Up to the end of the 18th century, the transport of materials to inland areas like Hertfordshire was difficult and costly. Consequently builders used the sources they had to hand; flint, straw, timber and clay. The characteristic qualities of the Dacorum area owe much to the survival of such traditional materials. They have however been supplemented by many more recent materials, brought in from outside the region.

**Stone**

Hertfordshire has no significant source of quality freestone, being mostly reliant on chalk and its associated material, flint. Chalkstone (also known as clunch) of adequate strength for walls has long been quarried at Totternhoe near Dunstable. Its blocks have been used to construct churches or other important buildings, often in combination with flint.

Flint is used in a functional way, roughly knapped rather than squared in the East Anglian tradition. The material (and the skill to build with it) is available commercially, but it is mostly used for conservation work or sculpture.

Also to be found within the masonry of some buildings, including garden walls, is Hertfordshire ‘pudding-stone’ an unusual local stone of glacial origin, comprising rounded pebbles bound within a flinty cement. The image at the top far right is an example of pudding-stone.

**Decorative plasterwork is still to be found in the area, following the East Anglian tradition of pargetting.**

Well laid flintwork can be a visual delight and upholds a local tradition.

Flint and limestone are sometimes combined to form a picturesque chequerboard pattern.

**Until the eighteenth century timber framing was the most common building form. The frame was usually concealed behind a coat of lime plaster.**

**KEY ISSUES**

**MP1: MATERIALS AND TEXTURES**

**MP1A**

Based on its long history and large size, Hemel Hempstead has a diversity of materials in its built environment.

**MP1B**

Hemel Hempstead consultation participants favoured traditional materials and styles, including Victorian brickwork, knapped flint and timber framing, preferring them to standard modern products.

**MP1C**

Hemel Hempstead consultation participants expressed an interest in the use of new materials and innovative styles.

**MP1D**

Many Hemel Hempstead participants referred to much of the New Town materials (yellow buff brickwork primarily) as ‘dull and unimaginative.’

**MP1E**

There is a diversity of paving materials used in the New Town centre, the old town and local centres, with no common vocabulary.
By the 19th century, imported limestones such as Bath stone or Portland were being employed, either for dressings or full construction and largely supplanted the use of flint.

Timber
Timber-framing and weatherboarding were common up to the 18th century, when brick became much more common. Oak and elm were the preferred materials for the structural members. Church spires are usually formed in wood and clad in copper, shingle or lead to form the characteristic Hertfordshire ‘spikes’. Timber frames were infilled with wattle and daub or lath and plaster panels; sometimes they were later replaced by brick.

The timber frames were almost always hidden from view - sometimes behind weatherboarding or tiles, more usually behind a protective coat of lime plaster. The East Anglian tradition of decorative plasterwork known as parapetting reaches into Hertfordshire mostly in the east of the county, but examples are to be found in Dacorum, including Hemel Hempstead.

Later, the classical revival resulted in the use of rendered and painted surfaces in imitation of ashlar stonework.

Window joinery was almost always softwood, well seasoned and painted, but in some early buildings oak, elm or ash may have been used for the frames.

Brickmaking
Brickmaking was in evidence from 15th century and had become the accepted building material by the Tudor period. Local beds were used to source the clay but with improved transport, bricks were imported from further afield. In the early 19th century there was a vogue for using yellow and white bricks, often made from gault clay, in imitation of stone. In the Victorian era machine-made bricks and tiles became prevalent and coloured decorative patterns like diaper work were used to great effect.

The New Town buildings, with the exception of the concrete civic buildings, were built with standard yellow machine-made bricks.

Roofing materials
At one time thatch would have been the universal roof covering, using long straw rather than the more durable water reed that has been adopted in recent years. Thatch is however now rare in Dacorum’s towns, being mainly confined to farm buildings or other rural locations.

Roof tiles were first made by the Romans but their manufacture fell out of use and was only revived during the medieval period. Until the 20th century the tiles
The use of small paving blocks in the old town centre enhances the area's distinctiveness.

This section of the high street has a combination of clay and concrete pavers.

Many shops have Victorian mosaic tiles in the entryway.

A combination of modern granite slabs and brick in the new town centre.

used were normally hand pressed and made in clay, but since the 1920s machine made concrete and clay tiles have become common. Interlocking tiles, in imitation of Mediterranean or Roman tiles, are frequently to be found in postwar housing. Church roofs, if not in tile, were in lead sheet until slates became common.

An alternative to tile would have been cedar or oak shingles (wooden tiles). Most commonly, however, slate was imported in large quantities, especially from North Wales, and was almost universal for large or industrial buildings.

**Streetscape materials**

The first streets in the town were probably little more than beaten earth and ash, but after the 17th century granite setts and sandstone paving were used for heavily trafficked areas, such as town pavements or the surfacing of yards. In recent years, concrete slabs of various colours, sizes and textures have been common. The historical town centre uses small pavers to enhance the area’s distinctiveness. Many of the shops have Victorian mosaic tiles in the entryway (see bottom near right). The pedestrianised area of the Marlowes has been paved with a combination of bricks and granite slabs.
MAKING PLACES
LISTED BUILDINGS AND CONSERVATION AREAS

The New Town Centre was consciously developed to the south of the old High Street, ensuring that the relatively fragile historic area would be preserved. Today the Old Town is a quiet enclave with a high concentration of listed buildings from all periods.

Gadebridge Park provides an important green backdrop to the High Street and complements its compact urban form.

KEY ISSUES
MP2: LISTED BUILDINGS AND CONSERVATION AREAS

MP2A
There is only one Conservation Area in Hemel Hempstead, which includes the old town centre and part of Gadebridge Park.

MP2B
There are very few listed buildings in Hemel Hempstead outside the old town. Of these, the most prominent are the cluster of 19th century villas in Marlowes, opposite the Civic Centre.

MP2C
There are buildings within the Marlowes Shopping Area which could be considered for listing.
Hemel Hempstead High Street Conservation Area

The old heart of Hemel Hempstead became a Conservation Area in 1968 and was one of the first to be designated in Hertfordshire. The boundary is tightly drawn around the medieval town and takes in the High Street, the parish church and the Charter Tower.

The plan on the previous page contrasts the size of Hemel’s historic core with the remainder of the built-up area, demonstrating the scale of the town’s dramatic postwar expansion. There are however other parts of Hemel Hempstead that predate the New Town, notably the ribbon of Regency villas facing the civic centre in Marlowes and the Victorian enclave to the east, around the hospital. Elsewhere in the town the street pattern survives from some of the villages and hamlets that were absorbed in Hemel’s growth. Boxmoor is the best example, serving as a reminder of the area’s rural past and its subsequent development in the railway era.

The High Street owes its appeal to several factors. The variety and quality of its historic buildings, the gentle, climbing curve of the street that progressively reveals them, and the preservation of the narrow alleys and yards on the east side of the street all contribute to its special character. Most of all, though, it is the relationship with Gadebridge Park that gives the High Street its distinctiveness and maintains the ancient relationship between town and country. Views westward across the irregular rooftines of the High Street are significant.

The story of the New Town development is of increasing interest, particularly for its planning principles based on a cluster of neighbourhoods and a town centre which, like the Old Town, had a clear relationship with waterways and green spaces. The modern centre is not yet a conservation area but aspects of its layout and design concept, as well as its best buildings, are worthy of preservation or enhancement.
Streetscape and paving
The High Street is largely free from clutter and most of the streetlights are bracketed from buildings. Street furniture and surfaces are adequately maintained, although paving materials are mixed and outworn. A simple, coordinated treatment would enhance the conservation area and improve the setting of listed buildings.

Shopfronts
The High Street has a good collection of historic shopfronts from the 19th century onwards, although there are some modern fascias that are overscaled or employ unsuitable materials.

Listed buildings
Most of Hemel Hempstead’s listed buildings are concentrated within the short span of the High Street and their group value is considerable. The Church of St Mary is the oldest, most prominent and important building, listed Grade I. The secular buildings range from timber-framed buildings from the 16th and 17th centuries through to High Victorian civic architecture. There is a particularly fine sequence of Georgian fronts, including several of the inns and public houses, some of which conceal earlier structures.

Outside the Old Town the listed buildings are mainly isolated rural survivors within the neighbourhoods which nonetheless bring some distinctiveness to their localities.

Ancient monuments
The site of a former Roman villa at Gadebridge Park is a scheduled ancient monument. Consent must be obtained from the Secretary of State for Culture, Media and Sport before any work is done on the site, including repairs.
The building heights in Hemel Hempstead town centre vary widely along its length.

**Zone 1: Old Town Centre**
The Old Town Centre is defined by high quality predominantly two and three-storey buildings. There is a significant three-storey listed building that acts as a gateway to the High Street.

**Zone 2: Civic, Educational and Professional Housing**
The Civic, Educational and Professional Housing zone is defined by modernist institutional buildings on the western side, ranging in heights from one to four-storeys. The eastern side of the street is predominantly two and three-storey, including several listed villas. The two sides of the streets are asymmetrical in terms of building heights and the regularity of the building line.

**Zone 3: Market Area**
The Market Area is almost entirely three-storey buildings with one architecturally undistinguished eight-storey building. The market square is flanked by one-storey buildings.

**Zone 4: Marlowes Shopping Area**
The Marlowes pedestrianised shopping area is a mix of two to four-storey buildings of mixed quality.

### Key Issues

**MP3: Building Heights**

- **MP3A** There are few tall architectural landmarks in zones 2, 3 and 4.
- **MP3B** The two sides of the streets in zone 2 are asymmetrical in terms of building heights and the regularity of the streetwall.
Hemel Hempstead’s New Town neighbourhoods are predominantly two and three-storey buildings. There is tremendous variation in density among the units. The adjacent images show a sampling of these types, all of which are located near The Heights Local Centre. They represent conditions including on and off-site parking, shared front gardens, no front gardens, both front and rear gardens no gardens at all; and detached housing, two storey terraced units, garden flats, and maisonettes. The examples include:

1. Detached house with communal front garden, rear private garden and on-site parking,
2. Terraced housing with communal front garden, rear private garden and on-site parking in shared car parks,
3. Courtyard development with communal front garden, private rear garden and off-site parking,
4. Three-storey housing with garden flat (private rear garden) and maisonette with communal front garden on-site shared car park.

The locations of each house and plot are shown on the following page. The drawing includes all the communal garden and parking space associated with each unit. Densities have been calculated by calculating the area of the plot (including the footprint) and dividing any communal space among the number of units sharing this space.

**KEY ISSUES**

**MP4: DENSITY**

**MP4A**
Each neighbourhood has a range of housing unit types, including detached housing, terraced units, and flats (typically two or three-storey buildings.)

**MP4B**
The variation in unit types creates some variation in densities.

**MP4C**
The configuration of these units creates three typical street conditions: consistent building line (flats and terraces), inconsistent building line (detached houses), and linear pedestrianised courtyards (terraced units facing the courtyard).

**MP4D**
Flats and terraces are built with entryway gaps to maintain a strong building line.
Size and density comparisons
1. Total plot size: 0.0332 hectare (ha)
   Unit per hectare: 30
   (Total footprint area: 82 sqm, not including garage)

2. Total plot size: 0.0330 ha
   Unit per hectare: 30
   (Total footprint area: 52 sqm)

3. Total plot size: 0.0218 ha
   Unit per hectare: 46
   (Total footprint area: 38 sqm)

4. Total plot size: 0.0129 ha (average for the two flats)
   Unit per hectare: 78
   (Total footprint area: 43 sqm, for maisonette and garden flat each)

Relationship between the street and housing plot
The four examples cited to the right create different street patterns and streetlife. Three of the examples (2, 3 and 4) involve on-site shared car parks which are in courtyards behind the housing units. In both cases, the buildings were designed with an entryway gap to allow cars into the car park while maintaining the streetwall. The courtyard terraces (3) has 32 units that are not facing a street at all. The units face directly onto a shared landscaped linear courtyard. The detached houses (4) do not create a strong building line and are typically found on a range of street pattern types, including curvilinear and cul-de-sac streets.
Hemel Hempstead is centred around the confluence of the River Gade and the River Bulbourne. The two rivers meet at ‘Two Waters’. The Urban Nature Conservation Study notes that there are a number of dry valleys which influence the landscape as well.

The topography has had a profound impact on the town’s morphological development. The southern end of the historical old town and the New Town centre reside in the Gade Valley taking advantage of its relative flatness. The Grand Union Canal courses through the Bulbourne Valley, creating a more industrialised zone through Apsley.

As a result of the two river valleys and the dry valleys, the settlement is quite undulating with a number of significant views into and out of Hemel Hempstead, shaped by the topography and key landmark buildings.

**Key Issues**

**MP5: Topography**

**MP5A**
Hemel Hempstead’s topography creates a number of significant views into and out of the town.

**MP5B**
The presence of the river valleys has shaped the town’s morphological development with industrial and commercial growth along the river valleys and residential development along the valley slopes.
CONTINUITY AND ENCLOSURE
TOWN MORPHOLOGY

The morphology drawing shown at the right illustrates only the areas of built form. The drawing highlights a number of particular features with regards to street pattern, open space and building type.

The rapid growth in the 19th century combined with the lowering of the water table enabled the former floodplain along the River Gade for industrial purposes. This created a linear settlement stretching between Moor End and Hemel via the Marlowes. The London-Birmingham railway was forced by landowners to develop to the south of the town.

Street pattern
The morphology of Hemel Hempstead reveals the many different types of street patterns appearing over time in the town. The medieval street pattern is still present in the old town (1), with adjacent areas revealing the dense Victorian grid (also seen along the Grand Union Canal) (2). The New Town neighbourhood street patterns appear as networks of curvilinear streets (3) with larger distributor roads along their periphery to reduce traffic inside the neighbourhoods (3a). More recent developments on the town’s periphery reveal the evidence of dead-end streets (4). These streets discourage through traffic and reduce permeability.

Open space
The white spaces in between the areas of built environment shows the regular distribution of open space throughout the town, with few places requiring a great distance to reach open space. Schools are recognisable by the large building footprints floating in particular open spaces.

Building type
The carefully zoned location of the very large building footprints reveals that the town is primarily residential with a major cluster of industrial buildings in the north-east and along the canal (5). The Town Centre is made apparent by the large building footprints clustered closely together. The neighbourhoods’ local centres can be seen as larger building footprints in the midst of the neighbourhoods (6).

KEY ISSUES
CE1: TOWN MORPHOLOGY

CE1A
Hemel Hempstead’s neighbourhoods primarily have curvilinear streets with distributor roads at their periphery to provide permeability throughout the town while discouraging cut-through traffic.

CE1B
There is significant open space distributed throughout Hemel Hempstead town centre.
CONTINUITY AND ENCLOSURE
TOWN CENTRE MORPHOLOGY

The town centre morphology provides a close look at the built conditions in relation to street patterns and open space. Hemel Hempstead’s town centre is linear in structure, stretching over a mile-long along the Marlowes. There is significant open space along the River Gade to the west.

Block structure and permeability
There is a significant opportunity to connect shoppers to the Water Gardens open space. The town centre morphology drawing reveals the lack of built structure to encourage these connections. The three southernmost blocks on the western side of the Marlowes have a block structure which places the service courtyards and building rears on Waterhouse Street (A). While there is permeability which allows pedestrians to connect to the Water Gardens, the current block structure creates unpleasant conditions on Waterhouse Street related to the servicing. The area behind the eastern side of the Marlowes shopping district is strictly servicing (B). There is no need to encourage permeability since there is not significant open space behind this side of the street.

The morphology of the civic and education buildings reveal a total lack of block structure. While these buildings seemingly promote permeability to the River Gade, this space has become littered with car parks.

KEY ISSUES
CE2: TOWN CENTRE MORPHOLOGY

CE2A
The three southernmost blocks on the western side of the Marlowes have poor service-orientated conditions on the Waterhouse Street sides.

CE2B
The western side of the Marlowes by the civic and educational institutions was designed without a clear block structure.

CE2C
The western side of the Marlowes by the civic and educational institutions is impermeable due to the car park conditions.

G A Jellicoe’s original New Town Centre plan. (From Frederick Gibberd’s Town Design)

One of G A Jellicoe’s original drawings for the New Town Centre showed a one-sided shopping street on the eastern side of the Marlowes. Across from this street was a landscaped area in which the culverted River Gade weaved itself around everly spaced civic buildings. While there were many concerns with the scheme, it established a simple relationship and set of connections between the retail uses, the civic uses and the open space.
CONTINUITY AND ENCLOSURE
BUILDING LINES, SETBACKS AND GAPS

Building lines establish the way in which a series of building structures meet the street and pavement. A continuous building line facilitates a clear image of the street. Setbacks and gaps, while sometimes providing interesting features or key gathering spaces, can impact the clarity of this building line. For the purposes of this study the town centre drawings considers Waterhouse Street, Marlowes Road, the High Street and the cross streets between them.

Waterhouse Street
Waterhouse Street has an irregular building line from Moor End Road to Combe Street, with setbacks and gaps existing to service the retail buildings on the Marlowes and provide access to the bus terminal. There are also a number of setbacks to provide small parking areas and small landscaped areas.

Marlowes
There are several setbacks along the western side of the Marlowes, particularly where the Council office and West Herts College sites are. The market square is a significant setback which is frequently in use. There is also a wide elevated pavement on the eastern side of the Marlowes which sets back the retail shops.

High Street
There are very few setbacks along the old town’s High Street with the notable exception of the car park adjacent to the Market Hall.

Cross Streets (Bridge Street and Combe Street)
Bridge Street has no setbacks or gaps, creating a block perimeter. Combe Street has one gap which extends to Market Square.

KEY ISSUES
CE3: BUILDING LINES, SETBACKS, GAPS

CE3A
Waterhouse Street has several gaps and setbacks, creating a barrier to usage.

CE3B
The civic and educational buildings on the Marlowes were designed to be set back from the street to create open space around the structures.

CE3C
There is an extended setback created by an elevated pavement along the retail shops on the eastern side of the Marlowes.

CE3D
The small car park by Market Square is the only major setback in the old town.