

1.1 Background

In February 2000 Hertfordshire County Council commissioned The Landscape Partnership to undertake the preparation of a 'local authority scale' landscape character assessment and evaluation of the southern part of the county in accordance with the most current version of national guidance, with stakeholder input, and co-ordinated with existing landscape characterisations. The characterisation work was to enable a definitive classification of all landscape types and boundaries encountered to be made, for the purposes of

- advising on development control and policy development for future development plans, and
- providing a framework for other landscape planning, regulation, conservation and management activities in the county.

In 2001 an extension to the above Landscape Character Assessment was carried out to give full coverage within St. Albans District.

In February 2002 a further extension was agreed to provide complete coverage of Dacorum District, which previously had limited geographical representation. This volume therefore comprises Part 2 of Volume 3 i.e. the Landscape Character Assessment for Dacorum District. For the purpose of providing a complete district wide assessment a number of the character descriptions from the previous studies are also included within this document.

1.2 Context

The process of landscape characterisation and assessment has been spearheaded in England by the work of the Countryside Agency (formerly Countryside Commission) and is currently enshrined as a major planning tool in PPG7. In tandem with English Nature, parallel approaches were formulated and tested during 1995-97 to derive, on the one hand, a series of Natural Area profiles for the whole of England and, on the other, the Countryside Character profiles. While the Natural Area profiles highlighted the distinctive ecology of rural areas, the Countryside Character profiles analysed landscape character in fairly broad-brush terms via the assessment of physical influences, historic and cultural influences, buildings and settlement, land cover and changes in the landscape.

Through this process 120 Natural Areas and 181 character areas were formulated and a joint map published, called 'The Character of England: landscape, wildlife and natural features' (see Figure 01). This map defines the county of Hertfordshire as lying within six Character Areas:

- Area 86 South Suffolk and North Essex Clayland
- Area 87 East Anglian Chalk
- Area 88 Bedfordshire and Cambridgeshire Claylands
- Area 110 Chilterns
- Area 111 Northern Thames Basin
- Area 115 Thames Valley

• **Figure 01**
The Character of England
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English Nature

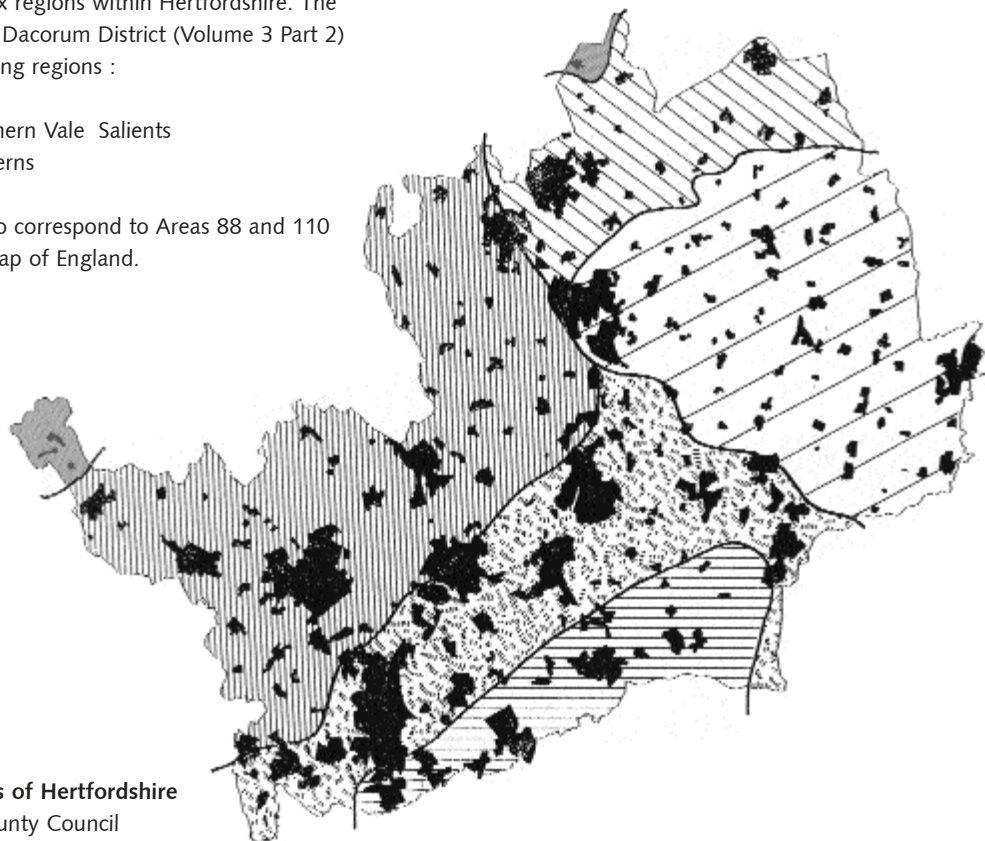


1.0 INTRODUCTION







The Hertfordshire Structure Plan Review adopted in April 1998 embraced the concept of landscape character assessment (see para 392 et seq.) and refers to Volume 1 of A Landscape Strategy for Hertfordshire, which was published as background information in 1998. This first document identifies six regions within Hertfordshire. The present document for Dacorum District (Volume 3 Part 2) falls within the following regions :

- Region 1: The Northern Vale Salients
- Region 2: The Chilterns

These two regions also correspond to Areas 88 and 110 from the Character Map of England.



• **Figure 02**
Landscape Regions of Hertfordshire
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 <p>Region 1: The Northern Vale Salients. A transition zone between the Chilterns scarp face and the adjacent open plains (Oxfordshire and Bedfordshire).</p>	 <p>Region 4: The East Hertfordshire Plateau. (The South Suffolk and North Essex Clay Lands).</p>
 <p>Region 2: The Chilterns.</p>	 <p>Region 5: The Central River Valleys. A sub-section of the Northern Thames Basin.</p>
 <p>Region 3: The East Anglian Chalk (North Hertfordshire Ridge). A sub-section of the Chilterns.</p>	 <p>Region 6: The South Hertfordshire Plateau. A sub-section of the Northern Thames Basin.</p>

Within these broad categories there are physical and cultural features that serve to distinguish sub-divisions within each area. Some of these divisions are not immediately obvious and require analysis of the basic landscape components and their relationship to each other. A single character area may contain different landscape types that combine to give it a unique character. Recent change within a landscape area may suggest a difference of character that is in fact superficial. Logical and consistent observation and analysis was therefore used to derive 30 Landscape Character Areas, as described in this report. Each character area is distinct. One of the intentions of this study is to highlight, conserve and reinforce this distinctiveness.

This study revisits the general landscape features of the county covered in the first volume of the Strategy before providing a detailed description, assessment and evaluation of each Landscape Character Area covered by the scope of this study.

2.1 PHYSICAL INFLUENCES

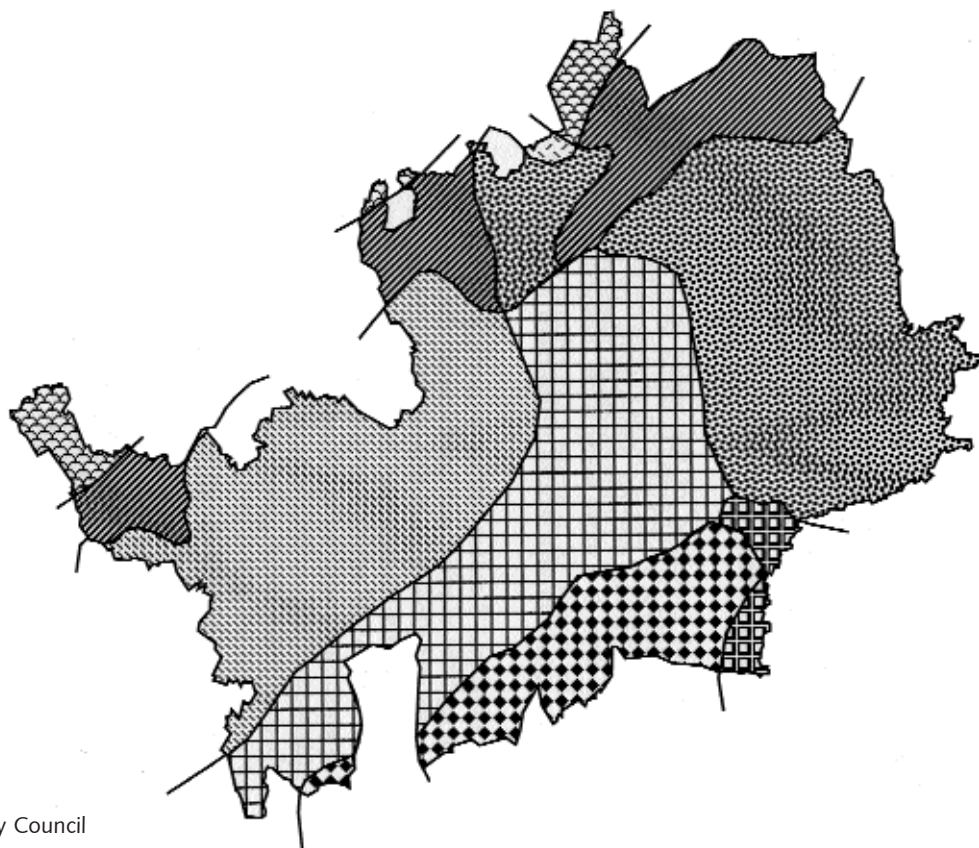
2.1.1 Geology and Soils

Hertfordshire is not old in geological terms. Its base stratum is heavy blue-grey gault clay, which forms an impermeable layer beneath the chalk, whose outward expression is best seen in the Chilterns, in the north west of the county. Over the chalk a thin layer of clays, sands and pebbles - the Reading Beds - was then deposited. In the south-eastern part of the county (Rickmansworth to Bishop's Stortford) a layer of thick London clay was later laid down. Still later (about 200,000 years ago during the last Ice Age) glaciers moved southwards over the chalk, depositing 'drift' - layers of broken rock from the areas further north over which the glacier had passed, which were then left behind as it melted. This is the chalky boulder clay found in the north-eastern part of the county. In the west of the county, where there were no glaciers, a natural weathering process produced the 'clay-with-flints' - a clay deposit containing frost-shattered flints and pebbles from the Reading Beds. Glaciation had one other significant impact on the county's geology - the proto-Thames. During the last Ice Age what is now the Vale of St Albans was the valley of a much larger Thames, with lakes at Wheathampstead and St Albans. Eventually the Thames cut itself a new valley further south and, when the ice melted, the earlier valley formed the Lea and Colne rivers.

Today the soils within the county are of two kinds: alkaline or neutral chalky soil (boulder clay) in the north and east of the county; and more or less acid leached soils over the centre and west of the county. These two soil types, which divide the county very roughly along a north-west/south-east line between Stevenage/Hitchin and Ware/Hoddesdon, have had a defining impact on vegetation, agriculture and development - that is, on fundamental aspects of the landscape character of the county. The light chalky soils of the north west were easily cultivated, if not particularly fertile, and were possibly never heavily wooded in any event. Cultivation of the boulder clay seems to have been intense in the early medieval period, especially on sloping land where drainage could be more easily achieved.









On the heavy, poorly-drained London clay, south east of a line drawn roughly between Rickmansworth and Hertford, via Hatfield, cultivation proved very difficult, so it was long left to support oak and hornbeam forest and pasture. There is very little arable farming and, until comparatively recently, little settlement. North and west of this area lie the Lea and Colne gravel regions. The river diversion mentioned above left rich gravel deposits in the old Thames valley, which provided better-drained, more accessible routes through the county than the forested clays. Settlements grew up in these valleys, and most of the modern towns in Hertfordshire are on these gravels. The river valleys are therefore the areas most heavily affected by human interference, settlement throughout the centuries and, more recently, transport routes and gravel extraction.

Within Dacorum District there are 3 main soil types; Stagnogley Soils in the Vale of Aylesbury to the north west; Redzinas around the Chiltern scarp slopes and Paleo agrillic brown earths on the Chilterns dip slopes.



• Figure 04
Soils

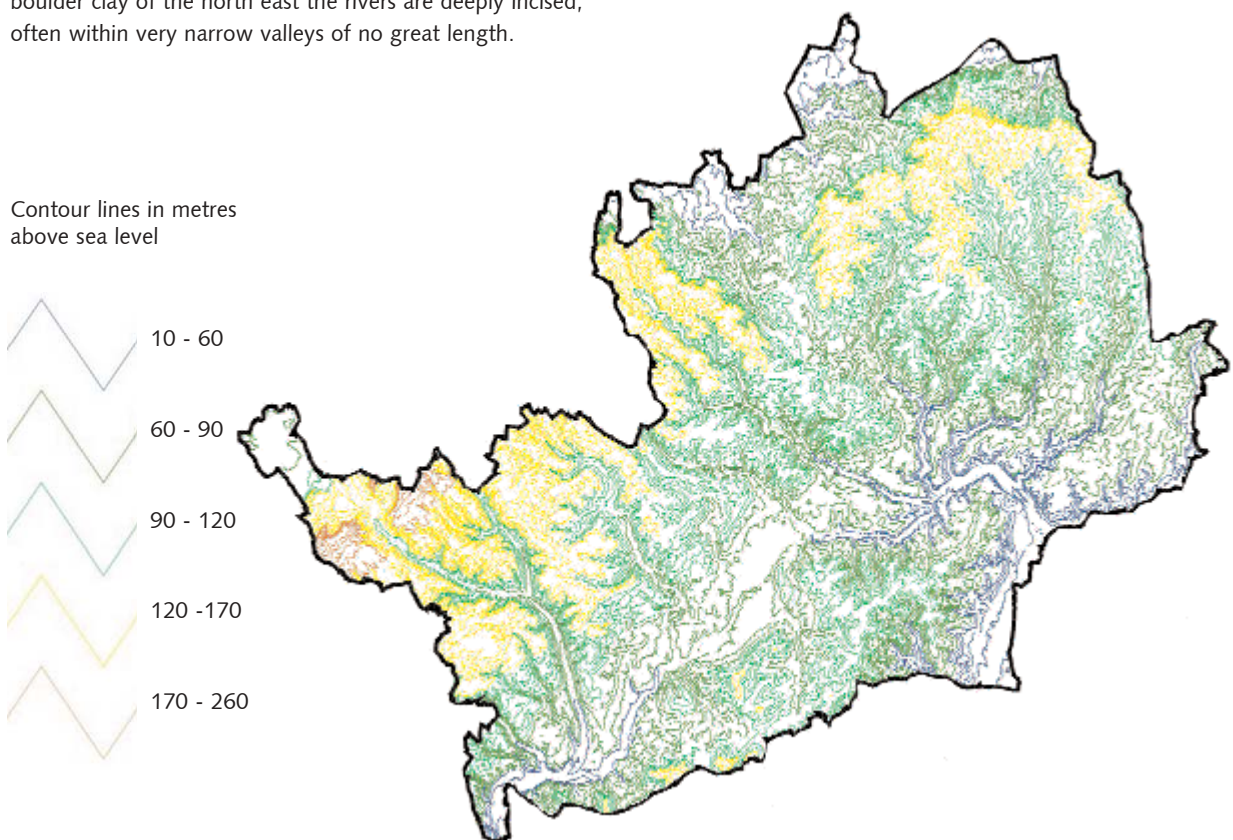
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	<p>RENDZINAS: Associated - Brown Calcareous earths and argillic or paleo-argillic earths. Parent material: Chalk and associated drift. Character: Well drained, shallow chalky soils, with deeper loamy or clayey/flinty soils.</p>		<p>PALEO ARGILLIC BROWN EARTHS: Associated - Brown calcareous earths and argillic brown earths. Parent material: Plateau drifts (clay with flints) and associated drift over chalk. Character: Deep well drained to moderately well drained loamy (usually silty) over clayey or occasionally clayey soils with associated less clayey or calcareous soils.</p>
	<p>STAGNOGLEY SOILS: Associated - Calcareous pelosols and brown earths and brown earth. Parent material: Jurassic or cretaceous clay and associated drift. Character clayey soils and non-calcareous loamy or loamy over clayey soils.</p>		<p>CALCAREOUS PELOSOLS: Associated - Stagnogley soils and argillic brown earths. Parent material: Chalky glacial drift. Character: Slowly permeable, well structured, calcareous clayey soils, associated with non calcareous clayey soils with impeded drainage or less clayey better drained soils, often stony.</p>
	<p>BROWN EARTHS: Associated - Argillic brown earths and alluvial gley soils. Parent material: River-terrace drift and associated alluvium. Character: Deep or moderately deep, well-drained loam soils, locally shallow over gravel, associated with clayey or loamy soils with high ground water.</p>		<p>PALEO ARGILLIC BROWN EARTHS: Associated - Argillic brown earths and stagnogley soils. Parent material: Glacial, glaciofluvial or river-terrace drift and associated brick earth. Character: Deep well-drained to moderately well-drained loamy (often silty) or loamy over clayey soils, usually stony and locally shallow over gravel. Associated with loamy over clayey soils with impeded drainage.</p>
	<p>STAGNOGLEY SOILS: Associated - Argillic brown earths or brown earths. Parent material: Cretaceous or Tertiary clay and associated drift. Character: Clayey or loamy over clayey soils with impeded drainage, associated locally with better-drained mainly loamy soils.</p>		<p>ARGILLIC BROWN EARTHS: Associated: Paleo argillic brown earths and alluvial gley soils. Parent material: river-terrace drift, brick earth and associated alluvium. Character: Deep well-drained loamy (often silty) soils, locally stony or shallow over gravel, associated with poorly-drained and clayey soils with high ground water.</p>

2.1.2 Topography

Hertfordshire contains three upland areas: the southern upland area of London clay; the north-east upland area of boulder clay; and the western chalk/clay-with-flints uplands. The latter of the three areas falls within Dacorum District and represents the maximum elevations within the county on the Chiltern Hills.

The upland areas are divided by a number of river valleys and lowland areas. The valleys of the Colne, Lea and Stort form a broad belt from Rickmansworth to Ware, curving round to Bishops Stortford. The north-eastern and western uplands are divided by a narrow belt of lower ground stretching from Hitchin through Stevenage to Ware. The central river valleys including the Lea are generally shallow while to the west within Dacorum District the Gade and Bulbourne river valleys are more pronounced. On the boulder clay of the north east the rivers are deeply incised, often within very narrow valleys of no great length.



• **Figure 05**
Topography
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2.2 HISTORIC AND CULTURAL INFLUENCES

2.2.1 History

Early activity in the county was focused on the river valleys and the lighter gravel soils, especially around the proto-Thames, although it may have been limited by swamplands. Significant areas of woodland were cleared from the mid to late Bronze Age onwards. This process accelerated during the Iron Age and was nearly complete by the Roman period.

Following an intense period of development during the late Iron Age, the Roman occupation had a strong impact on the landscape, linked to the development of existing settlements at Verulamium, (now St Albans), Welwyn, Braughing and Ware and the roads between these and other strategic locations. This was combined with 'industrial' activity at Berkhamsted and Verulamium and large-scale tile and pottery production, using local materials, at Elstree, Radlett, Bricket Wood and Verulamium. Many villas were built in Hertfordshire and the villa of Gorhambury, for example, shows evidence of the use of the landscape for recreational purposes, in that there was probably a covered walkway and an avenue of trees and shrubs.

The division of the country under Danelaw (the frontier ran approximately north west to south east across the county) led to a divergence in settlement patterns and associated landscape management. Evidence can be found in the pattern of place names and the contrast between villages and greens in the east and larger areas of commonland in the west.

The Normans built castles at strategic locations: Great Berkhamsted (guarding the Tring gap), Hertford (at the confluence of several rivers with the Lea) and Waytemore (the Bishop of London's stronghold at Bishop's Stortford). These were superimposed on an already well-settled landscape; by the time of the Domesday Book there were 168 settlements recorded for Hertfordshire, the majority in the north east. Medieval farming practices developed and the Abbey of St Albans, a major landowner, continued to have a widespread influence on land management. Hunting parks, more for food than ornament, became major features in the landscape in the medieval period and Hertfordshire probably has a higher density than any other county. Relic features from these are still present today in several areas

The Plague of 1348 reduced the rural population and a number of the villages and lands around were abandoned, especially in the north and east of the county.

On the Dissolution of the Monasteries, much of the land confiscated by the Crown from St Albans Abbey was conveyed to courtiers and businessmen, all keen for status and a healthy retreat from the capital. This change in ownership accounts for a growth in country-house building in the mid-16th century, for example at Cassiobury,

Gorhambury, Knebworth and Theobalds. The parks associated with these houses were increasingly ornamental as well as functional. Status was an important motivator here and the gardens at Theobalds, created under James I, became very influential. Morden, writing in 1704, stated: 'This County has an incredible number of Pallaces and fair Structures of the gentry and Nobility...The rich Soil and wholesome Air, and the excellence of the County, have drawn hither the Wealthiest Citizens of London.' (R. Morden, *The New Description and State of England*, 2nd edn. (1704), p.71).

Hertfordshire's links with the London commercial centre grew in importance and there emerged a stronger radial force within the developing geography. Development was not consistent or uniform, with buildings constructed, altered, destroyed and rebuilt, lands emparked and later disemparked, and great houses built and later abandoned. This process continued throughout the following centuries and is still evident today. As Lionel Munby remarked, 'the surviving parks are among the most beautiful places in Hertfordshire', and Hertfordshire is often the first move out to 'the country' for many Londoners.

Hertfordshire shares much in common with other Home Counties in its pattern of development from the 17th century onwards, although the construction of the New River in the Lea Valley to supply London with water was notable. As elsewhere, lands were enclosed, creating the regular patchwork pattern of much of the landscape, and communications improved as canals, roads and later railways were built, most often along the river valleys. Town growth was slow, but for a time in the 19th century the scale of malting and brewing, and associated cereal growing in eastern Hertfordshire made it one of the largest centres of the industry in western Europe.

2.2.2 Buildings and settlement

Since the middle of the 19th century there has been a major change in the landscape of the county. Until then it had no useable natural resources on which to base an Industrial Revolution (see transport section below). The development of modern Portland cement in 1900 made reinforced concrete viable, using the gravel deposits of the proto-Thames basin, with consequent effect on the local landscape. The arrival of the railway provided a focus for new settlements around stations and the development of light industry. Hertfordshire became a commuter belt; free first-class railway tickets were handed out to purchasers of the houses in the new garden cities. The development of the New Towns after WWII increased the demand for local gravels and perpetuates a seemingly natural division in the county. Most construction within the last century and a half has been in the southern and south-western parts of the county, while the north east, which was the most populated during the medieval period, remains sparsely populated and rural. This is probably the most obvious pattern in the landscape of the county.

2.3 TRANSPORT

2.3.1 Roads

The prehistoric routes in the county are notable for their continuity. They result from topography and geology, following the chalk scarp and the river valleys. The Romans then constructed radial routes from their Thames crossing-place, which became Londinium. Their main roads went through the Tring Gap (Akeman Street), through Verulamium (Watling Street) and up the Lea Valley (Ermine Street). Other roads connected the towns to each other. Puckeridge, for example, became a nexus of roads, on the route between Colchester and Sandy.

The poor state of roads through the county demanded significant financial input - the first successful toll-house in the country was at Wadesmill. A parallel system of drove roads - used for animals rather than vehicles - is still partly visible in the green lanes and footpaths, often with the name 'green', 'travellers' or 'bull' attached. It is recorded that in 1766, 992,400 head of beef cattle were driven to Smithfield, many of them through Hertfordshire, so these tracks were an important part of the transport network. Only in the 19th century was there a significant improvement in the county's roads - due chiefly to the efforts of John and James McAdam, sometime Hoddesdon residents.

The late-19th and 20th century growth of settlements in the county entailed a massive change in the road system, with ever more elaborate routes radiating out from London, compounded by the exceptionally high rate of car ownership in the county. One of the first bypasses in the county opened in 1928, round Welwyn. In 1959 the first motorway, the M1, was built through Hertfordshire. Now a long section of the M25 and an upgraded A1(M) are included, the former the first non-traditional route since the Roman occupation.

2.3.2 Rivers

The rivers have always been important transport routes, not least because of the poor state of the roads, which on the London clay became impassable in wet weather until the use of tarmacadam became widespread in the 19th century. The rivers provided the only industrial focus, with overlapping uses for the watermills as technology advanced. Flour production until the 16th century was contemporary with wool fulling (12th - 17th centuries) and paper milling (15th - 19th centuries), with malting from the 17th to the 19th centuries. At Hertford there was even a mill for grinding oak bark for tanning in the early 19th century. The river Lea linked the rich grain-producing lands of the north east and adjoining counties to the insatiable markets in London, its continuous programme of improvements regulated by Act of Parliament. The Lea Navigation canal and lock system is today part of the Regional Park and used for recreation rather than transport. An aqueduct was constructed in 1609 to carry unpolluted water from Amwell to Stoke Newington, a distance of some 20 miles. This too is still a visible landscape feature (the New River) and a unique industrial relic, while the canal system to the west - the Grand Union Canal - is also used now for recreational purposes and has become in places a notable landscape feature.

2.3.3 Railways

Like the road system, the railway spread in a radial pattern from the capital. The London and Birmingham Railway followed the route of the Grand Junction Canal up the Tring valley. Its builders encountered similar problems with landowners to those of the canal builders - but railways '*cannot easily be turned into a landscape improvement*'. The most obvious industrial relic in the county is the Digswell Viaduct - 475m long and over 30m high, constructed to avoid the parks of the gentry in the Mimram valley.

2.4 LAND COVER AND LAND USE

Hertfordshire is an enclosed county. Sir John Parnell, writing in 1769, called it 'a most exquisitely Beautifull cultivated Hedgerow'ed country', while Walker described it in 1785 thus: 'The land is generally inclosed, though there are many small common fields, or lands, laying intermixed in small pieces, the property of different persons, which are cultivated nearly in the same way as inclosed lands; the large common fields lie towards Cambridgeshire.' (Quoted in Munby, *The Hertfordshire Landscape* (1977)).

Agriculture was the dominant source of employment. Additional factors were market gardening on the fertile alluvial land between Hoddesdon and Wormley and on the eastern side of the Lea valley and forest industries in the north-west and south. Patten and clog makers, coopers and stavemakers all used wood, and other woodland products included shovels, spoons, bowls and other 'hollow wares'. Significant and ecologically valuable areas of woodland remain, especially on the heavy London clay which is unfit for arable cultivation. Both woodland and hedges were an important part of the rural economy as well as of its landscape: 'I know of no part of England more beautiful in its stile than Hertfordshire: thro'out the oak and Elm hedgerows Appear Rather the work of Nature than Plantation, generally Extending thirty or forty feet Broad, growing irregularly in these stripes, and giving the fields the air of being reclaimed from a general tract of woodland.' (Thomas Fuller, *The Worthies of England*, ed. J. Freeman (1952), p.229).

Parliamentary enclosure was the last major transformation of the rural landscape before the ploughing-out of hedgerows of the mid-20th century. In the south and west, where piecemeal enclosure had already transformed the arable, enclosure was largely of the surviving commons. In the early 1960s some 5500 acres were common, almost all of it in the west of the county. In the north and north east enclosure was of open arable fields, generally after the General Act of 1845. Thus the present landscape of this part of the county has now, after the impact of 20th century arable intensification, largely reverted to its pre-enclosure pattern.

Before 1900 the major impact on the landscape other than agriculture was parkland. The gentry of Hertfordshire were pioneer gardeners, laying out a new landscape as a frame for the house and as a status symbol in its own right. Lord Burghley built himself a palace at Theobalds in 1564. His son, Robert Cecil, spent £40,000 on building Hatfield House and rearranged the entire landscape to give himself more privacy. Woodland and arable were switched around on a grand scale. Today there are still almost no views into the parkland from outside.

Country house building took place in waves: pre-1580 and between 1640s and 1660, with a lot of 'improvements' between 1680 and 1720. Another building boom took place between 1750 and 1780. The fashionable site for a country house changed, from proximity to remoteness, from hilltops to near water, with four grand houses built along the Mimram valley in the 18th century. But parklands could be destroyed even more quickly than they were made. The opportunities for profitable farming were such that medieval parkland was ploughed up whenever there was no permanent resident on the estate. Some parklands were first wooded, then cleared for farming, returned to open woodland as a deer park and then cleared and ploughed for farmland once again. In the 20th century the greatest threats to parkland were from housing development, the transport infrastructure and mineral extraction, whereas arable farming of former wood pasture at least retains woodland boundaries and the outline of the park.

3.1 TERMS OF REFERENCE

The guiding principles and format for the Hertfordshire Landscape Strategy Volume 3 Part 2: Landscape Character Assessment, Evaluation and Guidelines for Dacorum District are set out in the following documents:

- Landscape Character Assessment in connection with Hertfordshire Minerals Local Plan Review, Contract Documents - Appendix A Landscape Character Assessment : Brief (Hertfordshire County Council, Environment Department).
- Landscape Character Assessment in connection with Hertfordshire Minerals Local Plan Review Contract - Appendix A Landscape Character Assessment: Methodology Specification (Hertfordshire County Council, Environment Department).
- Landscape Character Assessment - Guidance for England and Scotland 2002 (Countryside Agency).
- Summary Specification for Extensions to Landscape Strategy from Hertfordshire County Council dated 10/1/02.

The key elements of the method used in the study, incorporating the above guidance, are set out below.

3.1.1 Briefing and Familiarisation Tour

Following the award of the contract, an initial briefing meeting was held between the Contract Manager, staff of Dacorum District Council and key members of the project team to discuss the project brief and programme. A familiarisation tour of the study area preceded the above meeting to gain a flavour of the range of landscape types involved.

3.1.2 Project Administration

The project was monitored throughout the contract period by the County Council's Head of Landscape in liaison with a representative from Dacorum District Council. Monitoring included the use of the following:

- progress meetings
- liaison by phone
- work programme - consultant to provide and update a work plan identifying the main activities against the contract period
- correspondence - by letter, fax and e-mail

3.2 DESK STUDY

The initial desk study work was sub-contracted to The Living Landscapes Project, following guidance in the brief. This stage involved the division of the study area into a number of Landscape Description Units or LDUs and involved consideration of the following levels of detail.

3.2.1 Level 1

Subdivision at a national/regional scale in accordance with the Joint Character Map of England combining both Landscape Character Regions and Natural Areas. This information provided a framework for analysis at a finer grain: levels 2 and 3.

3.2.2 Level 2: Physiography and Soils (scale 1:50,000).

The following subjects were considered and a relevant category identified:

Topography	Geology
Flat - F	Fluvial-glacial and river drift - F
Low-lying - L	Till (glacial drift) - T
Rolling/undulating - R	Clay - C
Valley - V	Limestone/chalk - L
Sloping - S	Mixed - M
Upstanding/plateau - U	

Soils

- Sandy brown soils - S
- Brown free-draining soils - B
- Clay soils - C
- Gleyed (poorly draining) soils - G
- Mixed soils - M

The study area was divided into units based on a combination of the above three factors and a combined coding given, e.g. VLB denotes a limestone/chalk valley with brown free-draining soils.

3.2.3 Level 2: Cultural Pattern (scale 1:50,000).

To the physiographic pattern the way that man has utilised the land, or the 'cultural pattern', was then added using the following categories:

Land Cover	Settlement Pattern
Urban - U	Nucleated - N
Cropland - C	Settled - S
Pastoral - P	Dispersed - D
Rough - R	Unsettled - U
	Planned - P

Enclosure Pattern

- Wooded - W
- Estate - E
- Unenclosed - U
- Secondary - S
- Open - O
- Boundary trees - A

A separate three-letter code was then given to each LDU to express cultural pattern. This may have led to some sub-division of the physiographic units.

3.2.4 Level 3: Land Cover Coding (scale 1:25,000).

This level of detail was derived from the historic landscape characterisation information made available digitally through the English Heritage project undertaken for Hertfordshire in 2000. This information provided a further level of resolution and sub-division of the LDUs. The following categories were given:

Current Land Cover	Historic Field Pattern
Urban - U	Irregular - I
Woodland - W	Sub-regular - S
Parkland - Pk	Regular - R
Rough - R	Geometric - G
Disturbed - D	Unenclosed - U
Other - O	

Field Size

- Small - 1
- Small-medium - 2
- Medium-large - 3
- Large - 4

A glossary of the terms used by The Living Landscapes Project is included as Appendix 6.1.

The above data was collated as a series of overlays suitable for reading against a 1:25,000 scale OS base.

3.3 FIELDWORK

3.3.1 Fieldwork

The fieldwork was carried out between May and August 2002. Each survey team consisted of a team of two, including a landscape architect, who was responsible for drafting the text and defining the boundaries of each landscape character area surveyed, and another landscape-related professional. The total survey team included a total of three people with qualifications from a variety of disciplines including geography, landscape architecture and landscape management. A moderation process was built in, to ensure consistency of appraisal across both the study area and the previous studies for Southern Hertfordshire in 2000 and St. Albans District in 2001.

3.3.2 Recording

Each study area was systematically appraised by a survey team, who considered each LDU in turn. Field survey record sheets were used to record data. A sample of the two-page pro forma used is included as Appendix 6.2. The form was updated from that used in previous studies to allow for greater transparency in the completion of the Evaluation Matrix. The use of forms was supplemented by additional notes and photographic records. Both notes and photographs informed the process of drafting a description of and illustrating each character area in the final report.

3.4 LITERATURE REVIEW

In parallel with the desk study and fieldwork a literature review was carried out. This provided background information and informed the process of defining character areas. The methodology specification in the contract documents provided an important list of suggested sources. This was supplemented by a number of other source materials. The Bibliography, section 5.0, lists all the sources used.

3.5 DRAFT LANDSCAPE CHARACTER AREAS

3.5.1 Draft Landscape Character Areas were defined, using the survey data from the fieldwork. This process involved identifying which LDUs were character areas in their own right and those which required aggregating or splitting on the basis of consistent landscape character as identified in the field.

3.5.2 The definition of boundaries required careful consideration. As the LDUs had been defined primarily on the basis of geology, soils or landform the boundaries, although real, rarely accorded with fixed features on the ground, such as the edge of a woodland or a road or track. In defining boundaries for each character area, a decision was made to follow an identifiable feature visible on the ground wherever possible. It was considered that this approach would be both more comprehensible to a lay

audience/reader and more defensible within the local authority planning process. However, in a limited number of situations there was no clear line on the ground. In these instances boundaries were drawn either along a contour line (where there is break in slope reasonably clearly visible in the field), or as a straight line between two fixed features.

3.5.3 The boundaries arising from the foregoing methodology were also reviewed against previous studies involving aspects of landscape character assessment including the Chilterns AONB and Landscape Conservation Areas (as defined by local authorities). Where possible, and particularly where there were only marginal variations, the boundaries established for this study were amended to match those previously defined. However, due to the different methodologies utilised, this was not always possible without compromising the integrity of this study. Furthermore the process was made more difficult where two different boundary lines were already present in a given area. This landscape character assessment followed best practice as defined in the methodology available at the time (Landscape Character Assessment -Guidance for England and Scotland (2002), published by The Countryside Agency), as suitable for the scale of study involved and as the most effective criteria of boundary definition.

3.5.4 It should be clearly understood that although the drawing of boundary lines on a plan is an inevitable part of the process, this does not always mean that landscape character is dramatically different to either side of each and every line. Landscape character can suddenly change, e.g. at the interface of an historic parkland, at the foot of a steep scarp slope or at a settlement edge, but generally there is often a more gradual transition. In such cases the boundary line marks more a watershed of character, where the balance of the defining elements has shifted from one landscape type to another.

This should be understood when viewing the GIS version of the landscape character areas, as the lines are digitised against a 1:10,000 base and at a scale of accuracy of c.1:2,000. This level of detail suggests that a decision has been made about which side of a road defines a change in landscape character and whether one particular house is included in an area or not. In practice a reasonable decision has been made on the basis of the available OS data, existing boundary information and the fieldwork data and survey sheets, but will be subject to change over time and cannot in every instance be regarded as definitive, but rather as indicative of a transition.

3.6 STAKEHOLDER INVOLVEMENT

An important part of the process of landscape character assessment in this study was the involvement of the local community. The details, results and further implications of the process are set out more fully in a supplementary report. The key elements involved are set out below:

3.6.1 Tier A - Community of Interest

This group included 97 different authorities and societies with a professional, statutory or local interest in the process, including most of those that had been involved in similar previous studies. Those who registered an interest in receiving further information were then sent draft area boundaries, draft text of the Summary Page and invited to a meeting on 22 July 2002 at Dacorum District Council Offices. At this meeting attendees received a presentation on the background to Landscape Character Assessment and details of the process underway within Dacorum District. Attendees were also given the opportunity to discuss their views and to make suggestions on the draft information previously circulated within small groups. Other information was made available on request. In the autumn of 2002 digital copies of revised work in progress were issued to all registered parties, asking for their written comments. Comments received up to Christmas 2002 were processed and conveyed to the consultants for incorporation as appropriate. The main contribution made by this category of stakeholders is to rigorously review and challenge the suggested area boundaries and to provide detailed information to populate the character statements.

3.6.2 Tier B - Community of Place

As for Volumes 2 and 3a, views of the local community were sought via the Hertfordshire Citizens Panel. The Citizens Panel is a strictly representative cross-section of the community who have agreed to participate in a number of sampling processes. It provided a way of securing community evaluation of landscapes unbiased by the agenda of local pressure groups. 924 members of the Citizens Panel living in north and west Hertfordshire were selected by. A similar but improved version of the previous questionnaire was then devised in conjunction with MORI and sent to the Tier B recipients, achieving just over a 20% response rate. As before, on the basis of maps in the questionnaire, (with an appropriate weighting factor to compensate for lower response rates), contributors responses about landscape preferences were aggregated and analysed and an appropriate summary comment included in the community views section of each character area description. Where both available and informative, individual views are quoted. These were selected on the basis of a professional review of published material and questionnaire responses, with references provided to aid audit ability and ownership. Although this round of Tier B consultation generated fewer responses than in the past (typically 20% per area rather than 33%), and thus fewer than required for strict comparability with previous work, it is considered that sufficient responses have been received

to have confidence that landscape areas identified as distinctive are indeed representative of community preferences. Where the current consultation may fall short is in not always identifying some of the minor valued landscapes. This view is supported by sensitivity analysis undertaken during previous studies. It is therefore suggested that a further round of community consultation, e.g. as part of the Local Plan process would be beneficial to ensure that no areas are unfairly described as having no or very little community support.

3.7 REPORT FORMAT

Following the receipt of inputs from the stakeholders and continuing literature review, the landscape character descriptions were developed into a final form. A consistent pattern was used to describe each of the 30 character areas that emerged. This took the form of a nominal four to five pages of text and illustrations as follows:

3.7.1 Summary Page

- Location- brief geographical description.
- Landscape character - summary statement of the area.
- Key characteristics - main elements defining the character.
- Distinctive features - individual features of note.

3.7.2 Assessment Page

Physical influences

- Geology and soils.
- Topography - including degree of slope and altitude range.
- Hydrology.
- Land cover and land use.
- Vegetation and wildlife.

Historic and cultural influences

- Field pattern and field size.
- Transport pattern.
- Settlement and built form.
- Other sources of area specific information

3.7.3 Evaluation Page

- Visual and sensory perception.
- Rarity and distinctiveness.
- Visual impact of built development.
- Accessibility.
- Community views.
- Condition and robustness matrix.
- Landscape and ecological designations.

The above topics were considered systematically for the evaluation section of the report. The entry for each topic was devised on the basis of professional judgement, input from HCC staff, responses from the public consultation process and the following specific criteria.

Visual and sensory perception. This included views to, from and within an area, the scale of elements, sense of enclosure, visual unity and noise/tranquility. Information was largely gleaned during the field survey process and recorded on the survey sheets.

Rarity and distinctiveness. Rarity was assessed on the frequency of the landscape type within parts of Southern Hertfordshire, St Albans District and the study area (not the whole county). Distinctiveness relates to those particular landscape characteristics or features that help distinguish one particular landscape character area from another and make it special. This may have referred to individual features or the overall character. The entry for rarity and distinctiveness was added later in the report process when an overview of the whole study area was available.

Visual impact of built development. This identified the magnitude and extent of the impact of built features on local landscape character. It included settlements, roads, railways, etc. Data was gathered during the field survey and presented on the survey sheets.

Accessibility. This was a qualitative assessment of the number lengths of rights of way, areas of publically accessible land and the presence of associated recreational activities.

Community views. These were based on an aggregate statement from the Community of Place questionnaire returns, which were analysed by HCC Head of Landscape. A provisional five-point rating was given to each landscape area (or sub-area) with 'A' being the most valued and 'E' the least acknowledged. These ratings are included at the end of each community views section. Historic or literary quotations were added when available, to give a 'time depth' perspective. Some extracts from questionnaire responses may also have been included where apt or where there is little history of commentary.

Condition and Strength of Character matrix. See section 3.8 below.

Landscape and ecological designations Relevant designations were collated from HCC, English Nature and English Heritage. These include Areas of Outstanding Natural Beauty (AONB), Landscape Conservation Areas, , Scheduled Ancient Monuments (visible features), Special Sites of Scientific Interest (SSSIs), historic parks and gardens of the English Heritage Register.

3.7.4 Guidelines Page

A general strategy and list of area-specific guidelines for managing change is included for each character area (see section 3.8 below).

In addition to the above each description is illustrated with a diagrammatic location plan and photographs of the area. The Landscape Character Areas are also identified on a map. This was done digitally as an ArcView 3.2 project set against a 1:10,000 scale OS base, at a resolution of 1:2000 scale. Some of the 30 Landscape Character Areas identified were further sub-divided to show a finer level of resolution. The text for the report was also provided as an Access

database, to enable the GIS map data to be made interactive with the text. The data described above was delivered to the client in both hard copy and on CD-ROM.

3.8 ANALYSING LANDSCAPE CHANGE

Under section 3.7.3 above there is reference to a 'Condition and Strength of Character Matrix'. In order to assess any landscape's potential ability to adapt to change without losing its intrinsic character, it is necessary to analyse the functional integrity or condition of the landscape and balance this against the strength of character as demonstrated by the more permanent or robust elements of the landscape. Landscape condition is determined from an evaluation of the relative state (poor/moderate/good) of elements within the landscape which are subject to change, such as survival of hedgerows, extent and impact of built development. Strength of character is determined from an evaluation of the impact of relatively stable factors, such as landform and land cover, the apparent continuity of an historic pattern, the degree of visibility of and within the area and its rarity.

Seven factors were considered for each area (see matrix for any area). Each was evaluated in the field and an entry made on the survey sheet. They were then considered against a three-point scale and entered in the matrix table. Values for the factors on each axis were then aggregated and a majority total applied. The resulting intersection on the matrix determined the general strategy for each landscape character area (last page of each character area).

This evaluation via matrix enables a general guideline to be determined, such as, for example 'conserve and strengthen', where a landscape area is in good condition but only moderate robustness, or 'improve and reinforce' where a landscape area is in moderate condition and of weak robustness. Once this primary guideline has been established, specific guidelines can be put forward that will address issues within the particular area, with a view to improving both condition and strength of character as necessary to reinforce its distinctiveness.