to these possibilities as part of their approach to their site where it seems appropriate to do so.

References and links

- Information about the engagement and participation aspects of the new Localism Bill can be found at <http://www.communities.gov.uk/planningandbuilding/planningsystem/preapplicationconsultation/>
 - For an excellent guide to development related engagement including principles of engagement, a copy of *Engage: Good Practice Guide to Public Engagement in Development Schemes* http://www.rtpi.org.uk/download/9516/PAE_good_practice_guide.pdf
 - More on Broadland's online consultative processes is at <http://broadland-consult.limehouse.co.uk/portal>)
 - Charrette training is provided in the UK by the University of Hertfordshire <http://www.herts.ac.uk/csc/hertfordshire-charrette/nci-charrette-system-course.cfm> while principles behind charrettes can be explored at <http://www.charretteinstitute.org/charrette.html>
 - Prince's Foundation in the UK - undertakes a number of significant scale Enquiry by Design (EbD) processes which are analogous to charrettes <http://www.princes-foundation.org/index.php?id=33>
 - Information and sources of advice and guidance on The Community Right to Build can be found at <http://www.communities.gov.uk/localgovernment/decentralisation/localismbill/righttobuild/>
 - Information about the Community Infrastructure Levy can be found at <http://www.communities.gov.uk/planningandbuilding/planningsystem/communityinfrastructurelevy/>
- Information about advice and support to help communities actively engage in the development of new sites can be found at <http://www.communities.gov.uk/news/newsroom/1886591>)

4.2. Masterplanning and other design processes for new sites

Overview

Following on from, and connected to, the last section on engaging communities, this section deals with techniques including master planning, action planning and design codes that assist in the design aspects of place shaping for new sites. Site developers need to be aware that both the National Planning Policy Framework and the Joint Core Strategy focus strongly on the role of good design process and instruments in planning and place shaping. There is a strong emphasis on connecting design with planning the development of sustainable places (see information boxes).

Design and planning new sites: national policy

“Planning policies and decisions...should aim to design places which promote:

- *Opportunities for meetings between members of the community who might not otherwise come into contact with each other, including through mixed-use developments which bring together those who work, live and play in the vicinity;*
- *Safe and accessible environments where crime and disorder, and the fear of crime, do not undermine quality of life or community cohesion; and*
- *Accessible developments, containing clear and legible pedestrian routes, and high quality public space, which encourage the active and continual use of public areas”.*

“Local planning authorities should consider using design codes where they could help deliver high quality outcomes”.

Source: National Planning Policy Framework, 2012: 17

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Joint Core Strategy Policy 2: Promoting good design

All development will be designed to the highest possible standards, creating a strong sense of place. In particular development proposals will respect local distinctiveness including as appropriate:

- The historic hierarchy of the city, towns and villages, maintaining important strategic gaps
- the landscape setting of settlements including the urban/rural transition and the treatment of 'gateways'
- the landscape character and historic environment, taking account of conservation area appraisals and including the wider countryside and the Broads area
- townscape, including the city and the varied character of our market towns and villages
- provision of landscaping and public art
- the need to ensure cycling and walking friendly neighbourhoods by applying highway design principles that do not prioritise the movement function of streets at the expense of quality of place
- the need to increase the use of public transport, including through 'public transport oriented design' for larger development
- designing out crime
- the use of sustainable and traditional materials
- the need to design development to avoid harmful impacts on key environmental assets, and in particular SACs, SPAs and Ramsar sites.

This will be achieved by ensuring that:

- major development areas providing over 500 dwellings or 50,000m² of non-residential floorspace, and areas of particular complexity will be masterplanned using an inclusive, recognised process demonstrating how the whole scheme will be provided and ensuring that it is well related to adjacent development and infrastructure
- all residential development of 10 units or more will be evaluated against the Building for Life criteria published by CABE (or any successor to this standard), achieving at least 14 points (silver standard)
- Design and Access Statements for non residential development will show how the development will meet similar high standards.

Joint Core Strategy <http://www.gndp.org.uk/our-work/joint-core-strategy/>

Design and Access Statements

The Joint Core Strategy sets out the need for site developers to provide evidence based Design and Access Statements for new sites. Recent advice on how to write Design and Access Statements is found in the references and links <http://www.planningportal.gov.uk/planning/applications/howtoapply/whattosubmit/designaccess>

Masterplanning

Masterplanning is one of the widely known and most used best practice techniques for place shaping. For larger sites, the masterplan aims to gain a greater understanding of each neighbourhood's existing physical character, to make sure the new place relates well to what exists already and to provide a high quality environment for new residents, businesses and visitors. There is a wealth of [good guidance](#) available on masterplanning and the information box describes what a master plan does.

Site developers should be aware that for larger new sites, masterplanning is a highly relevant technique for getting place shaping right. This has been recognised in the Joint Core Strategy which says *“Masterplanning for large-scale developments and areas of particular complexity (for example within the city centre) must embrace the principles of urban design, and must also examine carefully how development, including infrastructure, can be progressed logically and implementation in full can be ensured.”*

Site developers would be expected to take into account that master planning is a preferred approach for a number of places in the 'growth triangle' in which development sites are located. *“Major growth in the Old Catton, Sprowston, Rackheath, Thorpe St Andrew growth triangle, and at Cringleford, Easton/Costessey, Hethersett, Long Stratton and Wymondham will be masterplanned as attractive, well-serviced, integrated, mixed use development using a recognised design process giving local people an opportunity to shape development”* (Joint Core Strategy, 2011: 56)

What is a masterplan?

“In broad terms, a masterplan comprises three dimensional images and text describing how an area will be developed. Its scope can range from strategic planning at a regional scale to small scale groups of buildings. Most commonly, it is a plan that describes and maps an overall development concept, including present and future land use, urban design and landscaping, built form, infrastructure, circulation and service provision. It is based upon an understanding of place and it is intended to provide a structured approach to creating a clear and consistent framework for development.

Whereas a development plan sets out the scale and type of development, and the key principles of character for a region, a masterplan is generally employed where there is a greater degree of certainty regarding the development of a specific site, and is linked to social and economic analysis and a delivery strategy. Although a masterplan may specify more detailed governing principles such as building heights, spaces, movement, landscape type and predominant uses, it does not necessarily preclude a degree of flexibility in designs within the plan”.

<http://www.scotland.gov.uk/Publications/2008/11/10114526/2>

It may be worth alerting site developers that a well-organised engagement process (such as those developed through Enquiries by Design and charrettes described in the last section) generally results in the development of a masterplan.

Area Action Plans

In considering the design arrangements for their site, site developers

will need to take into account the Area Action Plan DPD that the council is currently developing. This will provide the broad layout and relationship of different land uses in the Old Catton, Sprowston, Rackheath and Thorpe St Andrew Growth Triangle where most growth including new housing is expected to take place. Site developers would be expected to consider the Area Action Plan documentation (once published) in developing their design.

Design codes and guides

Design codes have been used in many places to help ensure that development of new sites meets a good standard of design quality over time, and they are supported by the National Planning Policy Framework. Site developers would be expected to consider making use of design instruments such as codes to ensure the long-term application of consistent and coherent design approaches, based on recognised principles of urbanism. An example of a successful design code is that developed for [Upton](#) in Northamptonshire and other references are provided below.

Site developers can already draw on the expert advice contained in Broadland's Design Guide, which this guide supports. Much of the detailed information in the Design Guide about vernacular character, building materials and detailing, landscape, and conservation, remains highly pertinent to successful place shaping process.

Community trusts in the masterplanning process

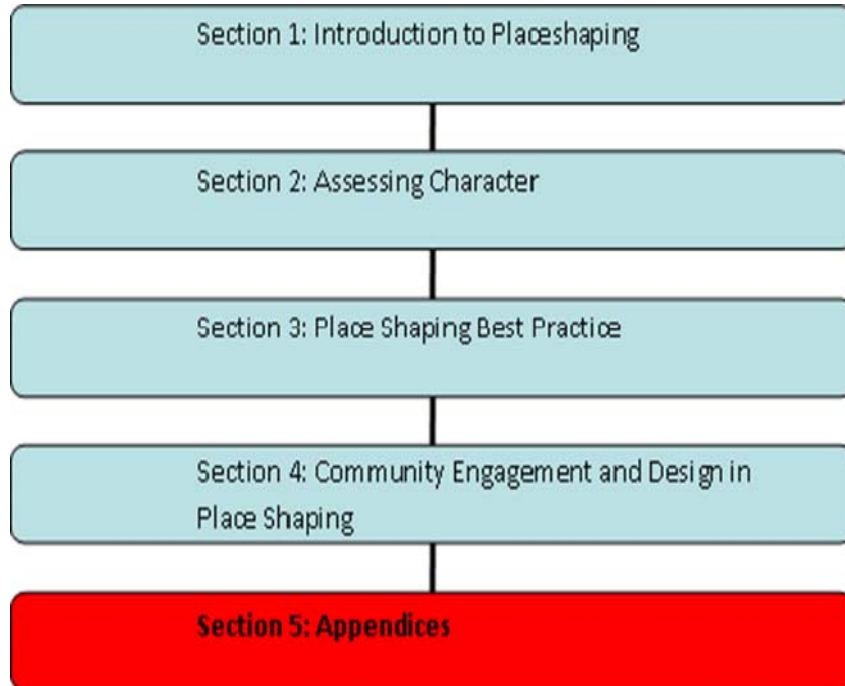
Site developers would be expected to consider whether a community trust would be an appropriate vehicle for championing community requirements on their site through masterplanning processes. A local example is the community led, independent, not-for-profit Community Trust that is in the process of being set up in Rackheath. One of its roles will be to take a key part in the area's masterplanning process. It will also be a means to build community and to champion the community and its needs including promoting green living (and working), green travel and delivering some local services.

References and Links

- Guides including the Urban Design Compendium and Shaping Neighbourhoods offer very useful information on all aspects of design process for new sites
- Advice on how to write Design and Access Statements can be found at <http://www.planningportal.gov.uk/planning/applications/howtoapply/whattosubmit/designaccess>
- For information on masterplans see <http://www.scotland.gov.uk/Publications/2008/11/10114526/2>
- Site developers can be alerted to documentation about the developing Area Action Plan (especially the Growth Triangle Guide which gives AAP content details) at http://www.broadland.gov.uk/housing_and_planning/3765.asp
- For information on design codes see http://www.rudi.net/tags/design_codes_0
- As an example of a successful EbD process and outcomes, the Upton, Northamptonshire design documents can be found at http://www.northampton.gov.uk/site/scripts/download_info.php?downloadID=332
- Broadland's Design Guide can be downloaded from http://www.broadland.gov.uk/housing_and_planning/4576.asp
- Information about the Rackheath Community Trust can be found at <http://rackheathcommunitytrust.org/>

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Appendices



Broadland's site development context

“Context is the character and setting of the area within which a projected scheme will sit. It is its natural as well as human history; the forms of the settlements, buildings and spaces; its ecology and archaeology; its location, and the routes that pass through it. Context also includes people, the individuals living in or near an area and how communities are organised so that citizens become real participants in the projected development. A thorough appreciation of the overall site context is the starting point for designing a distinct place” (Urban Design Compendium, 2000: 20)

A2.1. Overview

Broadland District is a predominately rural place. It covers an area of 213 square miles to the North East of the City of Norwich. Comprised of large areas of arable land and smaller pockets of pasture farmland, the district also contains numerous woodlands and plantations alongside areas of historic parkland. The boundaries of Broadland District are defined mostly by the river valleys of the Bure, Wensum and Yare. To the west, the boundary runs alongside elevated till plateau and to the east it borders the Norfolk Broads which are under the control of the Broads Authority, the local planning authority for the Broads Authority Area.

A2.2. Land use origins and history

The landscape of Broadland has been transformed over centuries by human emergence and settlement patterns. An overview of the historic timeline is provided below:

- **Palaeolithic to Mesolithic (c.500, 000 to c.4, 500 BC):** Some of the earliest recorded human activity in Britain has been found in Norfolk. Evidence of human tools has been recovered from gravel riverbeds and excavations have highlighted stone tools in a number of sites. Human activity may have been undertaken intermittently in Broadland during this period. **Neolithic,**

Bronze Age and Iron Age (c.4, 500 BC to c.43 AD): Evidence of Neolithic and Bronze Age flint and stone tools, as well as metal work, has been excavated. The discovery of burial sites across Broadland also provides evidence of larger populations. Examples include Gargytt Hill near Thorpe St Andrew and Dead Man's Hill in the parish of Cawston. The amount of metalwork found would suggest that Norfolk was an important area for settlement and wealth.

- **Roman Britain and Anglo-Saxon Periods (c.43 AD to 1066 AD):** The Romans played a large role in changing the landscape of Broadland and Anglo Saxons continued to cultivate the area. There is considerable evidence of Roman and Anglo Saxon presence with archaeological finds such as coins, pottery, buildings, roads and settlements.
- **Medieval (1066 to 16th century):** When William, Duke of Normandy, invaded England in 1066 he brought with him technology from the Continent. Estates, manors and monasteries started to influence the landscape and land use. Some of Broadland's Estates still have their origins in medieval deer-parks and ancient woodlands. This period saw the vast construction of churches, and their associated parish settlements. Many can still be seen today. A large proportion of Broadland's population died during the Black Death in 1349, which resulted in large-scale abandonment of villages. However, farming remained significantly important.
- **Post Medieval (16th century to 1900):** In the 18th century, Norfolk was one of the wealthiest and most populated counties in Britain. The Reformation of 1536-1540 and the associated fragmentation of land and estates characterise this period. Stately homes became very fashionable during the 17th and 18th centuries and the use of parklands and estate lands played an important part in creating the landscape of Broadland today. The failure of estates and country house during the late 19th century coincided with economic decline, which ultimately led

to a large depopulation of the district. However, the use of crop rotation changed the landscape; bringing with it large geometric enclosed fields. It was also during this period that the Broads area became a popular tourist resort for boating holidays for richer Victorian families.

- **Modern period (1901 to present day):** The 20th century saw significant changes in the population and economy of Norfolk. The conditions of the Second World War supported an increase in farming and Norfolk's large open spaces proved ideal for airfields and defensive structures. Many are still seen today. During the 1950s agriculture was 'de-controlled' from its wartime restrictions and this forced the radical restructuring of farmland to a more owner-occupied spatial and economic structure. Development during this period has been uneven and large areas of arable land are sparsely populated. Equally research through the Work Foundation concludes that today cities like Norwich should build on their strengths (knowledge economy; tourism, leisure and cultural industries; health; engineering; farming diversification and innovation etc) and promote local distinctiveness through high quality design.

A2.3. Character areas

Broadland exhibits a number of common characteristics in its landscape but it is also clear that there are many different landscapes and topographies, each with their own very distinct character. To a lesser extent there are also different types of settlements, building materials and vernacular styles in evidence. The combination of these factors produces subtle different and distinct areas within the wider district. The Broadland District Landscape Character Assessment (undertaken by Chris Blandford Associates) identified six generic Landscape Character Areas. These are summarised below.

Within each of the generic Character Types, sixteen further more detailed Character Areas have been highlighted that reflect the

distinctive variations in local character.

- **River Valley:** The district contains easterly flowing valleys of the River Wensum and Bure. There are narrow confined floodplains opening out to wider flatter areas along the lower reaches. Small and medium blocks of woodland are present on the valley slope, with a patchwork of grassland on the valley floors. Generally there is little development but there are some small-scale linear settlements on the upper slopes and crossing points.



Source: Broadland District Council

- **Woodland Heath Mosaic:** Heathland is found on flat or gently sloping topography which forms a simple plateau landscape. The underlying geology is of sands and gravel, overlain with sandy soils. There is a general absence of settlements, other than a scattering of 20th century settlements that line roads. Small-scale industrial units and a strong pattern of straight roads are also features.



Source: Landscape East

- **Plateau Farmland:** This character type occurs at the eastern and western edges of Broadland and forms an elevated plateau which is underlain by till deposits and loamy, clay soils. Land use is predominately arable farmland with very little woodland; the resulting pattern is a simple one of interconnected fields. Settlements are sparse but consist of small linear hamlets that have developed alongside roads. Traditional brick and tile farmhouses are a feature of the local vernacular style.



Source: Broadland District Council

- **Tributary Farmland:** This character is predominately of sand and gravel geology with sandy soils, but there are some areas of loamy soils when close to the river valley Landscape Character Type. There are gentle variations in topography, where a tributary cuts through the underlying geology to form landscape features. Land use is primarily arable farmland with pockets of parkland. This landscape type is mainly rural in nature, but has a dispersed pattern of small and large linear settlements, connected by narrow roads and lanes.



Source: www.south-norfolk.gov.uk

- **Wooded Estate lands:** This comprises a rolling landscape that is primarily arable farmland underlain by a mixture of geology. Till dominates which results in soils that are loamy and pebbly. There are numerous areas of woodland, copses and plantations, which give an enclosed feel. The settlement pattern consists of small manor houses, and isolated halls and larger estates with their associated parklands. There is a predominately rural feel, although a network of minor and major roads link small settlements and the outskirts of Norwich start to have an influence towards the south of the landscape area.



- **Marshes Fringe:** This is a transition zone between the elevated plateau and the marshes which line the Broads river valleys. This very gently sloping landscape has mainly sandy and gravel underlying geology. Land use is a patchwork of arable farmland and copses of woodland. Settlement patterns consist of small, often historic villages and towns, with a strong vernacular style interlinked with small road networks. Views of the Norfolk Broads and associated marshes are available, giving this a rural and highly individual character identity.



A2.4. Vernacular traditions

Broadland's (1997: 5) *Design Guide* offers some very useful insights into the vernacular traditions that have strongly shaped Broadland's landscape and buildings. It points out that details and materials such as shaped gables and slates were imported from outside the region and became part of the local tradition where they have been used widely and consistently. It speaks of the vernacular qualities of rural buildings built to meet the needs of people working on the land. It points out that as the use and construction of rural buildings changes the relationship between them and their surroundings needs to maintain the appearance of the landscape.

Vernacular qualities are also particularly important in relation to towns and villages (many of which have conservation areas) and this has implications for developing the local character of new sites. The Design Guide notes that most of the buildings in towns and villages as well as the spaces between them are vernacular in style and that new development should be sympathetic to this established character.

Specifically on the relationship of vernacular tradition to new development the Design Guide (1997: 6) says that this should continue to draw on local traditions in terms of the form and grouping of buildings and the way that materials and detailed designs were used in the past. *"It does this in order to help make sure new development fits into its surroundings and respects local character and of course, local character has developed over the years, at least in part by the use of design, materials and techniques which have been found to work well"*.

The Guide does not promote *"slavishly copying"* local traditions, but states that new development *"while meeting today's needs, should take account of and respect its surroundings"*. While it expects that planning circumstances will vary across the district, these design provisions can be applied throughout: *"the significance of vernacular traditions as a guide for new development will depend in part on the character of the surrounding area"*.

A2.5. Policy context

Place shapers need to take into account the national, regional and more local policy context that is relevant to development, particularly in setting out a sustainable growth framework. Key points are summarised below.

National policy on sustainable development – the National Planning Policy Framework

National policy states that the essential purpose of sustainable development is to produce buildings and places which minimize environmental impact whilst strengthening local communities through economic growth and employment levels. The information box provides the definition recently provided by Government.

National Planning Policy Framework definitions of 'sustainable' and 'development'

"Sustainable means ensuring that better lives for ourselves don't mean worse lives for future generations.

Development means growth. We must accommodate the new ways by which we will earn our living in a competitive world. We must house a rising population, which is living longer and wants to make new choices. We must respond to the changes that new technologies offer us. Our lives, and the places in which we live them, can be better, but they will certainly be worse if things stagnate.

Sustainable development is about change for the better, and not only in our built environment".

Source: NPPF, 2012: Ministerial foreword

The National Planning Policy Framework was released by the government on March 2012. Its primary aim is to streamline national planning policy into a consolidated set of priorities to consider for

planning and deciding on new developments. It aims to reduce the complexity and simplify the planning system. It provides a framework within which local people and their Local Authorities can produce their own distinctive local and neighbourhood plans, which reflect the needs and priorities of their own communities.

The Framework also sets national priorities and rules and is intended to ensure planning decisions reflect genuine national objectives. These include the need to safeguard the natural environment, combat climate change and support local economic growth, while allowing local authorities and communities the opportunity to produce their own spatially specific plans. .

Planning Policy Statement 1: Developing Sustainable Communities

Until recently *Planning Policy Statement 1: Delivering Sustainable Development* and its supplement, *PPS1: Planning and Climate Change*, provided important parts of the government's overarching planning policies on the delivery of sustainable development through the planning system. The Department for Communities and Local Government's website continues to state, "*local authorities must take PPS contents into account in preparing plans. The guidance may also be relevant to decisions on individual planning applications and appeals*" but their future remains unclear since the advent of the National Framework for planning policy. Given their relevance to developing new sites there is reference to key points here. A [fuller list](#) of PPSs can be accessed and downloaded from the DCLG website.

The key objectives of PPS1 are to ensure that developments are sustainable, durable and adaptable and make efficient use of resources. PPS1 for instance states that new development should make good use of opportunities for decentralised and renewable or low carbon energy.

PPS1 encourages local planning authorities to develop planning policies using 'an evidence-based understanding of the local feasibility and potential for renewable and low carbon technologies including micro generation'. The stress on an evidence base for new

developments is carried forward in the National Planning Policy Statement in a summarised way.

Both the Planning Policy Statement on planning (PPS1) and its Climate Change Supplement highlight situations where planning authorities should look to require higher levels of sustainability than those set nationally. This could include where:

- There are clear opportunities for significant use of decentralised and renewable or low carbon energy; or
- Without the requirement, for example on water efficiency, the envisaged development would be unacceptable for its proposed location.

Broadland's new development sites could offer opportunities for renewable energy and restriction is the use of water. Therefore these local issues will still be relevant in the development of future places.

The Climate Change Supplement to PPS1 meanwhile encourages local planning authorities to identify suitable areas for renewable and low carbon energy sources (and their supporting infrastructure), particularly where this would help secure the development of such sources. It also warns against stifling innovation by rejecting proposals solely on the grounds that the site lies outside such energy generation areas.

Local policy including the Joint Core Strategy

A [Joint Core Strategy](#) has been prepared by Broadland District Council, Norwich City Council and South Norfolk Council, in partnership with Norfolk County Council, working together as the Greater Norwich Development Partnership (GNDP). The Joint Core Strategy sets out the long-term vision and objectives for the strategy area. This includes strategic policies for steering and shaping new development sites. It identifies broad locations for new housing and employment growth and also the expected changes to transport infrastructure as a result.

The Joint Core Strategy incorporates three policies which are directly

relevant to place shaping. These are:

- **Policy 1: Addressing climate change and protecting environmental assets**

All development will be located and designed to use resources efficiently, minimise greenhouse gas emissions and be adapted to a changing climate and more extreme weather.

- **Policy 2: Promoting good design**

All development will be designed to the highest possible standards, creating a strong sense of place.

- **Policy 3: Energy and Water**

Development in the area will, where possible, minimize reliance on non-renewable energy sources and maximise the use of decentralised, renewable or low-carbon energy sources. The development will aim to use sustainable construction technologies and the release of land for development is dependent on the water infrastructure being sufficient to meet the additional requirements of new developments.

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