Branston and Mere Village Appraisal

Produced September 2017 for the Branston Neighbourhood Development Plan by urban forward ltd.



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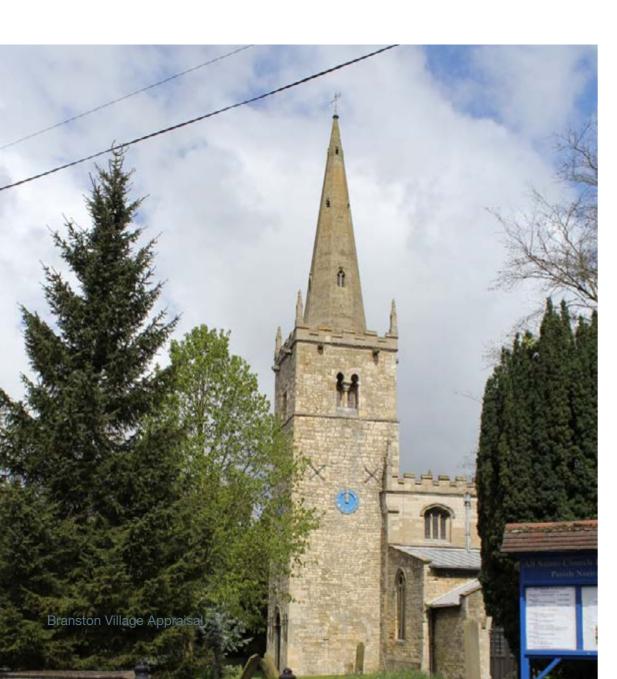


Section 1: About this document

The purpose of this document

This document has been produced to support the spatial strategy and design policies in the Branston Neighbourhood Development Plan. It should be read in conjunction with the Plan document, along with the documents outlined in the appendices of this guide.

The intention of this document is to enable design teams to make their proposals specific to Branston, and to help avoid some of the common pitfalls associated with new development. The guidance within this document is not exhaustive, and we encourage design teams to undertake further studies should they wish to develop schemes within the village.



Structure

The document is set out in the following sections:

Section 1 sets out how to use the document, introduces the Plan area and explains the rationale behind the information contained within this Guide.

Section 2 explores the form of the settlement as a whole, looking at the way topography influences its morphology, how the village is set out, and how it has changed over time. It also looks at key views, landscape features and how amenities are located within the village.

Section 3 looks at the details of the village, examining the aspects that make up its character and identity. This analysis is then translated into useful principles for future development, suggesting ways in which designers can ensure their proposals support rather than erode local distinctiveness.

Section 4 examines the movement structure of Branston, modelling the way people can move and mingle within its streets and space. How accessible the shops and other services are is measured, and the role of Branston in supporting sustainable modes of transport is explored.

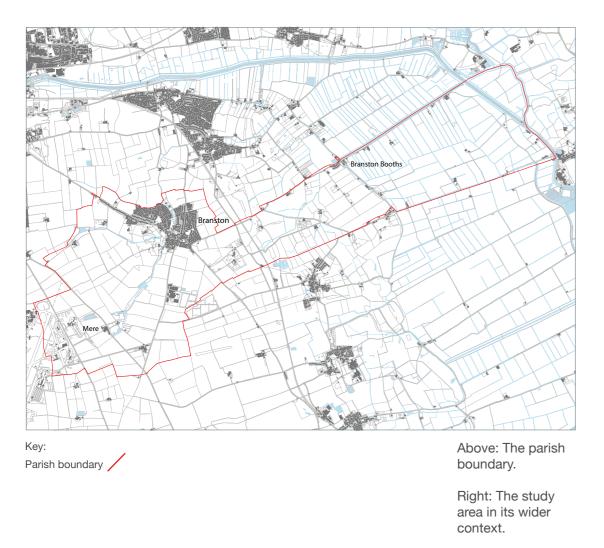
Section 5 provides appendices, setting out suggested further reading and providing a glossary of useful terms and definitions. It also includes general design principles. It looks at nationally accepted place making design best practice, and established design approaches that should apply to all places, with some Plan area-wide recommendations. It also demonstrates how design is embedded in national policy and guidance, giving weight to the need to secure high quality design through the planning process. A short guide to the movement modelling undertaken is also included.

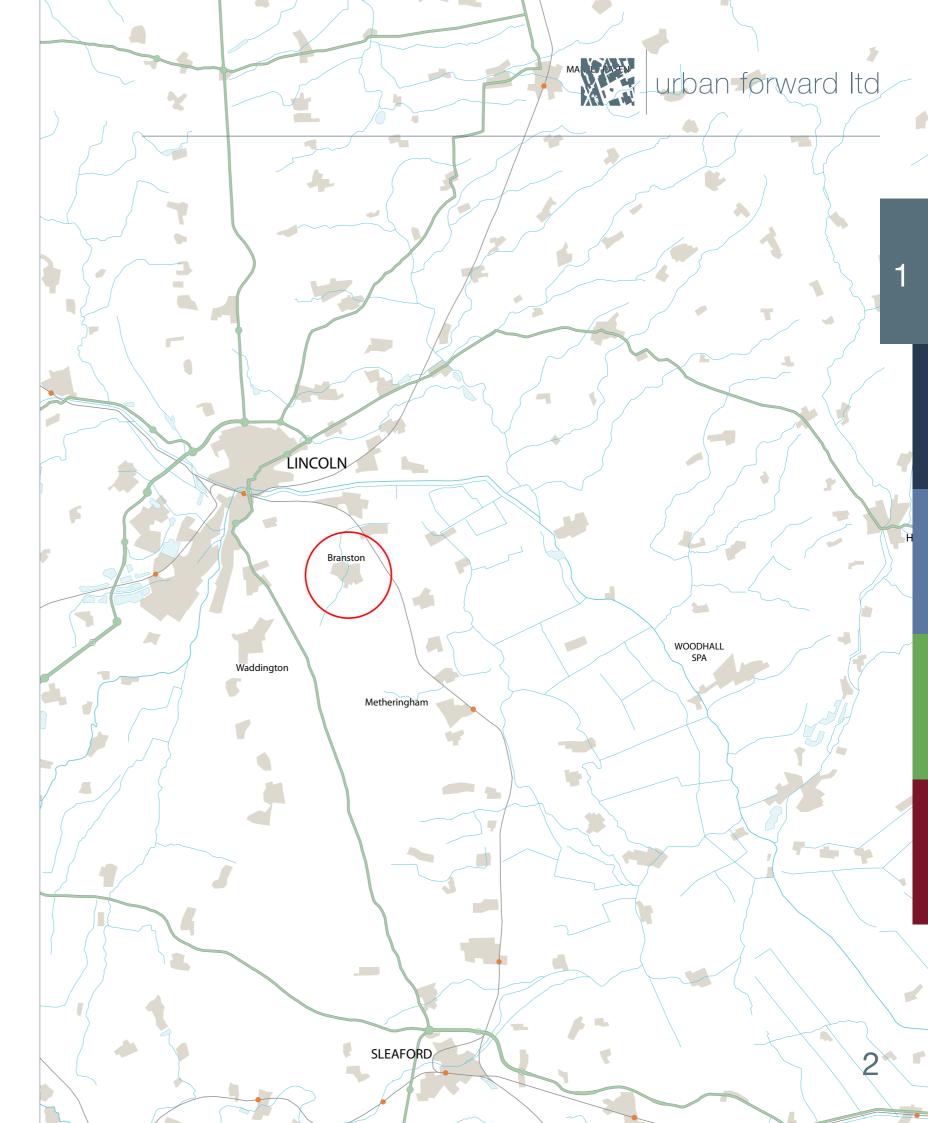
The study area

The Neighbourhood Development Plan area takes in the villages of Branston, Mere and Branston Booths, within Branston parish, which sits to the south east of Lincoln.

It is a large parish with distinct periods of growth, and with an extensive conservation area and distinctive open spaces.

There are schools, shops and services within Branston village and its core, and the facilities on offer serve a wider area than just Branston.







Section 2: Village character



About this section

This section of the study aims to understand how the general character and identity of Branston is formed. To do this, we examine how the village relates to its topography, how the extent of the built up area can be defined, and what pattern the village has formed.

We then examine how the village has changed over time, and chart the evolution of the built environment of Branston.

We map the type and distribution of dwellings throughout the village, and then examine how footpaths cross the area and the countryside beyond. We also look at the type and distribution of green spaces in and around the village. Key views are analysed, and the location of village amenities is mapped for reference.

This section is arranged as follows:

- Existing built up area
- Settlement pattern
- Change over time
- Evolution of the village
- Dwelling types
- Footpaths
- Green spaces
- Key views
- Village amenities



Existing built up area

The built up area of Branston extends along the Lincoln Road heading west towards Canwick and Lincoln, along Station Road heading north, and to the back of the High Street around the centre of the village.

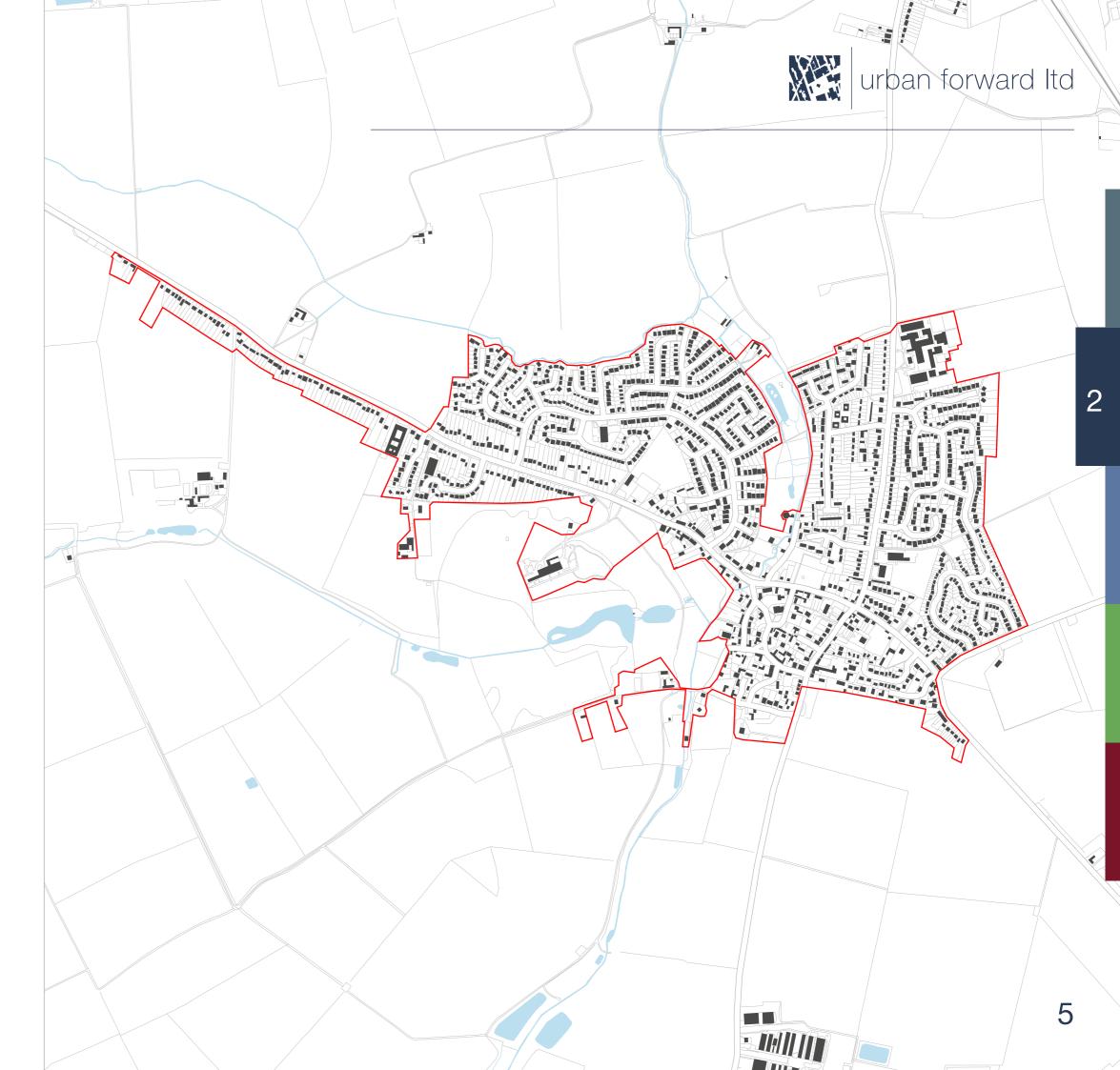
Beech Road loops north from Lincoln Road, extending the settlement to the north with a series of short culs-de-sac extending out in a fan-like pattern.

The western boundary is extended linear development shallow to Lincoln Road, with no backland development. The eastern boundary is made up of a series of culs-de-sac off Fairleas and Shardloes which link Moor Lane and Station Road.

A distinctive feature of Branston which impacts the extent of the built up area of the village is the space running northsouth that contains two streams. This causes a distinctive 'gap' in the settlement, separating development around Beech Road and the houses to the west of Station Road.

Historic Branston sits to the south of the High Street, and Branston Hall and associated grounds forms the rest of the southern boundary.

Right: Branston's existing built up area in relation to the wider countryside.

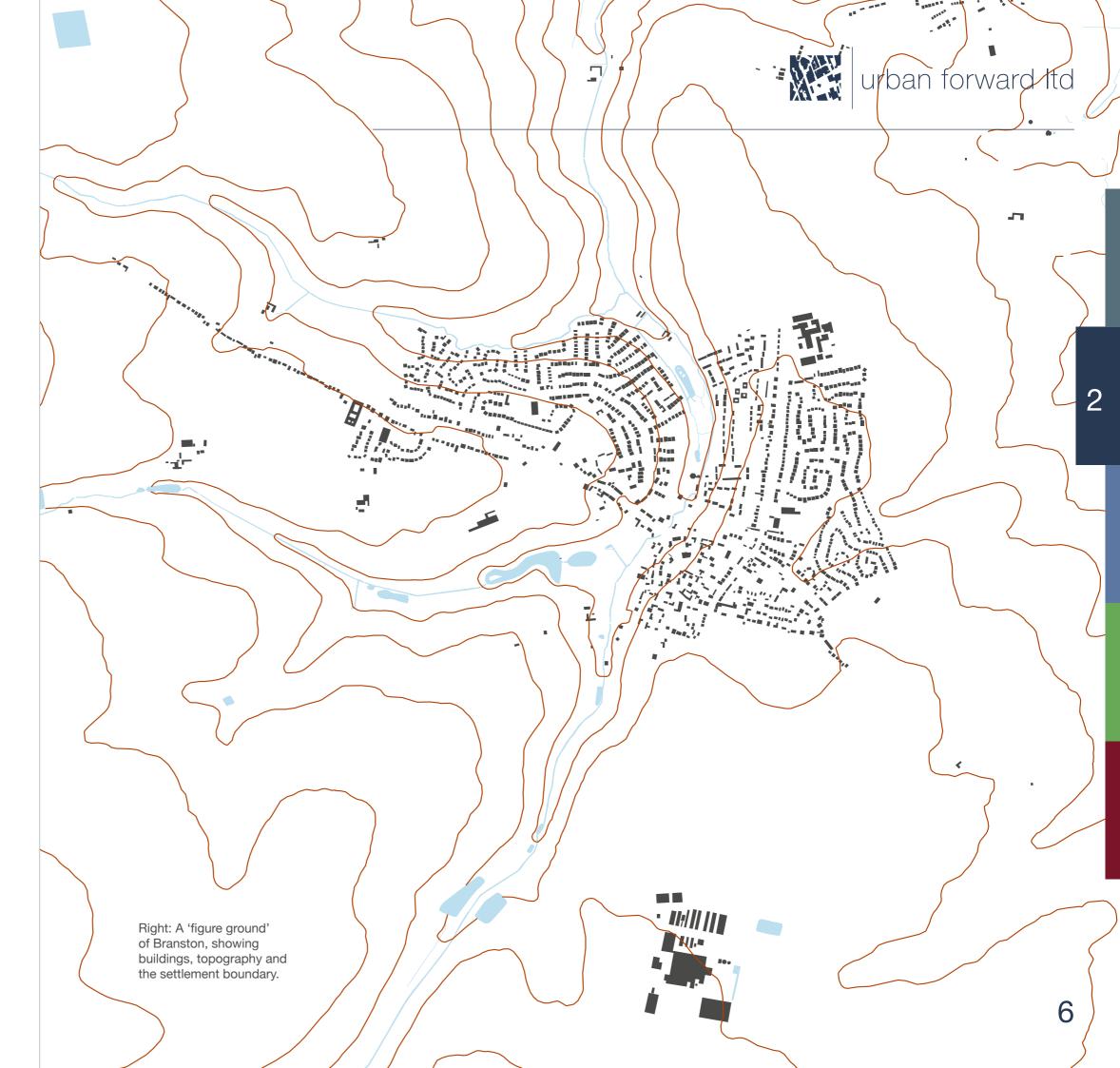


Settlement pattern

Historic Branston is a predominately nucleated settlement and its shape has a strong relationship with the underlying topography and hydrology of the area. Silver Street runs with the local ridgeline that extends to the south, and Thackers Lane cuts perpendicular to the ridge, extending to the west. Streets in the area follow this pattern, being either aligned with the topography roughly north-south or cutting across it east-west. The form is compact, with a series of interconnecting lanes.

Whilst the historic settlement pattern is essentially compact, with development clustered around the key junctions, newer development is strung out along in a linear fashion along Lincoln Road, Station Road, and Sleaford Road.

The figure ground diagram (right) shows that most streets are well 'constituted' by buildings; that is, the lines of the streets are clearly discernible from how the buildings define their edges and buildings present their fronts to the public space within the street. This is an important lesson for new development should it occur; buildings having a discernible relationship with their street is a key feature of the village.





Change over time

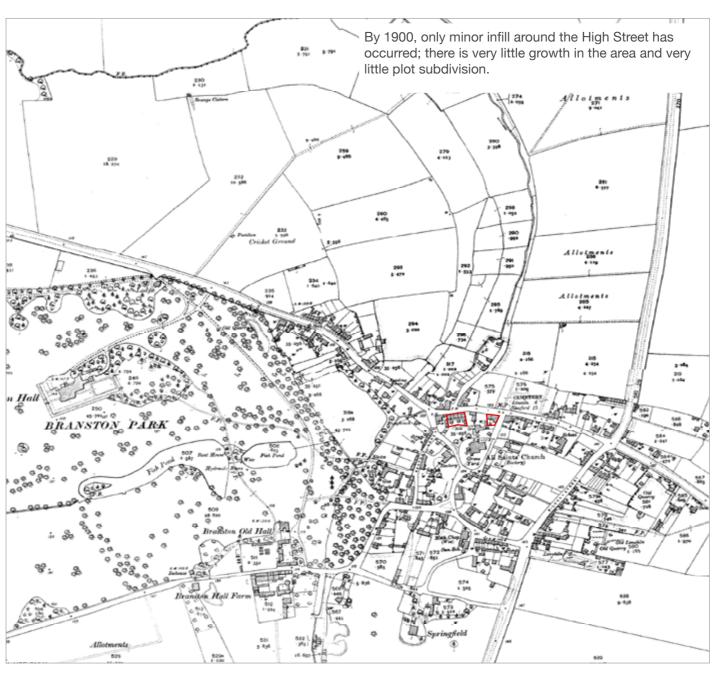
At its core, Branston is an old settlement, and is referenced in the Domesday Book of 1086. Branston Hall was built in the 1890's and is grade II listed, and All Saint's Church is possibly older still. The historic centre is essentially a vernacular limestone settlement, which has now been subsumed by later additions.

The following sequence of plans show how Branston has grown over time, where new development has occurred and how the shape of the settlement has evolved as new buildings have been added to the village.

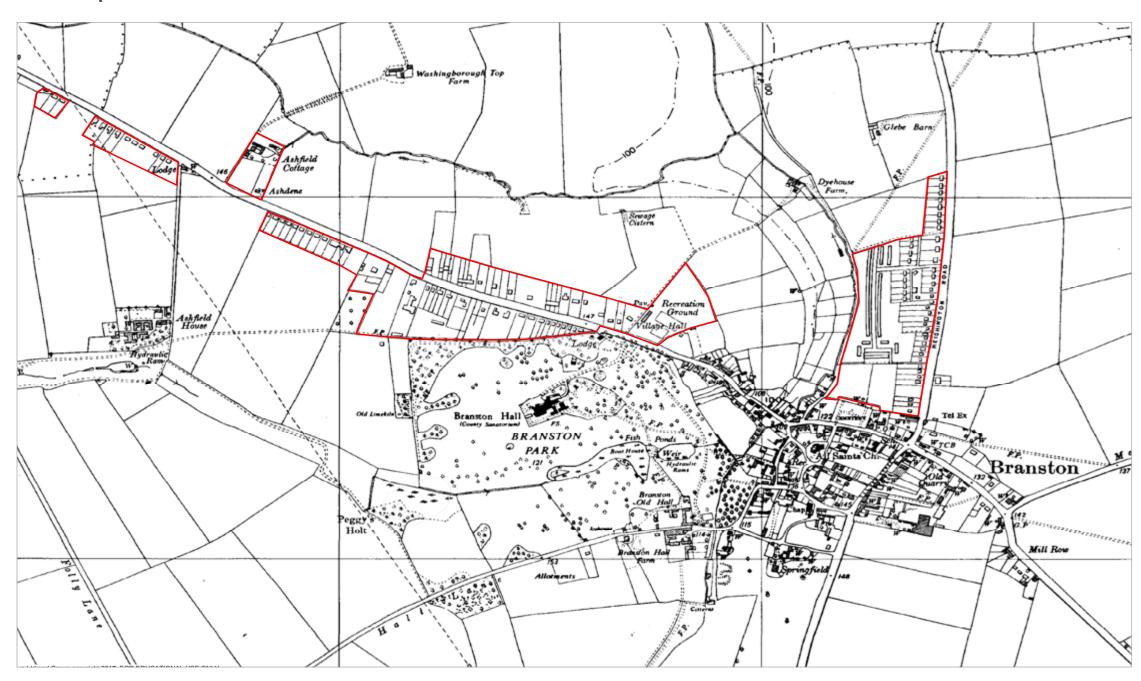
1880 plan

In 1880, the historic street pattern of the village can be seen essentially in a nucleated form. Buildings sit clustered around junctions of the High Street, Sleaford Road, Station Road and Silver Street. Behind this, a series of lanes interlink to form a tight mesh. Buildings sit in either tight urban plots to the core or burgage plots to the edges. Bransto

1900 plan



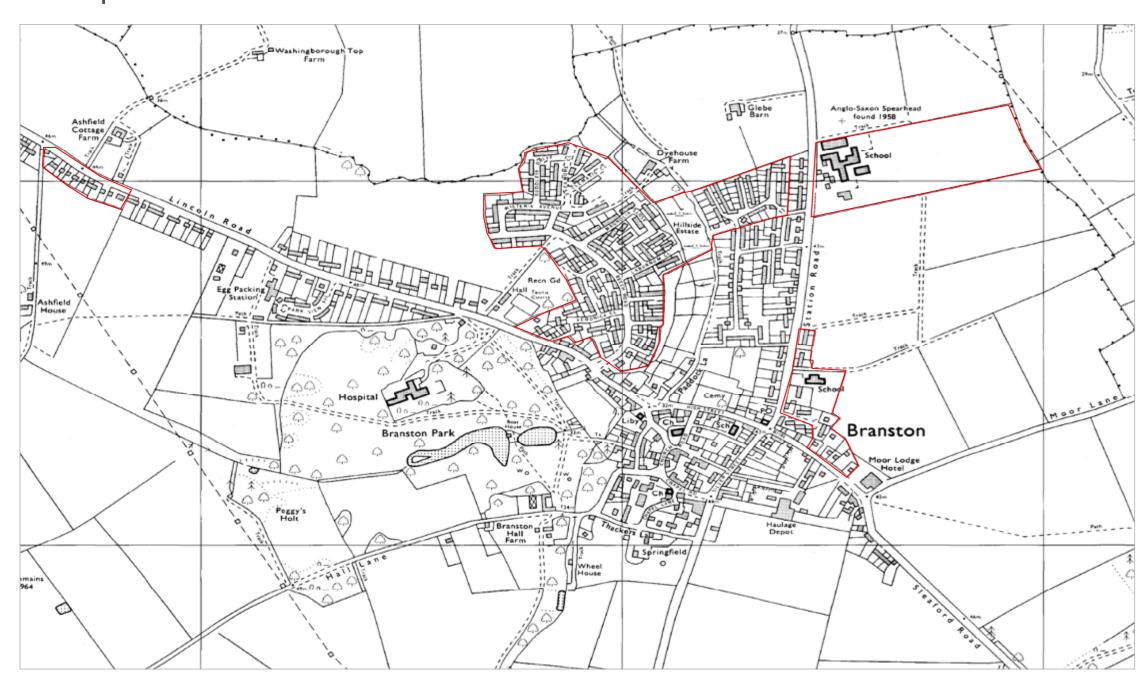
1950 plan



By 1950, the linear development that makes up the northern and western extent of the village can be seen. Here, linear development with long, narrow plots have been added along Lincoln Road and Station Road. The historic core remains relatively unchanged.



1970 plan



By 1970, backland development and plot subdivision begins to emerge, with the first part of Beech Road added, and the area to the west of Station Road being intensified. More linear development to the west occurs.

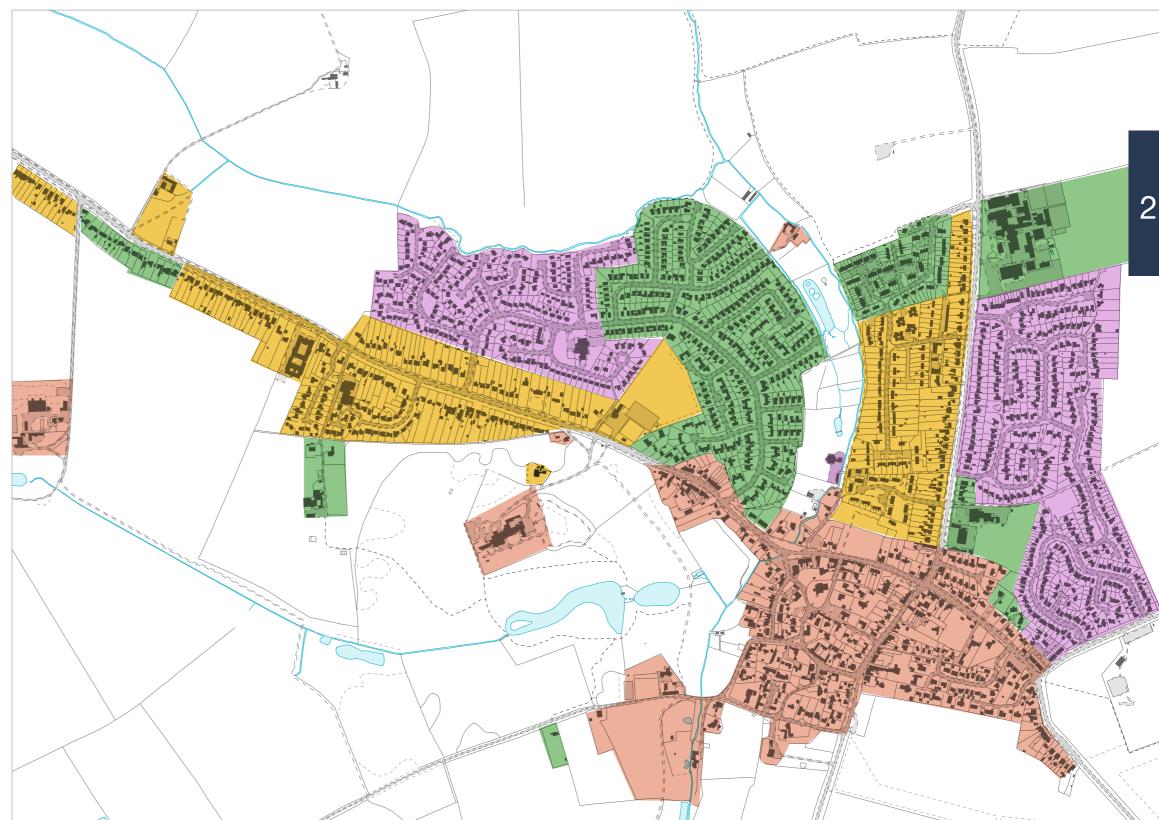


Evolution of the village

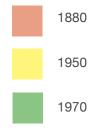
When tracking the evolution of Branston over time, a pattern starts to emerge; very little change has occurred within the historic confines of the original village. The historic core remains essentially unchanged densified, but most of the housing stock has been added through expanding the village along the main routes and through backland development.

The core of the village remains nucleated, with a strong relationship between the development pattern the original streets. Linear development along Lincoln Road brings with it a shift from a nucleated to linear, ribbon-like settlement, reinforced by how shallow much of the village is to the main streets; that is, you are usually very close to a main through route, not buried deep within a local street system.

This is not the case for development added in from about 1970 onwards, which shifts to using a 'nested hierarchy' of streets, with loop roads feeding a system of culs-de-sac. This pattern typifies development from this era but does not reflect the historic pattern of the historic village.



Key:



from 1970 onward

Right: The village growing over time, with the main eras of development highlighted.

Note that within these areas, a high degree of building replacement has occurred, so whilst an area might have been urbanised in one period, the actual buildings might be from a later period.



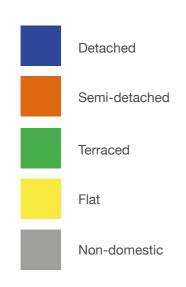
Dwelling types

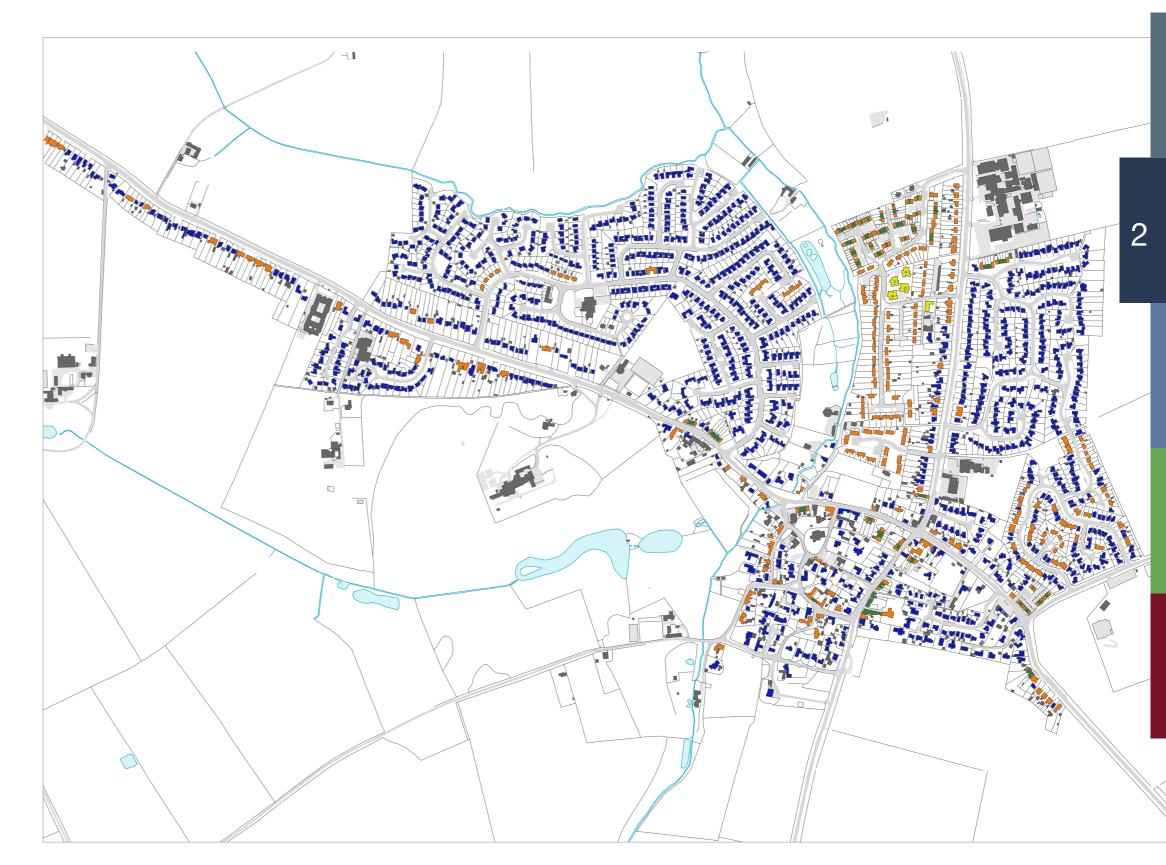
The housing stock within Branston is predominantly detached or semi-detached, although a modest number of terraced dwellings and flats are also present.

Of particular note is how dwelling types are distributed, with similar dwelling types clustered into distinct groups rather than dispersed throughout the village.

The denser clusters of dwelling types are found in the historic core of the village and along Station Road, which gives the structure of the village a relationship with its transport infrastructure and early history. This is an important characteristic of the structure of the village, and should help inform new development should it come forward in the future.

Fragmented development set within larger plots is more common on edges of the village, managing the transition to open countryside beyond.





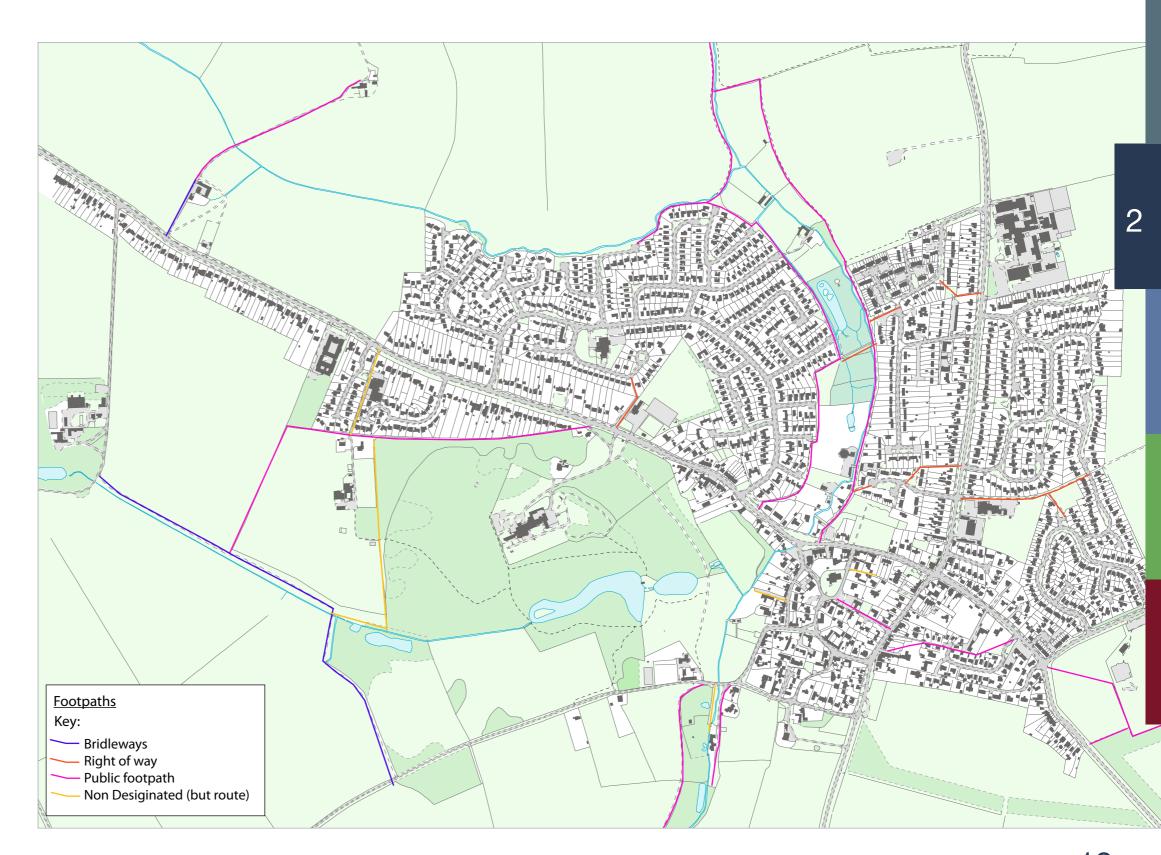


Footpaths

Branston is permeated by a network of pedestrian routes, and these provide an important alternative to the street network for moving around.

There is an opportunity to enhance the footpath network through identifying gaps in the system and adding in new connections, and through improving existing routes.

New development should seek to connect to the existing footpath network where possible, and should contribute to improving the system throughout the village. Upgrades should be make to key routes where feasible.





Routes



Left: Hall Lane leading into Folly Lane on the south western edge of the village.

Right: Entering the woods to the north side of Branston Hall from Lincoln Road.





Left: Paddocks Lane looking towards Able Smith Gardens.

Right: Looking along Folly Lane out into the countryside beyond.



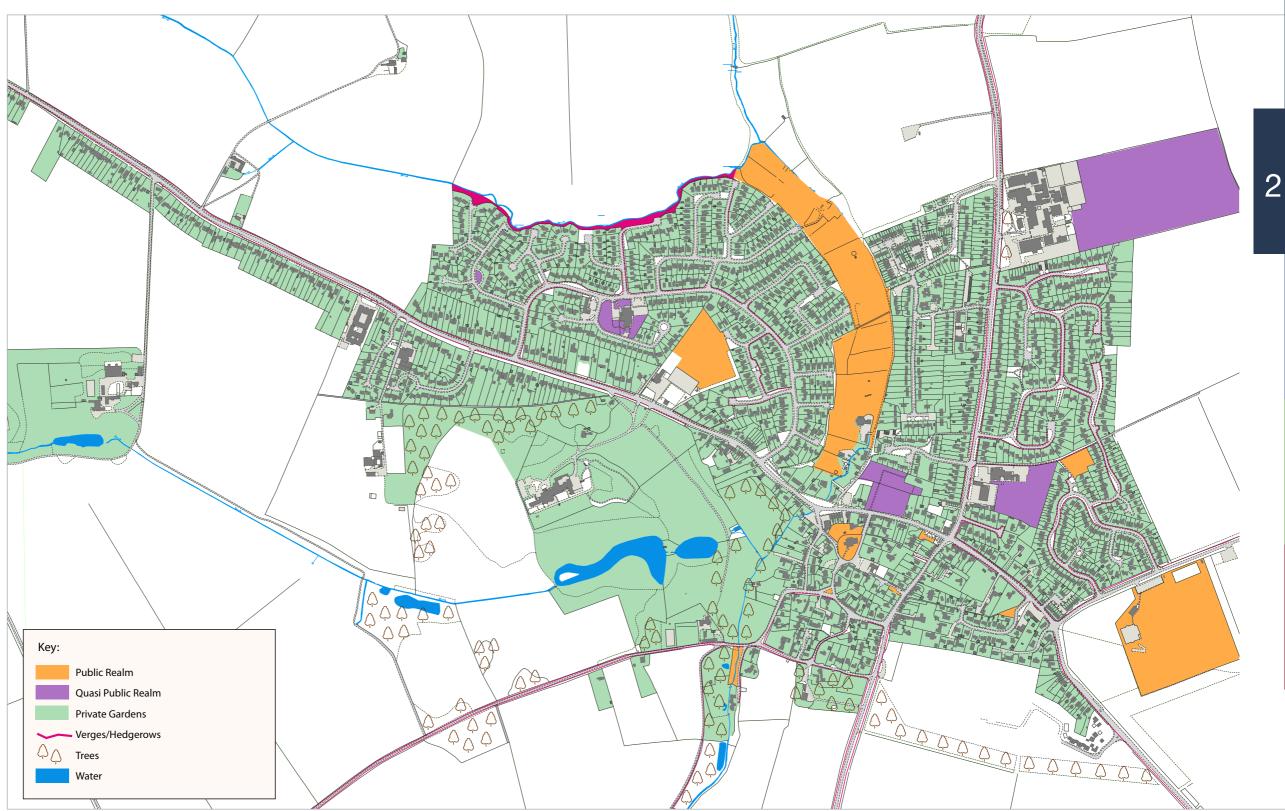


Green spaces

Key to Branston's character is the abundance of green spaces in and around the village. Many of these spaces are verges, private gardens visible from the street, or wide verges. Others are dedicated village greens, parks and river valleys.

Protecting and enhancing these green spaces is of paramount importance, and care should be taken to ensure they are well maintained and easy to access.

Extending some of these spaces is recommended, and where possible the spaces should be linked together with footpaths and landscape in the street scene. Improvements to these elements should be sought through planning agreements, and new development should seek to enhance the landscape structure of Branston.





Green Spaces



Left: A well-equipped play area in the centre of Branston, near to the village hall.

Right: The walkway through 'the jungle', the wooded river valley at the heart of Branston.





Left: Green space at the centre of the village, here with public art.

Right: Paddock Lane as viewed from Able Smith Gardens, with footpaths and green space visible.



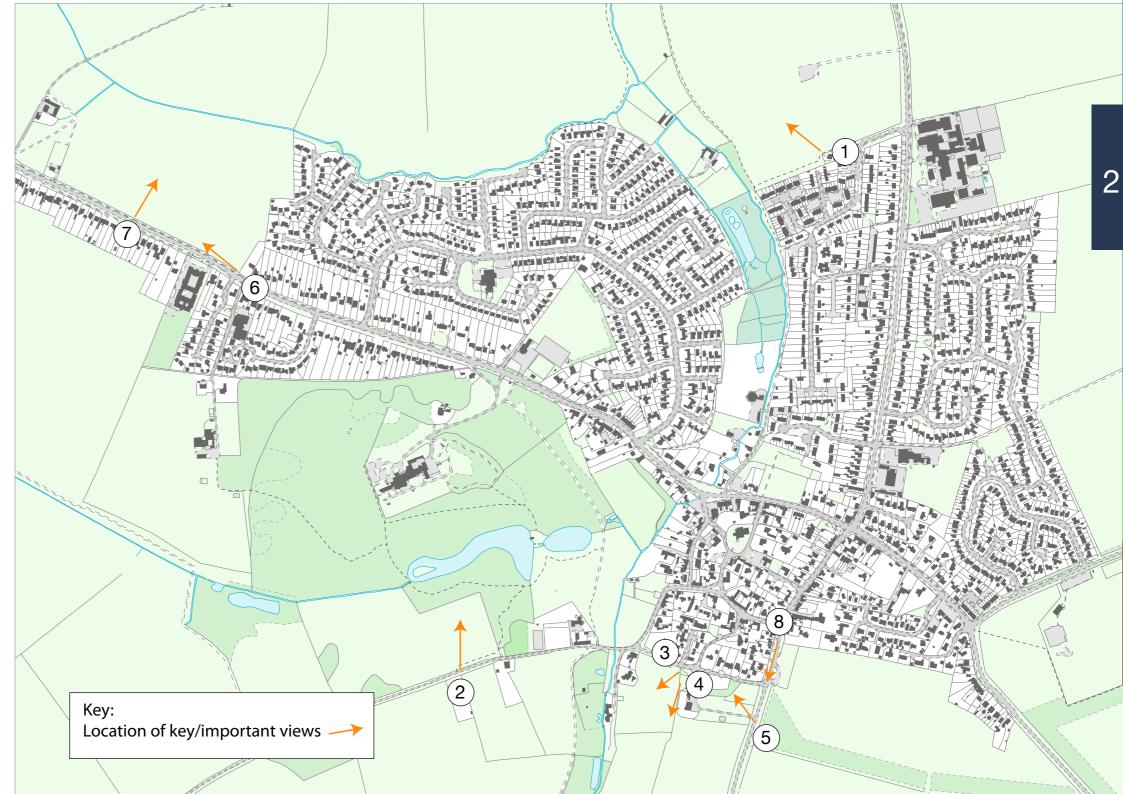


Key views

A key characteristic of Branston are the views onto the open countryside available from around the village. The relatively flat landscape allows for far-reaching panoramas which are as much a part of experiencing Branston as the streets, buildings and space.

Managing these views is therefore a key design consideration, and care should be taken to ensure that, where possible, new development does not truncate long views out onto the countryside.

Of particular sensitivity are the views shown right, which offer particularly fine long-distance views across the countryside. The area around Thackers Lane / Mere Road has been highlighted by several Planning Inspectors in their reports on development within the area and have special merit.





Views images



Left: The view from Cooper Close, looking north west towards Lincoln. Note the prominence of the Cathedral on the otherwise unbroken skyline.



Left: Looking from the south towards Branston Hall, with the mature grounds setting off the Grade II listed building.



Left: The Paddock on Thackers Lane, with excellent views out towards the south and west.



Left: Looking south from the Paddock on Thackers Lane, with views across the rural farmland.



Left: Heading into the village along Mere Road, with views over towards Thackers Lane.



Left: Looking along the Lincoln Road as you head toward Lincoln, with an excellent view of the cathedral across the fields.



Right: Looking west from Lincoln Road as you head toward Lincoln, with only fragmented farmsteads breaking up the view.



Left: The corner of Thackers Lane and Mere Road, looking out towards the countryside.

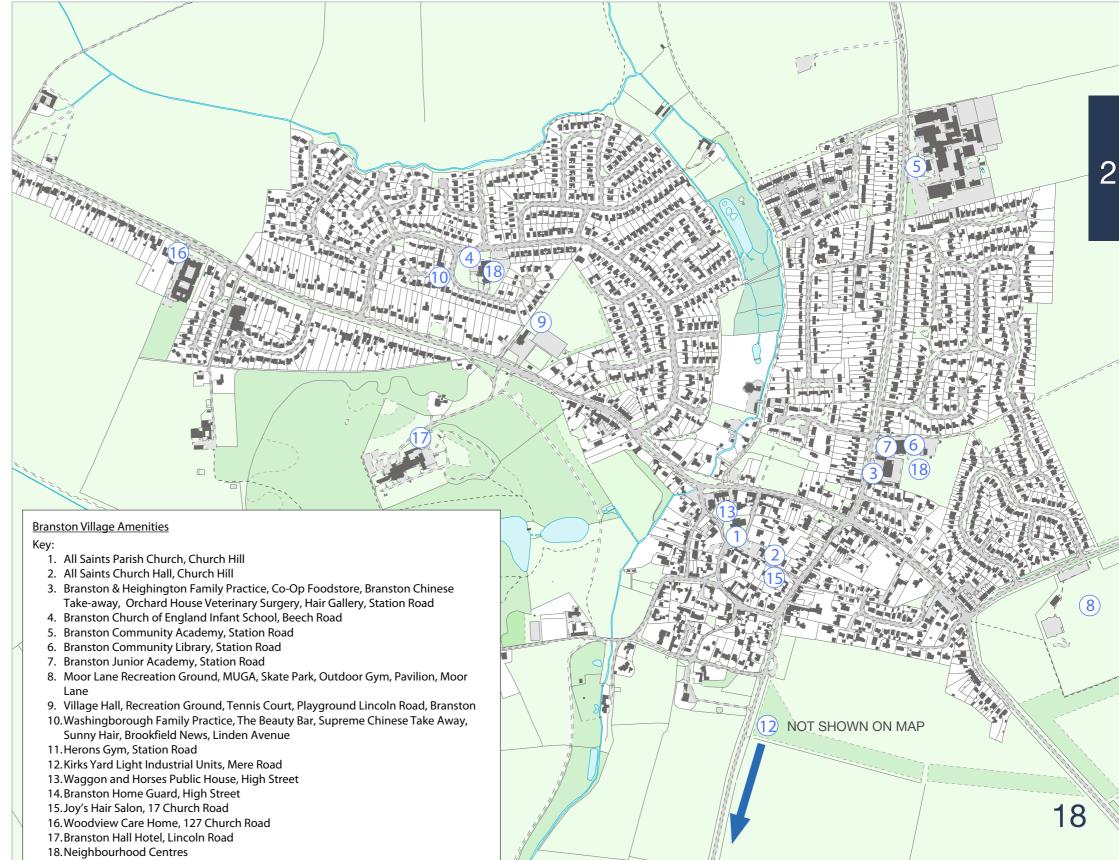


Village amenities

Branston has a range of facilities and services, and any new development in the village should be added in a way that either supports the existing facilities or provides new one.

A major anomaly within Branston is the performance of the historic High Street, which has very little in terms of commercial uses along it. This is unusual; vernacular high streets in the historic cores of villages are usually the place where the 'heart' of the place is, where people meet and mingle, and where shops and services are located.

Branston is different, with the historic High Street seeing high levels of through traffic but very little in the way of business. This phenomenon is examined in more detail in section 4 of this document.



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Amenities



The GP Surgery, located adjacent to Station Road.

The Village Hall, located on the recreation ground along Lincoln Road.





The primary school, located on Station Road.

The MUGA, located near to the football pitches on Moor Lane.





Section 3: Character appraisal



About this section

This section of the study aims to understand how the various elements that make up settlements combine to form a built environment of different characters. Much is made of the value of settlement character and identity, and a criticism often levelled at new development is that it lacks a distinctive character and does not speak 'of its place', instead looking much like anywhere else. Character and identity informs our experience of different places and helps us to differentiate one from another. The various elements that make up this image of a place are often shared between settlements, but with subtle but important variation. Variation within a settlement helps us to understand how a place is put together, which parts might be of interest for social and economic activities, which for more private living etc and affects the quality of experience when moving between each.

As previously discussed, at the larger scale, settlement character is informed primarily by the landform and the landscape setting in which it sits. Topography, watercourse and other natural elements help define the shape of the settlements, and how settlements interact with these elements is a key 'first step' in developing a distinctive character. How lines of movement relate to underlaying natural features is the next 'morphological layer' that defines character. How streets, lanes and linear green elements work with or against the landform changes between places and can generate distinctiveness.

Commonalities in design between places exist at all levels, with shared spatial and detailing relationships giving a feeling of familiarity and 'readability' even for new places. At the scale of plots and buildings this is especially true, but boundary detailing, materials, architectural styles and 'special' spaces all combine to distinguish one place from another, or more commonly, one region of the country from another. Local materials and detailing are especially important in this regard, with vernacular elements usually defined by locally sourced building materials and design flourishes at the building level.

The areas within the village have features which distinguish them from one another and the aim of this section is to distil those to enable new development to maintain and enhance the feeling of character. To do this, each of the main eras of growth is analysed to break down its character-forming elements, so that new development can draw inspiration from local types and forms to embed the character of Branston into their design approach.

The analysis in this document has been prepared as a result of consultation with the Steering Group, and is set out to cover the following:

- Streets
- Plots
- Landscape
- Buildings
- Detailing

How sensitive an area is to change is also explored, and to do so we use a simple scale to show how each important element analysed is to an area's character:







The higher the score on this scale, the more critical an element is in supporting the overall character and identity of the area being analysed.





Character areas

In order to understand and explain the townscape character of Branston, an analysis of each of the main eras of growth has been undertaken. Within these, 9 study areas have been identified. Where possible, these have been drawn so as to include whole streets or spaces and their edges.

Inevitably, there is some overlap between the character of one area and another, and although every effort has been made to define areas in a way that establishes difference, designers and developers should look to the complete analysis rather than focusing on just one street or space when considering how to bring forward new design.

It should be noted that inevitably there will be a degree of redevelopment and churn within each of the defined areas, meaning that each of them contains buildings that are not from the era that defines the overall area.

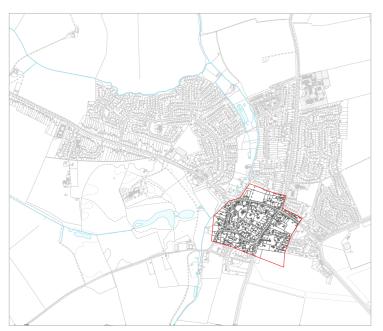
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Key:

- 1. Village Core
- 2. Thackers Lane
- 3. Lincoln Road West
- 4. Lincoln Road Central
- 5. Lincoln Road East
- 6. Beech Road
- 7. Hillside Estate
- 8. Station Road
- 9. Sleaford Road



1. Village Core



The historic core of the village is covered by the conservation area, and thus has special design considerations. Its main features, such as its important landscape and built form, are summarised here, but designers should read the Conservation Area Appraisal in conjunction with this Guide.

Future management

The key character forming elements of this area are the close relationship between the buildings and the street, the way that similar buildings cluster together, and the way greenery within private gardens adds to a sense of greenery on the street. The narrow range of materials and detailing help the various building typologies work together to generate character. Short, intimate sight-lines along simple lanes with verges give this part of the village a distinctive feel. Boundary walls are critical in generating character. Within the village core, the landscape is of particular importance, especially the large trees visible from the street.

Conservation areas are protected and managed through mechanisms other than this Guide, but there are important lessons here for future development in other parts of the village. Extracting the key aspects of character from this part of the village and reinterpreting them should be explored so that future development references the best of Branston.

	Streets	Plots	Landscape	Buildings	Detailing
Types	Interconnecting lanes that form a deformed grid. Main streets more formal.	Rectangular, with short front gardens and the balance of land to the rear.	Large trees in private plots, green boundaries to plots over low walls. Some street trees in greens.	Generally domestic in scale, houses of semi-detached, some detached and some terraces. Halls and churches.	Distinctive stone coursing flat- laid. Quoins, lime mortars. Chimneys and windows with vertical emphasis.
Form	Simple, winding, footpaths only on the main streets. Verges to some streets.	Varied, with some arranged with their garden spaces adjacent to the street edge.	Green edges to most streets but not uniform. Trees sporadically placed, but highly visible.	Mainly cottage-style housing with dormer roofs and simple arrangements.	Flat-laid stone and rubblestone, quoins on building corners. Dormers commonplace.
Dimensions	Generally narrow at around 5m, with narrow footpaths where present. Verges up to 1m. Wide main streets.	Ranging from around 7m to 120m wide, some as deep as 50m but most around 30m deep.	Hedge and other planting generally to around 2m, but some trees up to 25m with large canopy spreads.	A range of heights but remaining at a domestic scale to eves. Some accommodation in the roofspace.	-
Variety	Low, with a relatively uniform approach to street treatments. Kerbs to footpaths.	Reasonably wide, with similar plots grouped together. Some more fragmented plots to the east.	High, native planting, with forest trees and some mono-culture clipped hedges.	Reasonable, with varying sizes but all retaining similar relationships with plot and street.	Reasonably narrow, with similar buildings grouped together and coherent roofscapes.
Materials	Simple, asphalt surfaces and concrete kerbs, some textured.	Boundaries delineated by low walls in rubble stone topped with red clay pantile and by hedges.	-	Mostly limestone with some red brick. Some render, although uncommon.	Wood frame windows, red clay pantile roofs with some slate, extensive limestone.
Sensitivity to change					

Example images:









Image Study



Dormer windows are commonplace in the village core, allowing accommodation in the roof space and helping to reduce building heights.

Boundaries are extremely distinctive in the village core, with rubble limestone walls topped with pantile coping.





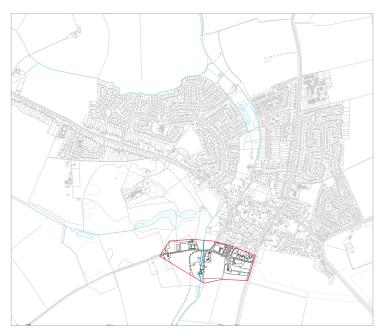
This modern infill development on Hall Lane retains the essential characteristics of the street, reinterpreting the ridge height (red), the building line (blue), and the pitch and form of the roof (white).

Verges and garden trees add greener to the streets and lanes, and are a key characteristic of the area.



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2. Thackers Lane



The Thackers Lane area, which includes part of Hall Lane, sits to the south of the village, still within the conservation area. Its form is very different from the lanes and high street to the north, with the look and feel of farmstead development in the countryside. It has a waterwheel and distinctive open space, and forms the transition to the open countryside beyond to the south.

Future management

Many of the built form characteristics here are similar to the adjacent lanes and high street to the north, but the arrangement is very different, with larger plots and buildings sitting in small clusters, broken up by gardens and open spaces. Stone, red clay pantiles and some slate form the materials palette, and distinctive rubblestone boundary walls line the streets. The streets are simple, verge-lines and have no kerbs. Large trees in private plots play an important role in adding landscape into the street scene.

	Streets	Plots	Landscape	Buildings	Detailing
Types	Rural lanes, with good sight lines.	A range of plots, giving the appearance of farmsteads in the landscape.	Large trees in fields and gardens. Some garden boundary hedges.	Domestic dwellings and converted farm buildings.	Course limestone boundaries, hipped and gable roofs, stone fronts to buildings.
Form	Generally straight, narrow lanes with no footpaths. Verges to the edges.	Generally square, with buildings arranged to give the impression of backland development.	Groups of trees, large, native species, generally clustered around the boundaries.	Typically 1.5- 2 storey, with dormers. Horizontal emphasis on some. Simple form, strong ridge lines.	Mainly gable roofs arranged parallel to the street, some dormers. Vertical emphasis on windows.
Dimensions	Around 5m with 1m verges.	Range from 8m to 50m wide for grand properties. Some large front and side gardens. Generally short rear gardens.	Mature trees up to 20m. Mown verges around 1m wide.	Generally wide- fronted at around 6m+, with some larger still.	Horizontal emphasis on windows, few porches and low- key garages.
Variety	Narrow, looking and feeling similar to each other.	Wide, but with similar plot types clustered together to create rhythm within the street.	A mix of species, some oak, some small fruit trees adjacent to stream.	A range of building types, generally clustered, but sharing details across the area.	Narrow, with a high degree of uniformity between building detailing, especially within the same street.
Materials	Simple asphalt for street surface, mown grass to the edges.	Rubble stone walls with red clay pantile tops, hedges visible behind.	-	Mostly limestone with red clay pantile roofs. Some slate, although uncommon.	Wood for window frames, pantile coping for walls, limestone and red clay / slate for roofs.
Sensitivity to change					

Example images:









Image Study



Larger buildings with a horizontal emphasis, giving the impression of farmsteads.

Uncluttered, rural lanes with no kerbs and grass verges.





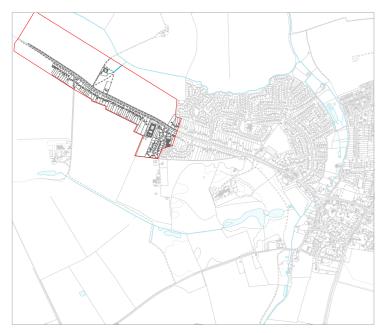
Post and rail fencing to fields, allowing views through and helping give the impression of rural character.

Greenery in private gardens but visible from the street important for character.



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3. Lincoln Road - West



Linear development was added to the village from around 1900 to 1950, with the majority of this taking the form of semi and detached housing. This era of housebuilding saw essentially suburban styles built across the country, and the homes within Branston share the design and layout characteristics of this period of development.

Future management

Development along these village approaches has a coherent design ethos that is as much rooted in how buildings relate to plots and the street as it is to the buildings and details themselves. The plot boundary is a key feature of the area, and its current form, prevalence, character and identity should be maintained and managed into the future. The proportions of the buildings and the way they vary from plot to plot is key; avoiding runs of the same design on too many adjacent plots is critical. Instead, pairs or small groupings of similar buildings should be used, but whole row of the same design should be resisted. Period detailing around windows, roofs and wall coverings could usefully influence new development, should it occur here. Long views to Lincoln Cathedral should be maintained.

	Streets	Plots	Landscape	Buildings	Detailing
Types	Long main approaches to the village, wide with good sight lines.	Residential plots with large front and rear gardens.	Small trees set to the front of the plot, giving the appearance of street trees. Hedges.	Generally domestic, detached or semi- detached. Victorian, Arts and crafts or 1930s style. Mix of storey heights.	Generally simple detailing, 45 deg hipped roofs, some bay windows.
Form	Straight, with regular arrangement. Foot paths to both sides. Green verges to the south.	Generally wide plots, with 5m of setback and a relatively consistent build line.	Hedges are clipped, often mono-culture. Trees are mid-sized, often with a vertical emphasis.	Squat, square footprints, wide fronts, some deep roofs.	Chimneys placed centrally. White weather boarding etc.
Dimensions	7m carriageways with 2m footpaths to the edges. Verges 3-5m where present.	12 - 20m wide, some very deep at 70m.	Hedges mid-height, at around 1.5m. Trees tall, up to 15m.	Around 10m wide, standard height to eves, some bungalows with deep roofs.	Horizontal emphasis on windows, wide door apertures and some porches.
Variety	Narrow; essentially a single treatment though the area.	Narrow, with many similar plots grouped together in runs along the street.	Narrow, with mainly native trees. Hedges tend to be similar along the street.	Wide, with lots of contemporary but different styles shown.	Wide, with only short runs of houses showing the same detailing.
Materials	Black or grey asphalt for surfaces, engineered kurbs with standard upstand to the north but not to the south.	Lots of hedge boundaries, clipped. Some walls in brick.	-	Mostly red brick, with some render.	Red clay, slate and brown concrete roof tiles all acceptable, but grouped in distinct zones. Red brick.
Sensitivity to change					

Example images:









Image Study



Long views of Lincoln Cathedral are a key character-forming part of this area. No kerbs and wide verges to the southern edge of the street.



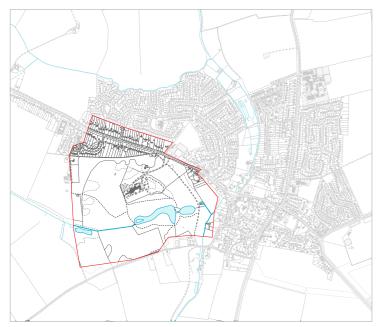


Large trees in private gardens add greenery to the street, enabled by leaving space for planting.

A high degree of differential between plots is present, but a consistent build line helps retain character.



4. Lincoln Road - Central



Lincoln Road central marks the transition between the looser ribbon development to the west and the village core, with the impression of moving into this space being of entering the village proper. Open views onto the countryside to the north are replaced by linear urban development from the 1900's. Open spaces add character to this part of the street.

Future management

The large plots, consistent building setback and vertical boundary to the street are key character-forming aspects to this street and should be maintained. It is appropriate to vary building design from plot to plot, but in doing so, the key relationships between building and street including active edges and front-facing dwellings should be respected. Space within front gardens for extensive planting should be made, as this adds a great deal of character and quality to the street scene. The loss of greenery should be resisted, including the loss of hedges and front boundaries. Strong boundaries help to generate 'edge friction' on the street, which has been shown to slow traffic on busy streets.

	Streets	Plots	Landscape	Buildings	Detailing
Types	Long main approaches to the village, wide with good sight lines.	Residential plots with large front and rear gardens.	Small trees set to the front of the plot, giving the appearance of street trees. Hedges.	Generally domestic, detached or semi- detached. Victorian, Arts and crafts or 1930s style. Mix of storey heights.	Generally simple detailing, 45 deg hipped roofs, some bay windows.
Form	Straight, with regular arrangement. Foot paths to both sides. Green verges to the street edge.	Generally wide plots, with 5-7m of setback and a relatively consistent build line.	Hedges are clipped, often mono-culture. Trees are mid-sized, often with a vertical emphasis.	Squat, square footprints, wide fronts, some deep roofs.	Chimneys placed centrally. White weather boarding etc.
Dimensions	7m carriageways with 2m footpaths to the edges. Verges 2-4m where present.	12 - 20m wide, some very deep at 70m.	Hedges mid-height, at around 1.5m. Trees tall, up to 15m.	Around 10m wide, standard height to eves, some bungalows with deep roofs.	Horizontal emphasis on windows, wide door apertures and some porches.
Variety	Narrow; essentially a single treatment though the area.	Narrow, with many similar plots grouped together in runs along the street.	Narrow, with mainly native trees. Hedges tend to be similar along the street.	Wide, with lots of contemporary but different styles shown. Buildings show more grouping here.	Wide, with only short runs of houses showing the same detailing.
Materials	Black or grey asphalt for surfaces, engineered kerbs with standard upstand.	Lots of hedge boundaries, clipped. Some walls in brick.	-	Mostly red brick, some render.	Mainly red clay roofs or brown concrete roof tiles.
Sensitivity to change					

Example images:

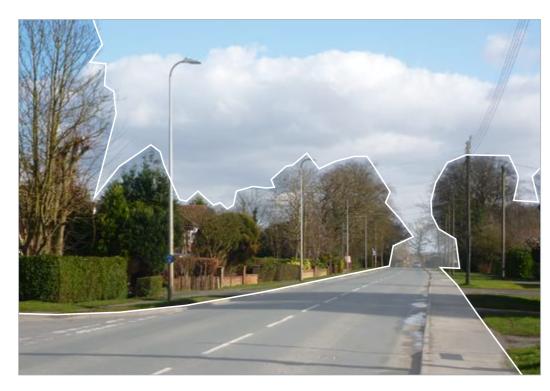








Image Study



Large trees and green boundaries frame the view along the street.

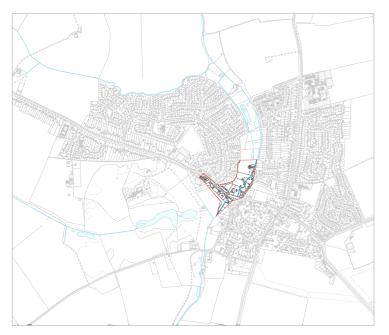
Buildings vary a fair amount, but share key relationships such as build line and orientation.





Open spaces within private plots are a key part of the character of the area.

5. Lincoln Road - East



Lincoln Road East sits within the conservation area, but is distinct as it marks the transition from the more suburban approaches to the village to a more dense, historic urban core. It displays a complex townscape, with important green spaces frames by terraces of cottages.

Future management

This area is highly visited as it forms a major through-route within the village, and thus is sensitive to change. The relationship between the buildings and green spaces to the street are particularly important, helping to add interest to the street scene. The narrow range of materials and detailing should be maintained, and the complex relationship between buildings, solar orientation and the street should be respected. Runs of similar buildings are encouraged.

	Streets	Plots	Landscape	Buildings	Detailing
Types	Main through route, connecting to the wider area.	Domestic scale plots, smaller and tighter than elsewhere on Lincoln Road.	Green backdrop to skyline from large trees, small street trees, some hedges.	Domestic housing mainly two storey, cottages commonplace.	Chimney detailing, roofscape, and boundaries important.
Form	Gentle deflections, following the local topography and expressing the shallow valley.	Varies, with some deep and others with their long edge to the street, maximising solar gain.	Mono-culture hedge boundaries where present, but not common.	Terraces more common, some single storey infill but not common.	Ridges of roofs run parallel to the street, shallow pitch. Low boundaries.
Dimensions	Standard main carriageway, but footpaths narrow in places.	Very varied, from 5m wide to up to 20m wide.	Boundaries tend to be low at 0.6m. Trees mid-sized.	Mainly narrow frontage for cottages, some wide frontage with central entrances.	Windows generally have vertical emphasis and proportions.
Variety	The street varies along its length, with distinctive narrowings at the edges and green spaces.	Extreme variation within the view corridor, with short runs of similar types for cottages.	Wide, with walls, hedges and trees all varying along the same street.	Wide, but generally grouped in runs of similar properties helping to create a rhythm in the street scene.	Low, with a narrow range of styles and detailing to help generate consistency.
Materials	Generally light grey asphalt for carriageways and footways. Concrete kerbs with standard upstand.	Some hedge plot boundaries, some low stone walls or wooden fences. Some buildings to edge of plot.	-	Limestone walls, some red brick, red pantiles for the roof but some slate.	Generally wooden window frames, lime mortars and stone detailing.
Sensitivity to change					

Example images:









Branston Village Appraisal

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Image Study



Varied build lines, but buildings grouped into clusters of similar types.

Verges and green spaces common along the street, giving this area a distinctive character.





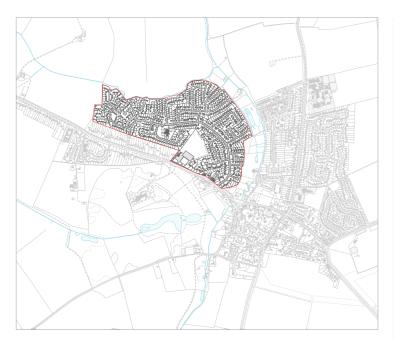
Sinuous street that follows the local valley topography.

Views of the church spire a key characteristic, with many long views through the area available.



urban forward Itd

6. Beech Road



Beech Road and the Valley Estate dates from around 1970's through to the late 90's, with a variety of building styles arranged along estate-like streets. The primary school is located along Beech Road and the side streets offer access to the countryside beyond.

Future management

Much of the housing stock in this area of the village is of low value in character terms, but there are several key aspects that help it form a coherent character. The landscaped gardens are particularly important in supporting the character of the area, and new development should ensure adequate space to the front of plots for a green boundary to the street. The distinctive mono-pitch roof forms could influence future development, as could the positive relationship between plot and street. Protecting the areas within Beech Road that have good quality 1960's development should be considered, as are examples here with their own character and identity.

	Streets	Plots	Landscape	Buildings	Detailing
Types	Distributor road and culs-de-sac.	Domestic scale plots, generally mid- sized with front and rear gardens.	Mature front gardens add most of the landscape. Some street trees. Hedges.	Domestic housing in a range of styles and storey heights. Bungalows common	Shallow and monopitch roofs, front projecting gables.
Form	Curving main street, short side streets that are generally gently deflected.	Modern in scale, with the short edge of the plot to the street.	Well-planted front gardens with hedges over low walls. Garden and street trees add greenery higher up.	Single and two storey, mainly detached. Some linked detached.	The buildings are generally plain, but rhythm to how gables and ridges are arranged etc.
Dimensions	Carriageways generally 6.5m wide, 5.5 side streets. 1.8m footpaths to both sides.	A range from 10 - 17m frontages, consistent setback from street at around 4m.	Boundaries tend to be low at 0.6m. Trees mid-sized. Some higher hedges.	A wide range, but generally family homes of around 6-8m frontage.	Generally a horizontal emphasis to windows. Shallow roofs with a simple gable detailing.
Variety	Narrow, with engineered estate- style approaches common. Some shared surfaces.	Generally quite uniform, with plot types arranged in large groups.	Wide, with walls, hedges, fences and trees all varying along the same street.	Wide, but generally similar within each street. Properties tend to be arranged in runs of the same type.	High, with materials and detailing following no discernible pattern, but similar materials in the same street.
Materials	Generally light grey asphalt for carriageways and footways. Some blockwork surfaces.	Inconsistent, with some hedges and fences, low walls etc Some frontages open.	_	A range of bricks, including red and buff. Roofs generally pantile or concrete.	A mix of window frame and barge board colours and finishes, but generally white or brown.
Sensitivity to change					

Example images:









Image Study



Strong green boundary to the edge of the street forms a key part of the character of the area.

Whilst there is a great deal of variation between buildings, similar buildings are grouped together, creating a consistent character within the street scene.



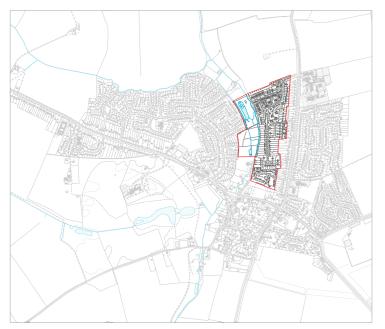


Distinctive mono-pitch roofs are a key feature of the area.

Side streets are often backdropped by the greenery beyond, visually connecting to the countryside.



7. Hillside Estate



The Hillside estate area was originally urbanised in the 1950s and extended throughout the 1980's and 1990's. The form is very different from Beech Road, with straighter streets and a simpler arrangement of plots and buildings. The area is made up of a mix of bungalows, terraces and maisonettes. Pre-fabricated housing is evident here, which possibly dates to the 1950's or 1960's.

Future management

The development in this area does not reference the townscape of historic Branston, instead showing features common to the era of development. Mono-pitch roofs are a feature that could inform future development, but more important is the simple relationship between buildings and street, with a consistent building line and long sight lines. New development should generate consistent street scenes, using similar buildings and a narrow palette of materials. Boundaries should be vertically delineated. Views onto the countryside between buildings should be maintained, and streets should not be fully 'end stopped'.

	Streets	Plots	Landscape	Buildings	Detailing
Types	Side and back streets, including culs-de-sac.	Domestic scale plots, generally mid-sized with short front and rear gardens.	Mature front gardens add most of the landscape.	Domestic housing in a range of styles and storey heights. Some maisonettes.	Hipped and gabled roofs, central chimneys, porches, some panel construction.
Form	Generally straight, with footpaths to both sides.	Squat and regular in places, but with longer edge to the street.	Well-planted front gardens with hedges over fences. Garden trees add greenery higher up.	Single and two storey, mainly detached. Some linked detached, some terraces.	Roof ridges run parallel to the street, some box gables for roofs.
Dimensions	Carriageways generally 6.5,m wide, but narrower on the back streets. Footpaths 1.5 - 2m.	Generally mid- fronted at around 10m, with 30m depth, although some much larger.	Boundaries tend to be low at 0.6m, but returns higher at 1.8m. Trees mid- sized in gardens.	A narrow range, mainly mid-fronted at 10-12m.	Generally a horizontal emphasis for windows. steep roofs with a simple gable detailing.
Variety	Narrow, with essentially two types. Estate-style.	Generally quite uniform, with plot types arranged in large groups.	Narrow, especially within each street, helping to generate character.	Reasonably narrow, with similar buildings clustered in distinct groupings.	Low, with similar materials in the same street.
Materials	Generally light grey asphalt for carriageways and footways. Concrete kurbs with standard upstand.	Low walls in red brick, some hedges and railings to boundaries. Fences common.	-	Dark red / brown brick, with grey or brown tile roofs.	White for window frames, no eves boarding.
Sensitivity to change					

Example images:









Image Study



Consistent plots lines (white) and ridge lines (green) help generate character.

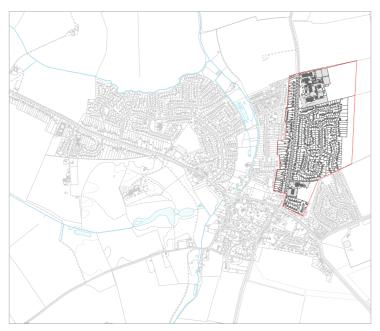
Gaps between buildings allowing for views out onto the countryside should be allowed for and maintained.





Some distinctive roof forms may offer inspiration for future development.

8. Station Road



The area around Station Road is a mix of post-war and later housing using similar house types across the area. There are large collections of bungalows and two storey houses, with garages common. The street system features sinuous curves and culs-de-sac, plus the main straight street edge on Station Road.

Future management

The housing stock in this area is not particularly characterful in terms of architectural detailing, but groupings of similar styles and materials helps to generate character. The greenery provided by verges, hedge boundaries and gardens is especially important, and new development should allow space for this kind of feature. Straighter streets than those here would be more in character with the older parts of the village, and care should be taken to avoid placing close-boarded fences to public boundaries, as these are of low quality.

	Streets	Plots	Landscape	Buildings	Detailing
Types	Main street to Station Road, back and side streets to the east.	Domestic scale plots, generally mid- sized with front and rear gardens.	Mature front gardens add most of the landscape. Some street trees. Boundary hedges.	Domestic housing in a range of styles and storey heights.	Hipped roofs common, front- projecting gables, brick detailing.
Form	Sinuous for all but Station Road.	Regular, arranged in groups with the short edge to the street.	Well-planted front gardens with hedges or shrub planting. Fruit trees present.	Single and two storey, mainly detached. Some linked detached.	The buildings are generally plain, but rhythm to how gables and ridges are arranged etc.
Dimensions	Carriageways generally 7m wide, but narrower on culs-de-sac. Footpaths 1.5 - 2m.	Mid-sized at 10- 12m frontage, some wider where garages present.	Hedges low at around 0.6m, trees around 10m within verges or gardens.	Standard residential dimensions, with up to 9m to ridge height and 10-12m frontages.	Generally a horizontal emphasis. Hipped roofs with central chimneys.
Variety	Narrow, essentially two types. Estate- style approaches common.	Generally quite uniform, with plot types arranged in large groups.	Narrow, ornamental planting and flowering fruit trees. Clipped monoculture hedges.	Narrow, with many similar housing types across the area grouped together.	Low, with similar materials and detailing in the same street scene.
Materials	Generally light grey asphalt for carriageways and footways. Some block at junctions.	Open frontages, low landscape edges, some hedges.	-	A range of bricks in mainly buff, sand, and light red. Dark tiled roofs common.	White window frames and weather boarding.
Sensitivity to change					

Example images:









Branston Village Appraisal

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Image Study



Common ridge (green) and build lines (blue) within the street scene help to generate character.

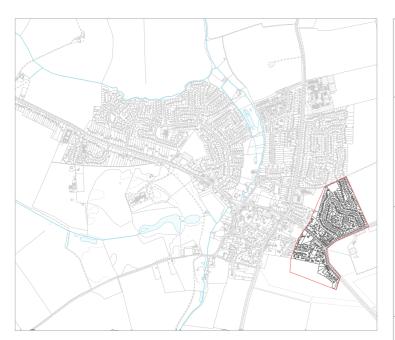
Repeated elements such as these front projecting gables help create a rhythm within the street scene.





Verges to Station Road are a key aspect of its character, and the consistent setback of the buildings makes the street appear green.

9. Sleaford Road



The area around Sleaford Road is a mix of historic development to the south and recent infill to the north and east. Generally, the newer buildings have picked up on the character of the area, using sympathetic materials and styles. Some of the streets are generic and estate-like, lacking the character of the best parts of the village.

Future management

The restrained colour palette, strong boundary delineation and repetition of form all help this area have a character that reflects on some of the more historic parts of the village. The boundaries in particular are important, and new development needs to follow this approach. Keeping to a narrow range of locally-inspired materials is also recommended, and avoiding overly complex building detailing is also desirable. The interface between the built edge of the village and open countryside beyond is very apparent from this area, and needs to be carefully managed, including long views.

	Streets	Plots	Landscape	Buildings	Detailing
Types	Main streets and quieter new estate streets.	Varied, from regular standardised plots to the east through to more vernacular approaches on the main streets.	Hedges and trees, green in front gardens.	Generally two- storey houses, either detached or semi-detached. Short terraces. Some bungalows.	Simple roofs, chimneys placed to gable ends, brickwork detailing.
Form	Straight for main streets, more sinuous for side and back streets.	Generally with the short edge to the street, common build line within the street scene.	Generally clipped mono-culture hedges, tall garden trees to the street edge.	Simple forms, flat fronts. Gabled roofs, generally ridge parallel to street. 35 degree pitch.	Soldier course detailing around windows, some barge boarding (although not supported).
Dimensions	7m main streets with footpaths, narrower for side and back streets but standard dimensions.	10m - 17m in places, but with similar types grouped together.	Hedges range from 0.6m - 1.8m, but should follow the approach in the local area. Trees tall at 20m.	Generally mid- fronted at around 8m, but with some narrower terraces.	_
Variety	Reasonably wide, including some block or shared surfaces.	Narrow, with many similar types arranged in long runs along the street.	Narrow. Generally ornamental planting and fruit trees.	Generally low, with similar types clustered together within the street scene.	Reasonably high, but consistent within the street scene.
Materials	Generally light asphalt and concrete kerbs, some block paving although not common.	Green edges to boundaries in low hedges or walls. Some railings, although uncommon.	-	Varied, with red brick, some stone, and some render. Stone and brick most appropriate.	Red clay and slate for roofs, hedges for boundaries, local brick and stone should be used.
Sensitivity to change					

Example images:









Image Study



Strong boundaries to Sleaford Road help frame the street, and give it a mature look and feel.

A strong green edge to Moor Lane marks the transition to essentially open countryside.





New development on Moor Lane subtly delineates the plot boundary for the terrace by adjusting the building lines

Development is screened by strong planted boundaries along Moor Lane, with only rooftops glimpsed over the hedge.





Section 4: Movement Analysis



About this section

In this section of the study we aim to understand how the streets within Branston distribute movement. This allows us to understand where in the village is likely to be 'naturally' busy by locating the easy-to-get-to parts of the village.

It also allows us to identify the types of street system that help movement, and those that hinder it. By measuring the system in this way, we can make recommendations about future connectivity within the village. What follows is a series of models that test movement at different metric distances, showing which routes are most likely to be used for making the trip at the distance being measured. The distances chosen correspond to passing traffic, local car trips, long walking and cycling trips, and short walking trips.

This information may be useful should development seek to add new facilities and services to Branston. Developers should seek to ensure that their site can support existing facilities and services, or that new ones are accessible for as many existing residents as possible. This section is arranged as follows:

- Strategic movement -25km
- Local movement 2.5km
- Local movement 800m
- Local movement 400m



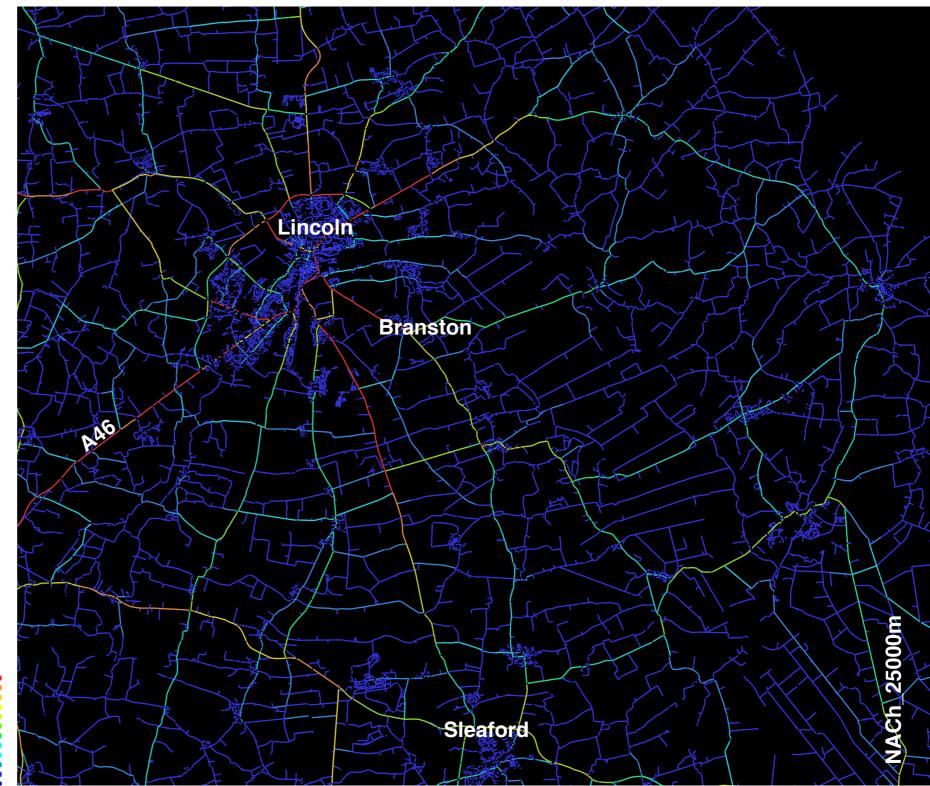


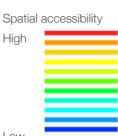
Strategic movement - 25km

Movement modelling has been undertaken to assess the performance of the street system in Branston and to see how it relates to the wider area. The 'warm' colours on the model are spatially accessible spaces, where movement activity is likely to be most intensive. The 'cool' spaces are likely to be quiet. Branston sits on a relatively major throughroute, linking Lincoln to the north west with Dunston and eventually Sleaford in the south.

The image (right) shows that for longer (25km) trips, the centre of Branston is a logical route choice, meaning that much of the traffic passing through Branston could be from a wide catchment. This gives the opportunity to capture 'passing trade' along this route, with a large 'hinterland' of potential spend available to facilities and services in Branston.

A key issue is that the main through routes in Branston have very little space to stop and shop. Introducing parking along these routes should be explored, so that buildings at their edge can be converted into commercial uses at ground floor.



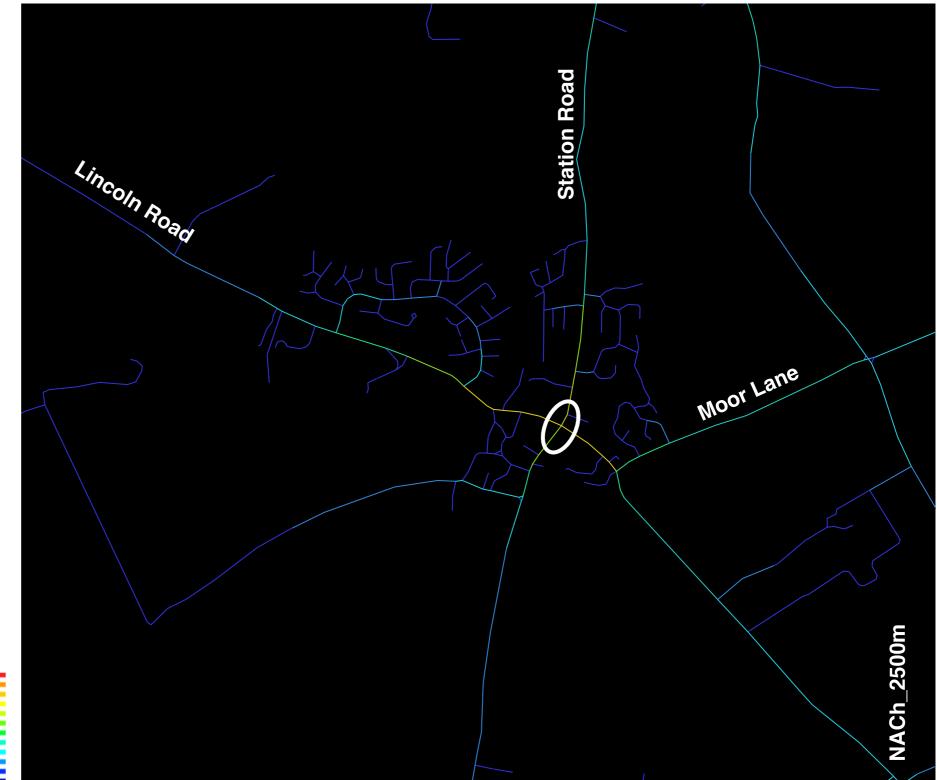


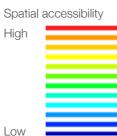


Local movement - 2.5km

For 2.5km driving trips, a key characteristic emerges; Branston is internally disconnected for local driving trips, with very little of the street system offering useful routes for this kind of trip.

The upshot of this is a 'funnelling' effect, with all traffic concentrated around the junction between Station Road, and the High Street. The low level of connectivity between the various neighbourhoods in the village could harm social cohesion, lower the use of sustainable modes of transport and cause spaces to feel too busy at peak times.





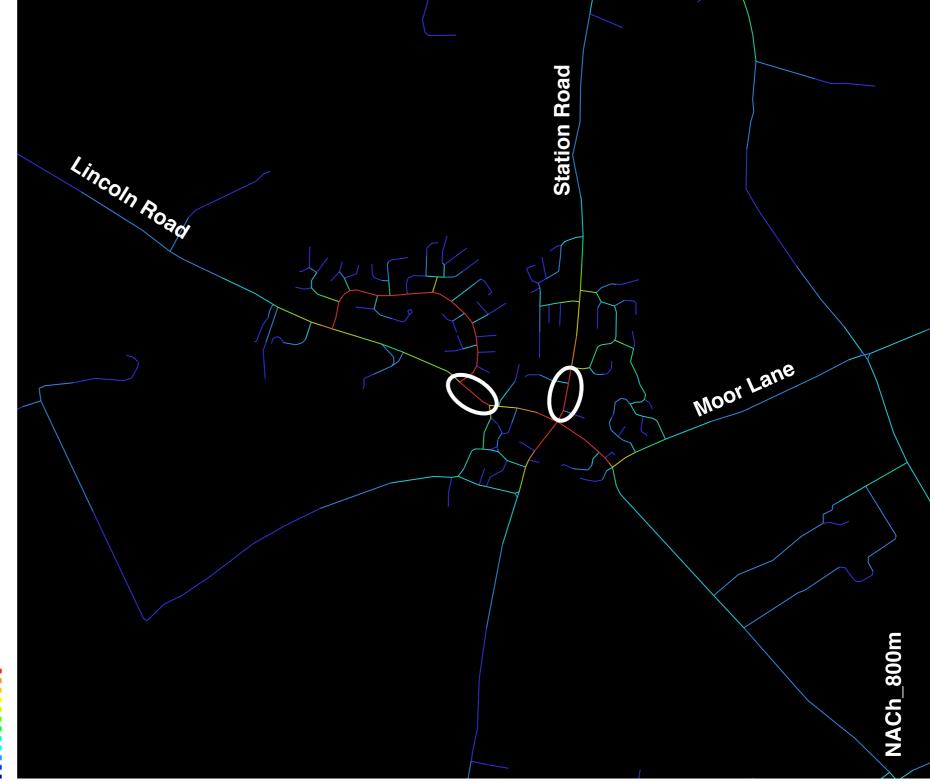


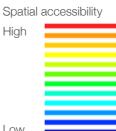
Local movement - 800m

For mid-length (15 minute) walking and cycling trips, the High Street area is highly accessible, with the cafe and Co-op / GP surgery sitting on highly integrated areas of the model. This means that these facilities should be walkable for a high number of residents. Again, note that very little of Branston is 'useful' for 800m walking trips, with many spaces showing in cool colours, indicating they do not offer wider connectivity.

This is due to the 'nested hierarchy' system, with culs-desac feeding a single distributor road. New development should not seek to replicate this, as it harms the walking and cycling movement patterns.

Note that the footpath network is not included in this modelling. This is due to the poor levels of usability that this type of route often has, especially at night or in the winter. The street system is statistically more likely to be used by more people due to feelings of safety and security.



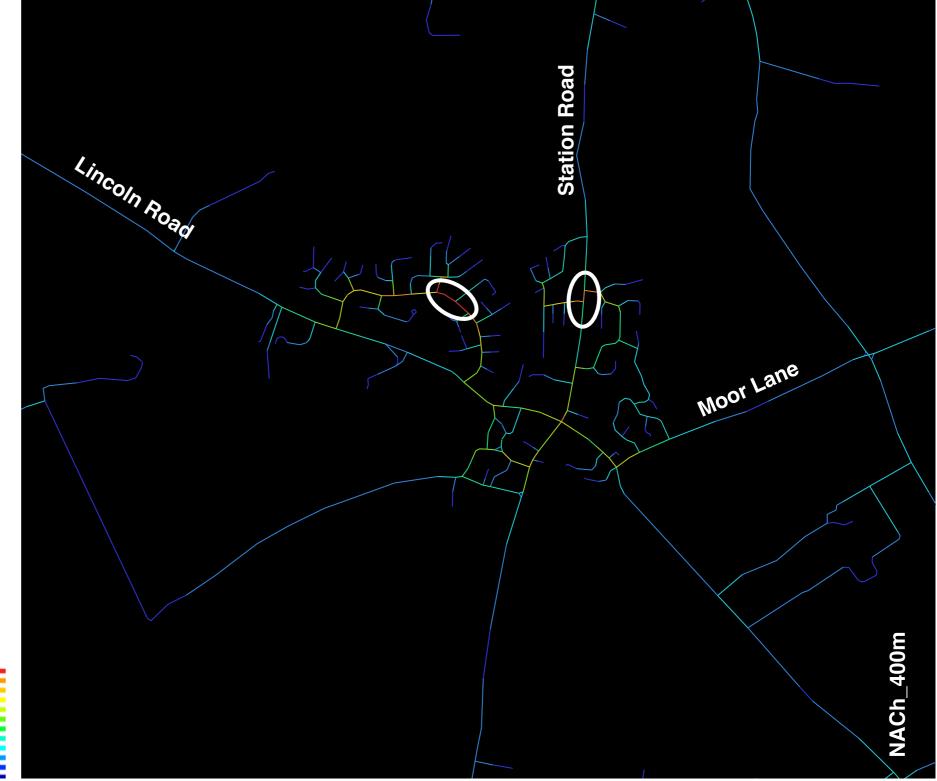


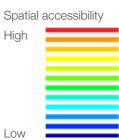


Local movement - 400m

Shortening the trip to 400m (5 minutes walk) cuts off the main facilities from most areas within Branston, almost certainly due to the long loop roads serving places like Beech Road and the east of Station Road. Here, there are few direct connections back to the centre of the village, making them spatially isolated.

New development should seek to avoid this kind of arrangement, instead making regular direct connections to the main lines of movement and ensuring that streets join up.







Section 5: Appendicies

Appendix I: The importance of good design

Although the primary purpose of this document is to examine the character and identity of Branston Village, it is important that any new development, should it occur, addresses every aspect of design best practice.

Good design is about more than just aesthetics; well-designed places let people have better lives by making places safe, easy to move through, economically and socially vibrant, and robust against climate change. Although this document focuses primarily on landscape in terms of how it informs local distinctiveness, all elements of good design best practice should be considered together.

Design has a role to play in all aspects of how a place functions; it influences the movement economy (the economic activities that rely on footfall and passing trade), the level of walking and cycling, the way in which people can meet and socialise, where people can take recreation and leisure activities and the levels of crime within any given area.

How a neighbourhood is connected to its surroundings is an extremely important factor when determining the likelihood of residents from that area walking and cycling. Research has shown that poorly connected neighbourhoods have far lower walking and cycling trips than those that integrate well with local shops and other facilities, which in turn leads to more traffic, poorer air quality and higher health problems for people living there.

Designs that incorporate natural and existing site features into their layout help retain character and identity as well as helping to maintain ecology and biodiversity. If managed well and 'designed in', flood prevention measures can be of real amenity value to local people and a habitat for wildlife.

Buildings that do not properly manage public and private space offer poorer quality living environments for residents, and cannot provide the levels of overlooking needed to make public spaces safe to use. Public spaces which are not overlooked are often sites of antisocial behaviour and are not usable for play and leisure.

However, well designed open space increases people's levels of exercise and gives people spaces to meet and socialise. Embedding character into new development helps an area as a whole be more recognisable, and helps to maintain links to a place's history.

Getting things wrong is extremely costly, as many design mistakes last a very long time, having impacts that extend for decades and which can be expensive to rectify. That is why it is critical to embed good design from the outset and to make sure that all new development follows urban design best practice.

"

Good quality design is an integral part of sustainable development. The National Planning Policy Framework recognises that design quality matters and that planning should drive up standards across all forms of development. As a core planning principle, plan-makers and decision takers should always seek to secure high quality design.

Source: PPG: Design (2015)

Working with the site

Working with what you have on site enables new developments to make the most of their setting, embedding existing landscape and other natural features into the design in a way that helps maintain links to the history of the area whilst retaining the character of the site.

New development in the Plan area should seek to work with the landscape, retaining important trees and other ecological features and using the topography to influence the alignment of streets.

Existing trees and vegetation should, where practical, be retained in such a way as to add visual amenity and ecological value to the development. Existing trees and hedges can give new development a mature look and feel, and this adds value. However, difficult to maintain or manage greenery should be avoided, as this has the potential to cause problems in the future.

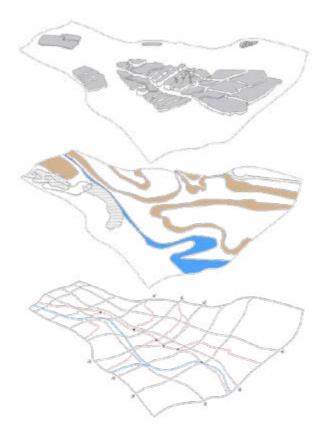
Surface water should be managed in a way that enhances the public realm and provides habitat for wildlife. Sustainable Urban Drainage (SuDS) have the potential to add extra character and amenity to developments but must be considered at the outset along with the design of streets and other spaces rather than retrofitted as an add-on.

"A system of open and green spaces that respect natural features and are easily accessible can be a valuable local resource and helps create successful places. A high quality landscape, including trees and semi-natural habitats where appropriate, makes an important contribution to the quality of an area."

Source: PPG: Design (2015)

Right: Landform and watercourses influencing route structure and developable land.

(Source: Sue McGlynn)



Images: Existing trees and water being used to generate place character and identity.







Connecting to the neighbourhood

Movement is the lifeblood of settlements; places with well-integrated movement systems have been shown to be economically and socially vibrant, safe and energy efficient. New development in the Plan area should not shy away from making strong links with the local neighbourhood, nor should it seek to create insular and overly private enclaves within existing neighbourhoods (see **Glossary** for more information, especially 'Radburn' and 'nested hierarchy').

Instead, new development should make as many links with the surrounding street mesh as possible, but only where those links can be well overlooked, direct and legible. Routes that are poorly overlooked, that run adjacent to private gardens or between back fences, or that are unnecessarily indirect should be avoided.

Streets should be designed in a way that offers more than just a movement corridor for cars; they should be pedestrian and cycle friendly, have space for parking, and should slow traffic through their design rather than through retrofitted calming measures.

Internally, where possible new streets should form a grid, with as many streets offering through movement as possible. Where this is not practical, dead ends should be short and should not be connected by blind alleys. Streets should vary in character, with their role in either local or wider movement evident from their design.

All streets should be simple and uncluttered, with decent lines of sight, low speeds and space for trees. Over-engineered junction radii should be avoided, and all streets should be designed using Manual for Streets principles (see **Appendix 2**).

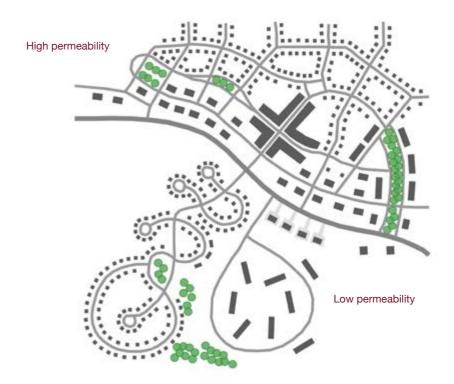
Development proposals should promote accessibility and safe local routes by making places that connect appropriately with each other and are easy to move through. Attractive and well-connected permeable street networks encourage more people to walk and cycle to local destinations.

Source: PPG: Design (2015)

Right: A grid of streets enables high permeability and easy movement, where as a 'nested hierarchy', where streets are arranged more like branches of a tree, offers very little route choice.

Bottom right: Quieter streets like this lane can be more pedestrian focused.

Bottom left: Mature trees and good sight lines give this street a high quality feel.







Development should seek to promote character in townscape and landscape by responding to and reinforcing locally distinctive patterns of development, local man-made and natural heritage and culture, while not preventing or discouraging appropriate innovation."

Source: PPG: Design (2015)

Making a place

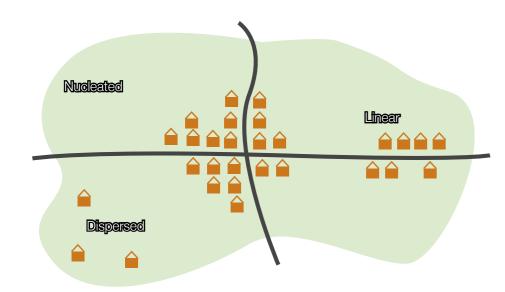
All new development in the Plan area should seek to promote local character and identity, because through doing so it is possible to protect and enhance what is already there for existing residents, and provide community and social cohesion for those new to the area.

A criticism often levelled at new development is that it 'lacks character', with many new developments looking generic despite the wide range of building types and materials used. Often this is due to overly standardised approaches to streets and spaces, where very little room is given for the types of innovation that allow one place to be different from another. Also, too wide a range of materials and styles can confuse the identity of new development, with the lack of a coherent approach weakening the overall visual quality and diluting the overall character.

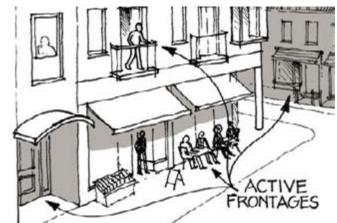
To maintain local distinctiveness, new development should be reflective of local aspects such as:

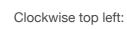
the local landform and the way development sits upon it the local pattern of streets, blocks and the dimension of plots development style and vernacular built forms, massing, details and materials (including street furniture and boundaries)

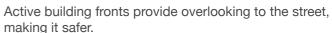
Developers should demonstrate how they have embedded local character in their Design and Access Statement.



Left: Settlement typologies in terms of how buildings sit in relation to main lines of movement, a key consideration for the character of the settlements in the Crich area.



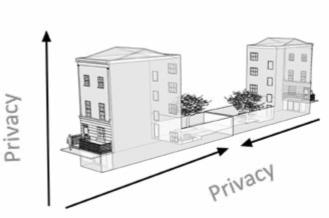




Buildings arranged in a perimeter block, with public streets and spaces to the front, and private gardens to

Perimeter blocks set up a 'privacy gradient', enabling active frontages whilst keeping gardens and rooms within a building private.







The Government attaches great importance to the design of the built environment. Good design is a key aspect of sustainable development, is indivisible from good planning, and should contribute positively to making places better for people."

Source: National Planning Policy Framework (2012)

Good design checklist

Below is a simple checklist to help designers when thinking about how to bring a site forward. It may also be helpful for other stakeholders looking at a development proposal, prompting examination of the design elements that are often left until too late in the design process or overlooked all together. A more comprehensive checklist can be found in Building for Life 12 (see Appendix III).



Are there existing site features of note? Can these be integrated into the development to add character and preserve site identity?



How can new routes into and out of the development help link with existing areas and make finding your way around easy? How should they cross the site?



Where should vehicles come into and out of the development?

Are there any traffic issues to manage?



Where should pedestrians access the site?

Are there any existing rights of way to consider?



Are streets designed to be pedestrian friendly so as to encourage walking?

Are vehicle speeds low and are there places to meet and parking for bikes? socialise?



What are the needs of cyclists in the area and how have you accommodated these?

Is there enough



Are buildings and spaces designed to be safe? Do buildings face the street and are their gardens secure? Are public spaces well overlooked and do they have a collected?

clear use?



How are bins and recycling to be dealt with?

Where are bins stored? Can people put bins away after waste has been







Strong boundaries feature throughout the area. Open frontages should be





Buildings should use local brick and proportions rather than introduce generic





Engineered-looking streets should be avoided, with local types referenced.





Timber boundaries should be avoided, instead use hedges or low walls.



Appendix II: Manual for Streets

Manual for Streets (MfS) replaces Design Bulletin 32, first published in 1977, and its companion guide Places, Streets and Movement.

It puts well-designed residential streets at the heart of sustainable communities. For too long the focus has been on the movement function of residential streets. The result has often been places that are dominated by motor vehicles to the extent that they fail to make a positive contribution to the quality of life.

MfS demonstrates the benefits that flow from good design and assigns a higher priority to pedestrians and cyclists, setting out an approach to residential streets that recognises their role in creating places that work for all members of the community. MfS refocuses on the place function of residential streets, giving clear guidance on how to achieve well-designed streets and spaces that serve the community in a range of ways.

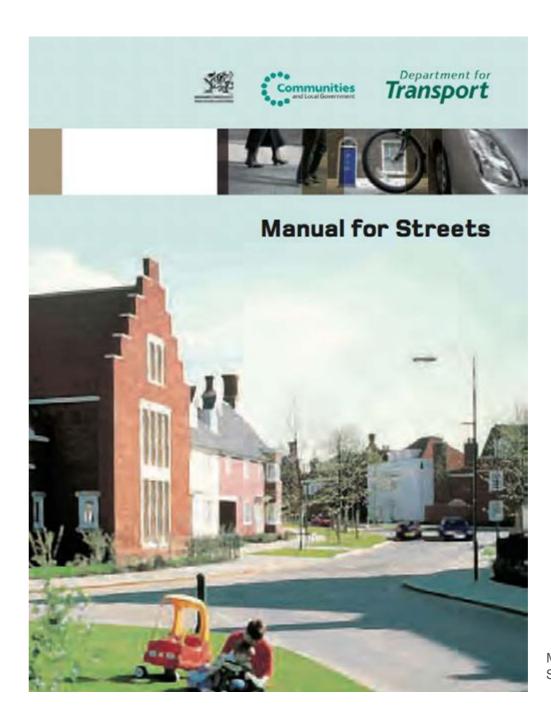
MfS updates the link between planning policy and residential street design. It challenges some established working practices and standards that are failing to produce good-quality outcomes, and asks professionals to think differently about their role in creating successful neighbourhoods.

It places particular emphasis on the importance of collaborative working and coordinated decision-making, as well as on the value of strong leadership and a clear vision of design quality at the local level.

Research carried out in the preparation of Manual for Streets indicated that many of the criteria routinely applied in street design are based on questionable or outdated practice.

For example, it showed that, when long forward visibility is provided and generous carriageway width is specified, driving speeds tend to increase. This demonstrates that driver behaviour is not fixed; rather, it can be influenced by the environment.

MfS addresses these points, recommending revised key geometric design criteria to allow streets to be designed as places in their own right while still ensuring that road safety is maintained.



Manual for Streets, TFL



Appendix III: Building for Life 12

Building for Life 12 is the industry standard, endorsed by government for well-designed homes and neighbourhoods that local communities, local authorities and developers are encouraged to use to help stimulate conversations about creating good places to live.

The 12 questions reflect our vision of what new housing developments should be: attractive, functional and sustainable places. Redesigned in 2012, BfL12 is based on the National Planning Policy Framework and the government's commitment to not only build more homes, but better homes - whilst also encouraging local communities to participate in the place making process.

The questions are designed to help structure discussions between local communities, local planning authorities, developers and other stakeholders.

BfL12 is also designed to help local planning authorities assess the quality of proposed and completed developments; it can be used for site-specific briefs and can also help to structure design codes and local design policies.

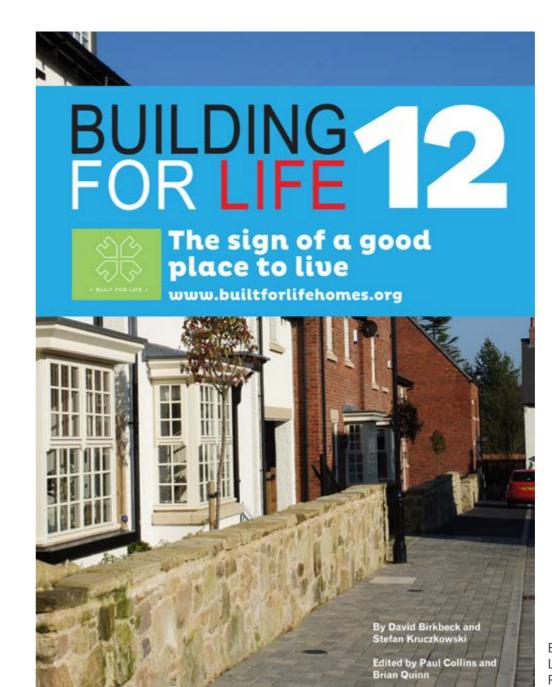
BfL12 comprises of 12 easy to understand questions that are designed to be used as a way of structuring discussions about a proposed development. There are four questions in each of the three chapters:

- · Integrating into the neighbourhood
- · Creating a place
- Street and home

Based on a simple 'traffic light' system (red, amber and green) we recommend that proposed new developments aim to:

- · Secure as many 'greens as possible,
- · Minimise the number of 'ambers' and;
- Avoid 'reds'.

The more 'greens' that are achieved, the better a development will be. A red light gives warning that a particular aspect of a proposed development needs to be reconsidered.



Building for Life 12, the BfL Partnership

Appendix IV: Space Syntax methodology

History

The term Space Syntax encompasses a set of theories and techniques for the analysis of spatial configurations. The theory was conceived from the early 1970s onwards by Bill Hillier and colleagues at The Bartlett, University College London, and published in two seminal books, *The Social Logic of Space* and *Space is the Machine*.

Over the years the theory and techniques have been continually developed and refined by the international academic community and by its use in practice. Its unique contribution to the field of urban planning and design is in the identification of fundamental links between spatial layout and the social, economic and environmental performance of places.

The central thesis of Space Syntax is that the spatial layout of buildings and urban places exerts a powerful influence on human behaviour: "The way that places connect is directly related to the way that people move, interact and transact. Space connects or segregates; brings people into social and economic relationships or keeps them apart; helps people save time or consigns them to carbon-intensive lifestyles; enhances real estate value or damages investments; increases safety or encourages criminal behaviour." (Space Syntax Laboratory)

Space Syntax has pioneered a space-based modelling approach that is able to explain, compare and predict human behaviour and its consequences within buildings and urban spaces, on foot, on bikes and in vehicles.

The theory is able to show how the social, economic and environmental performance of places – from the scale of the entire city to the scale of the individual street and building – is measurably affected by the interaction of two key properties of buildings and cities: 'spatial layout attraction' and 'land use attraction'.

This understanding allows us to analyse the performance of places, both existing and proposed, and show how planning and design decisions impact fundamentally on the way that people move, interact and transact in streets and buildings.

Space Syntax therefore provides a tried and tested, evidence-based approach to the analysis and design of spatial layout patterns and this understanding is crucial in the design of new routes and spaces.

The modelling techniques make it possible to quantify and describe how easily navigable any space is, useful for the design of large buildings and masterplan layouts where wayfinding is a significant issue.

Space syntax has also been applied to predict the correlation between spatial layouts and social effects such as crime, traffic flow, as well as between spatial layout and economic effects, such as footfall, land and rental values.





Top: Professor Bill Hillier, inventor of Space Syntax and developer of the theory into the powerful tool it is today.

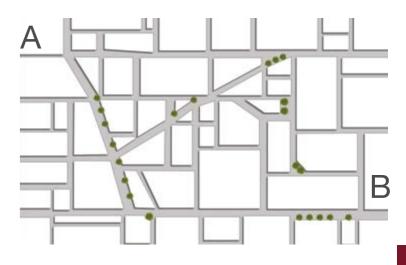
Above: DepthMap X showing movement analysis being undertaken, in this case of Rushden in Northamptonshire.

How we move

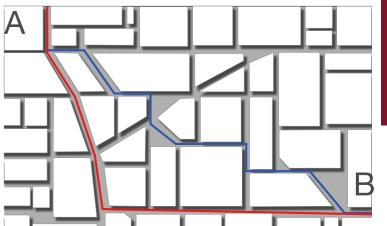
In developing Space Syntax theory, on-going observations of people using urban systems were undertaken. This painstaking research uncovered some fascinating relationships between the properties of an urban system and how people moved through it. Could 'the architecture of the grid' be exerting a powerful influence on users? And if so, in what way? If a reliable pattern could be found, then, reasoned the researchers, the underlying spatial properties could be measured.

The options for moving through any given system are many-fold but not infinite, and many trip options make little sense for efficient travel. If a person wants to travel from point A to point B in a system, do they take the shortest route (blue) or the most direct (red)?

Contrary to what many people think, route choice has reliably been shown to favour less complex, more direct journeys over shorter but more convoluted options. Although metric distance is a factor, people prefer to use routes that are simple, with as few changes of direction as possible.



Right: A possible movement system with a number of route options.



Right: Shortest (blue) and most direct (red) routes between points A and B.

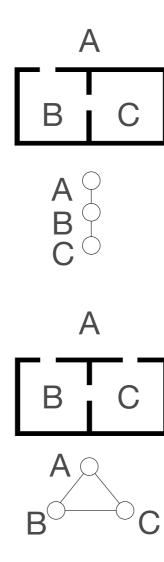


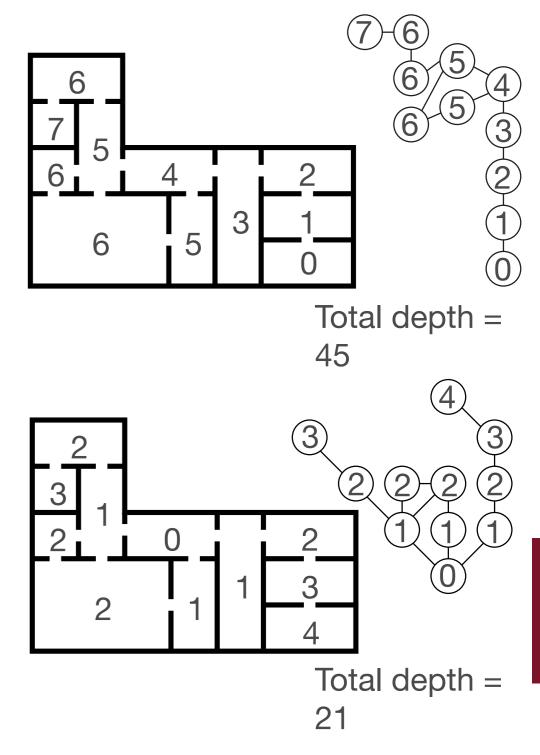
Measuring space

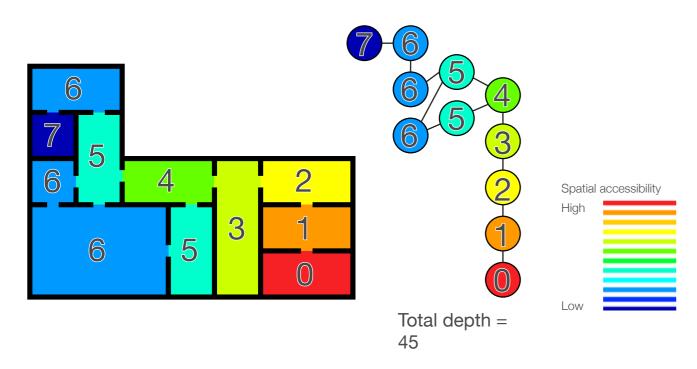
Once it was established that people reliably used space for movement in certain ways, it then became necessary to find a way to measure spatial properties to allow comparisons between parts of a spatial system. A branch of mathematics called graph theory enables precisely the type of measurement needed for our purposes. It uses the concept of spatial 'depth' to build up a picture of how parts of a spatial system interrelate.

Take the diagram below. On the left of this is a system with spaces A, B and C. To get from A to C you must pass through B. In comparison to the example on the right, A and C are more remote from each other, with a trip between them requiring you to travel further through the system. Here, C can be described as 'deeper' from A than in the diagram on the right. The spaces in the right hand diagram are equal in terms of depth; you can move from one space to all the other spaces in a single 'step', meaning that you travel less 'deep' into the system.

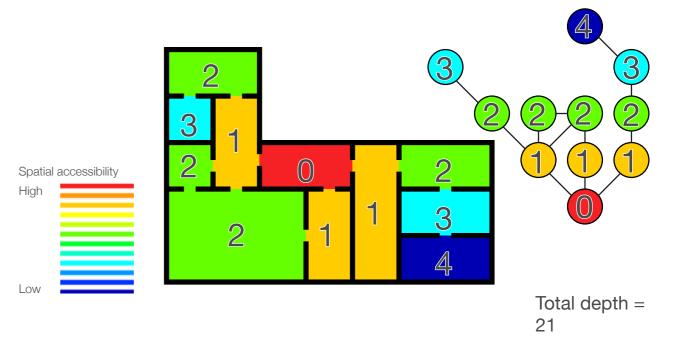
Moving to more complicated systems across the page, we can start to develop graphs that show how large numbers of spatial components relate to one another. As discussed, how spaces within an urban system link together and the complexity of moving from one to another predicts their level of usage. How the system looks depends on your starting point; in the diagram top right, we are starting in a space (0) that is 'deep' to many of the other spaces in the system, requiring users to pass through many other spaces to make progress. By comparison, starting in the more central part of the system means that more spaces are within easy reach. This space can be said to be more 'shallow' than the previous space, as it has more direct neighbours and you can access more of the system in fewer steps. The graph for this starting point shows how the numerical value for this less 'deep' space is calculated. With the support of the observational studies, it is reasonable to assume that this space will attract more movement than the other spaces in this example.







To help in visualising the properties of the components of a spatial system, colours can be added to the graph. The software used for undertaking the analysis uses a 'heat' scale to make understanding the outputs of the modelling intuitive for readers.'Hot' spaces are those that are 'shallow' in the system, and thus can be expected to attract more movement. 'Cool' spaces are more spatially isolated, requiring people to travel deeper into the system to find them.



The two diagrams are examples of 'step depth' measurement. Starting from a particular space within the system, the total number of steps needed to reach all the other parts of the system can be calculated. Should you want to show how all the spaces in a system related to each other simultaneously, then graph values for every space can be calculated and ranked in order of graph value or 'depth'.

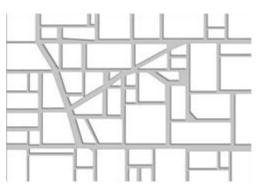
For large urban systems, models are created based on lines of sight through the publicly accessible spaces in the place being analysed.

This links the analysis to how users of a system experience its parts to the interrelation between the spaces within it. Lines of sight, or 'axial lines', can either be drawn 'by hand' on computer, overlaid on Ordnance Survey base plans, or can be generated by using road centre lines in GIS models.

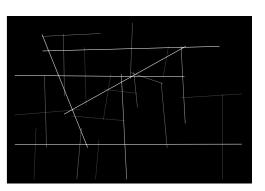
The axial line diagrams overleaf show the longest lines that it is possible to draw through the example plan. Different types of analysis require different types of axial line diagrams. For smaller systems such as the one above, an 'all lines' diagram can be produced, which has been shown to produce higher resolution correlations for movement flows. Reducing the amount of lines helps speed up the production of models, but this also lowers the resolution of the output.

For small systems this can lead to inaccuracies, but for large urban systems the resolution achieved has been shown to accurately predict movement flows.

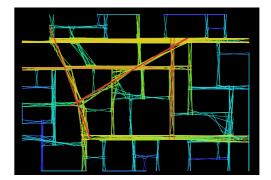
Whilst axial line analysis gives results with strong R-values, another type of analysis has been developed which enables more attributes of a movement system to be analysed; angular segment analysis. In this study, we are using this technique as it enables multiple properties of spaces within a system to be tested co-dependently, making for more accurate models.



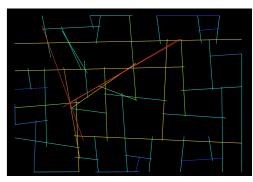
A movement system, ready to be modelled.



Lines of sight through the streets and spaces of that system.



An 'all lines' map, showing the strongest meeting and gathering spaces within the system.



A 'fewest lines' map, showing through movement within the system.

5

Settlements as movement economies

How settlements are formed has a pronounced effect on their ability to support economic and social activity. In a very real sense, settlements can be seen as 'movement economies', in that the way the uses within any given settlement are distributed is closely related to the way the spaces interconnect and movement flows between them. The map (top) shows the west end of London, with axial line analysis overlaid on its streets. The red lines show the most accessible spaces, the cooler blue and green lines show spaces that are comparatively less accessible. Overlaying land use on the same plan reveals something very important about the relationship between movement and economic activities. Research shows that spatial integration can predict how land uses will be distributed to a great extent; around 80% of retail units are to be found on the streets in the top 20% of integration.

For new development hoping to sustain a mix of uses, generating accessible spaces during the master planning is critical, as without natural movement, economic viability is difficult to achieve. Likewise for 'destination' uses such as hospitals, ensuring they are well integrated into the movement framework helps generate modal choice for users, as locations away from natural movement attractors increases model shift to private cars, increasing traffic and parking demands.

Types of analysis

Space Syntax theory and its techniques of analysis have been used in this study to measure the baseline levels of spatial accessibility in and around Branston.

As mentioned, Hillier *et al's* Space Syntax approach uses a number of geometric measures to represent the relative accessibility of the 'segments' of public space, defined by drawing lines, called 'axial lines', through the system being analysed. The geometry of a layout has a pronounced effect on actual and perceived connectivity and legibility as well as actual and perceived levels of safety, thus making it a powerful predictor of movement.

The software used for this study is the OpenSource version of *DepthmapX*, version 5. The colour range is 'Depthmap classic', and we have normalised the data in order to improve accuracy.

In this study we have used four types of analysis:

Normalised angular choice (NACh_25000 and 2500) indicates the 'through movement' potential of a segment within the model of longer journeys within the area, and thus is used to model local car journeys or longer bike rides.

Normalised angular choice (NACh_800 and 400) indicates the 'through movement' potential of a segment within the model for a 10 - 15, or 5 minute walking trip, thus revealing the local pedestrian movement system.

Not all of the analysis is needed for each of the iterations on site; the large radius measures allow the wider movement network to be analysed, and the precise configuration of the routes on site have little impact on this 'global' system. For local walking trips, the routes and spaces on the site become more important so are included.



Right: London, analysed for spatial accessibility.



Right: Retail land uses shaded red; note how around 80% of the retail is found on the 20% most spatially accessible streets.



Appendix V: Glossary of terms

Shortened extracts from By Design (ODPM/CABE, 2000) and The Dictionary of Urbanism (Streetwise Press, 2003)

accessibility The ease with which a building, place or facility can be reached by people and/or goods and services. Accessibility can be shown on a plan or described in terms of pedestrian and vehicle movements, walking distance from public transport, travel time or population distribution.

adaptability The capacity of a building or space to respond to changing social, technological, economic and market conditions.

amenity Something that contributes to an area's environmental, social, economic or cultural needs. The term's meaning is a matter for the exercise of planners' discretion, rather than being defined in law.

appearance Combination of the aspects of a place or building that determine the visual impression it makes.

area appraisal An assessment of an area's land uses, built and natural environment, and social and physical characteristics.

authenticity The quality of a place where things are what they seem: where buildings that look old are old, and where the social and cultural values that the place seems to reflect did actually shape it.

background building A building that is not a distinctive landmark.

backland development The development of sites at the back of existing development, such as back gardens.

barrier An obstacle to movement.

best value The process through which local authorities work for continuous improvement in the services they provide. Local authorities are required to challenge why a particular service is needed; compare performance across a range of indicators; consult on the setting of new performance targets; and show that services have been procured through a competitive process. Councils are subject to independent best value audits by the Best Value Inspectorate, an offshoot of the Audit Commission.

block The area bounded by a set of streets and undivided by any other significant streets.

block The space in between the streets, usually used for development but can also be used for parkland and open space. The shape can be regular (square) or rectilinear (longer and shorter sides).

brief This guide refers to site-specific briefs as development briefs. Site-specific briefs are also called a variety of other names, including design briefs, planning briefs and development frameworks.

building element A feature (such as a door, window or cornice) that contributes to the overall design of a building.

building line The line formed by the frontages of buildings along a street. The building line can be shown on a plan or section.

building shoulder height The top of a building's main facade.

built environment The entire ensemble of buildings, neighbourhoods and cities with their infrastructure.

built form Buildings and structures.

bulk The combined effect of the arrangement, volume and shape of a building or group of buildings. Also called massing.

character appraisal Techniques (particularly as developed by English Heritage) for assessing the qualities of conservation areas.

character area An area with a distinct character, identified as such so that it can be protected or enhanced by planning policy. The degree of protection is less strong than in a conservation area.

character assessment An area appraisal emphasising historical and cultural associations.

conservation area character appraisal A published document defining the special architectural or historic interest that warranted the area being designated. conservation area One designated by a local authority under the Town and Country Planning (Listed Buildings and Conservation Areas) Act 1990 as possessing special architectural or historical interest. The council will seek to preserve or enhance the character and appearance of such areas.



context (or site and area) appraisal A detailed analysis of the features of a site or area (including land uses, built and natural environment, and social and physical characteristics) which serves as the basis for an urban design framework, development brief, design guide, or other policy or guidance.

context The setting of a site or area.

countryside design summary A descriptive analysis explaining the essential design relationship between the landscape, settlement patterns and buildings. From this analysis the document draws principles that can be applied to development in the area and sets out the implications of the choices open to designers. As supplementary planning guidance prepared by a local authority, the summary can encourage a more regionally and locally based approach to design and planning. It can also provide the context for individual communities to prepare village design statements.

defensible space Public and semi-public space that is 'defensible' in the sense that it is surveyed, demarcated or maintained by somebody. Derived form Oscar Newman's 1973 study of the same name, and an important concept in securing public safety in urban areas, defensible space is also dependent upon the existence of escape routes and the level of anonymity which can be anticipated by the users of space.

density The mass or floorspace of a building or buildings in relation to an area of land. Density can be expressed in terms of plot ratio (for commercial development); homes or habitable rooms per hectare (for residential development); site coverage plus the number of floors or a maximum building height; space standards; or a combination of these.

design code A document (usually with detailed drawings or diagrams) setting out with some precision the design and planning principles that will apply to development in a particular place.

design guidance A generic term for documents providing guidance on how development can be carried out in accordance with the planning and design policies of a local authority or other organisation.

design guide Design guidance on a specific topic such as shop fronts or house extensions, or relating to all kinds of development in a specific area.

design policy Relates to the form and appearance of development, rather than the land use.

design principle An expression of one of the basic design ideas at the heart of an urban design framework, design guide, development brief or design code. Each such planning tool should have its own set of design principles.

design statement A developer can make a pre-application design statement to explain the design principles on which a development proposal in progress is based. It enables the local authority to give an initial response to the main issues raised by the proposal. An applicant for planning permission can submit a planning application design statement with the application, setting out the design principles adopted in relation to the site and its wider context. Government advice (Planning Policy Guidance Note 1) encourages an applicant for planning permission to submit such a written statement to the local authority.

design-led development (or regeneration) Development whose form is largely shaped by strong design ideas.

desire line An imaginary line linking facilities or places which people would find it convenient to travel between easily.

development appraisal A structured assessment of the characteristics of a site and an explanation of how they have been taken into account in drawing up development principles.

development brief A document providing guidance on how a specific site of significant size or sensitivity should be developed in line with the relevant planning and design policies. It will usually contain some indicative, but flexible, vision of future development form. A development brief usually covers a site most of which is likely to be developed in the near future. The terms 'planning brief' and 'design brief' are also sometimes used. These came into use at a time when government policy was that planning and design should be kept separate in design guidance. The term 'development brief' avoids that unworkable distinction.

development control The process through which a local authority determines whether (and with what conditions) a proposal for development should be granted planning permission.

development plan Prepared by a local authority to describe the intended use of land in an area and provide a basis for considering planning applications. Every area is covered either by a unitary development plan or by a development plan comprising more than one document (a structure plan and a local plan, and sometimes also other plans relating to minerals and waste). The development plan sets out the policies and proposals against which planning applications will be assessed. Its context is set by national and regional planning policy guidance.

development Statutorily defined under the Town and Country Planning Act 1990 as 'the carrying out of building, engineering, mining or other operation in, on, over or under land, or the making of any material change in the use of any building or other land'. Most forms of development require planning permission.



eyes on the street People whose presence in adjacent buildings or on the street make it feel safer.

facade The principal face of a building.

fenestration The arrangement of windows on a facade.

figure/ground (or figure and ground diagram) A plan showing the relationship between built form and publicly accessible space (including streets and the interiors of public buildings such as churches) by presenting the former in black and the latter as a white background, or the other way round.

fine grain The quality of an area's layout of building blocks and plots having small and frequent subdivisions.

form The layout (structure and urban grain), density, scale (height and massing), appearance (materials and details) and landscape of development.

grid (street pattern) A street system in which streets connect at both ends with other streets to form a grid-like pattern. Grids can be regular or deformed; regular grids have junctions that meet at crossroads, whereas deformed grids have their junctions offset from one another.

in-curtilage parking Parking within a building's site boundary, rather than on a public street or space.

landmark A building or structure that stands out from the background buildings.

landscape The appearance of land, including its shape, form, colours and elements, the way these (including those of streets) components combine in a way that is distinctive to particular localities, the way they are perceived, and an area's cultural and historical associations.

layout The way buildings, routes and open spaces are placed in relation to each other.

legibility The degree to which a place can be easily understood by its users and the clarity of the image it presents to the wider world.

live edge Provided by a building or other feature whose use is directly accessible from the street or space which it faces; the opposite effect to a blank wall.

local distinctiveness The positive features of a place and its communities which contribute to its special character and sense of place.

massing The combined effect of the arrangement, volume and shape of a building or group of buildings. This is also called bulk.

mixed uses A mix of complementary uses within a building, on a site or within a particular area. 'Horizontal' mixed uses are side by side, usually in different buildings. 'Vertical' mixed uses are on different floors of the same building.

movement People and vehicles going to and passing through buildings, places and spaces.

natural surveillance (or supervision) The discouragement to wrong-doing by the presence of passers-by or the ability of people to see out of windows. Also known as passive surveillance (or supervision).

nested hierarchy (layout) A type of layout common from around 1950 that, instead of traditional interconnecting grids of streets, uses a tiered order of streets, each with only one function (commonly distributor road, access road, cul-de-sac).

node A place where activity and routes are concentrated. performance criterion/criteria A means of assessing the extent to which a development achieves a particular.

'Radburn' (layout) a type of layout developed in America for a scheme in New jersey which used a segregated footpath network to separate cars from pedestrians. Commonly used in the UK in the 1960's, these types of layouts are identifiable by their garage parking to the rear of properties, often maze-like network of footpaths running along back fences and between buildings, and areas of 'left over' space with no obvious use.

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