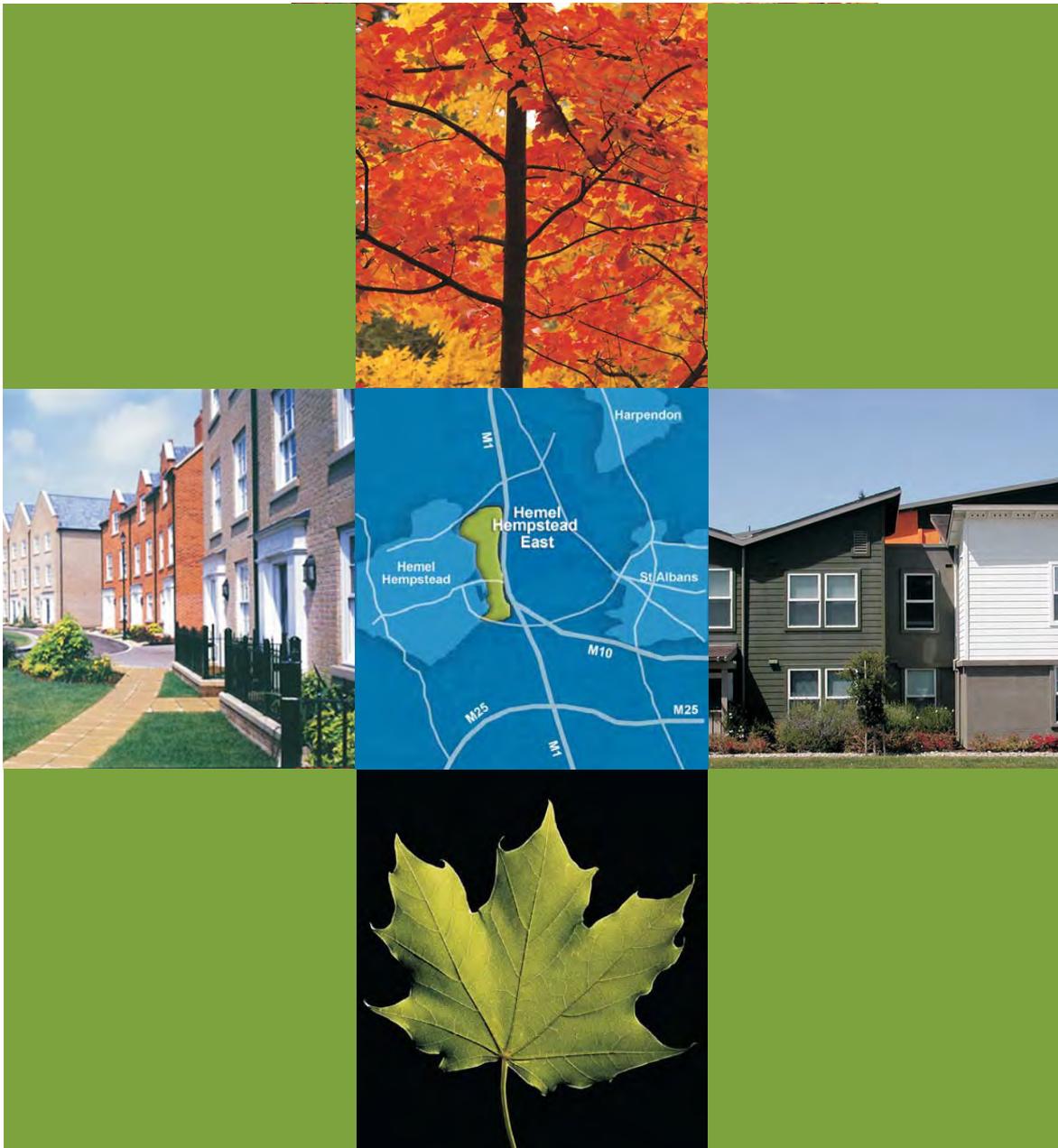


## Part B Baseline: Opportunities and Constraints



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## Appendix A Preliminary Archaeological Appraisal



## 1. Introduction

The purpose of this Part B of the document prepared by Entec on behalf of The Crown Estate is to set out the baseline technical information relating to the proposed development site. This information effectively forms the evidence base for taking the site forward for allocation through the LDF process. In addition to setting out the baseline situation, where appropriate, the following chapters also identify key opportunities associated with development of the site. Some further opportunities are also identified in Part D of the document which sets out an indication of how the site could be developed to create a highly sustainable and integrated urban extension to the east of Hemel Hempstead. The evidence set out here and the opportunities identified demonstrate the strength of the case for development of the land to the east of Hemel Hempstead.

The following chapters set out detailed information on the topics set out below:

- Employment and Socio-Economics;
- Community Facilities;
- Landscape and Visual Context;
- Transport;
- Historic Environment;
- Ecology;
- Infrastructure and Utilities;
- Informal Recreation and Public Access;
- Noise and Air Quality; and
- Issues associated with Buncefield.

This Part B specifically explores how development at Gorhambury can contribute to the achievement of key local opportunities for the above topic areas. It demonstrates that there are no significant environmental constraints to development of land to the east of Hemel Hempstead. Where appropriate, the following chapters refer to further work that may be necessary at the more detailed development stage, possibly as part of preparation of an Area Action Plan for East Hemel Hempstead. An EIA would be required to be undertaken and an ES would accompany outline planning applications for different phases of the development and therefore more detailed work would also be undertaken at this stage.

In cases where new data has not yet been obtained, for instance regarding noise and air quality work, technical work that was prepared in 2001 is used. This work will need to be updated once the relevant data is available.



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## 2. Employment and Socio-Economics

### 2.1 Introduction

This chapter has been prepared as an employment and socio-economics evidence base which is used to develop an initial indication of opportunities to improve and extend employment uses within the context of the proposed development at Gorhambury.

The chapter is set out under the following key headings:

- comparative baseline review;
- industrial structure;
- review of land availability and development context;
- local property market analysis;
- proposed land and employment uses; and
- assessment of the economic and wider benefits of proposals.

### 2.2 Comparative Baseline Review

#### 2.2.1 Introduction

This section provides a comparative assessment of Hemel Hempstead in relation to similar towns and areas in the South East. Whilst the town is located in the East of England region, as part of the London Commuter Belt, in many ways it has more in common with the South East region. The main aim of this review is to highlight the relative performance of Hemel Hempstead and indicate its strengths and weaknesses.

The areas have been selected on the basis that they are comparable to Hemel Hempstead in terms of location (within commuting distance of London, near a major motorway), scale (similar in population and area), function (sub-regional centre for employment and services) or recognised as being regeneration success stories (tackling deprivation, attracting investment or achieving growth). Differences between key social, physical and economic characteristics between towns may indicate where some towns have been successful in overcoming local barriers or weaknesses.

Assuming that all the towns across the UK face an equal level of competition and assistance (excluding area based initiatives), Hemel Hempstead should be able to achieve social and economic performance comparable to the best performing towns of similar size.



There is only a limited amount of information available that may be used to allow direct comparisons between the areas. Indicators from the 2001 Census at Middle Super Output Area level are used here. This analysis includes approximations of the area of each town drawn from the following middle level Super Output Areas. Note that all the following statistics are based on the Middle Super Output Areas identified in Table B2.1.

**Table B2.1 Areas used in the comparative review**

Area	Middle SOAs
Hemel Hempstead	Dacorum 005 to 008, 010 and 011 to 020
St. Albans	St. Albans 008 to 014 and 016 to 017
Welwyn Garden City	Welwyn Hatfield 003 to 009
Harlow	Harlow 002 to 003 and 006 to 010
Stevenage	Stevenage 001 to 012
Milton Keynes	Milton Keynes 005 to 009, 011 to 014, 016 to 018, 020 to 021 and 023 to 032

Source: Entec

## 2.2.2 Comparative Review

**Table B2.2 General features of different areas**

Area	Location	Rural/ Urban	Pop.	Pop. Density	Background	Transport	New Town
Hemel Hempstead	Hertfordshire, East	Urban	58,206	34	Hemel Hempstead is the subject of this study. Hemel is a new town and has a significant commuter population to London. The town's key employment area (Maylands) was affected due to the oil explosion at the Buncefield depot.	It has good links to the M1 to the east and the M25 to the south	Yes
St. Albans	Southern Hertfordshire, East	Urban	41,398	34	Currently one of the most expensive cities to live in the UK outside Central London, probably largely due to a fast and easy commute to London by train. The council estimates that 20% of the workforce travel to London. The local economy is made up mainly of offices, small enterprises, retailing and tourism based businesses.	Good transport connections: It is the meeting point of the A5183 & A1081, M25 is just south of city and M1 is only few miles to the west.	No



Area	Location	Rural/ Urban	Pop.	Pop. Density	Background	Transport	New Town
Welwyn Garden City	Hertfordshire, East	Urban	30,452	27	This town is also a 'garden city'. The town centre is dominated by the central mall or scenic parkway, almost a mile long.	Close to A1(M)	Yes
Harlow	Essex, East	Urban	41,330	34	Historically Harlow had a strong base in manufacturing. This has diversified over the years. It has a particular strength now in research with several major research employers in the town, second only to Cambridge. It has a large commuter population, mainly into London but also to nearby Stansted Airport.	Close to the M11 and forms part of the London commuter belt	Yes
Stevenage	Hertfordshire, East	Urban	57,007	37	It has an established industry and commerce base. Originally manufacturing played a big part in the local economy, although this is no longer these industries no longer dominate the local economy and have come to be replaced by computing, research, pharmaceuticals and financial services. It also plays a role as a distribution centre due to its strategic location. There is an extensive regeneration strategy to reform the town centre.	Close proximity to the A1(M)	Yes
Milton Keynes	North Bucks. South East	Urban	104,413	25	Milton Keynes is well placed in relation to larger regional centres; it lies halfway between London and Birmingham and between Oxford and Cambridge. It is one of the fastest growing urban areas in the UK. It has a diverse local economy.	Lies between the A5 and the M1	Yes

Source: Entec

Notes: Population estimates are based on Super Output Areas in Table B3.1 and are not for the whole town.

Population density = persons per hectare



**Table B2.3 Economic Characteristics**

	E1. Broad & Diverse Business Base		E2 Entrepreneurship	E3 Educational Attainment	E4 High Skilled & Adaptable workforce	E5 Employment in Key Sectors						
	VAT Registered Enterprises per 1,000 econ active Pop.	Proportion of small businesses in economy (<10 employees)	Self employment as a % of total employment	% Residents with No Qualifications	% Residents with qualifications level 4/5	% Public Sector	% Real estate, renting & business	% Financial Intermediation	% Manufacturing	% Wholesale/Retail	% Transport, storage & communication	% Hotels & restaurants
Hemel Hempstead	49.4	88	17	27	17	5	16	4	14	19	10	4
St. Albans	70.9	89	20	17	40	4	23	7	9	15	7	3
Welwyn Garden City	49.9	84	15	25	22	4	15	4	17	18	8	3
Harlow	41.9	83	14	35	10	4	11	3	19	21	8	4
Stevenage	38.8	89	15	28	15	5	14	5	16	20	8	4
Milton Keynes	50.1	85	13	26	17	4	15	5	15	22	11	4

Source: ONS

In terms of the local economy and entrepreneurship, Hemel Hempstead is about average in relation to the other areas under review.

Hemel Hempstead has a high proportion of self employed as a proportion of total employment as well as a high proportion of small businesses in relation to other areas, suggesting an active and confident local business environment. It has a fairly high proportion of VAT registered enterprises in relation to the local population. These are fairly average in comparison to the other areas.

In terms of levels of qualifications amongst the local population, Hemel Hempstead (with the exception of St. Albans) shows a relatively average distribution of highly skilled and low or unskilled people compared to the other local areas.

The transport, storage and communication sector shows a particular strength in local employment in Hemel relative to the other areas.

Manufacturing accounts for a fairly low proportion of employment. Hemel has the greatest concentration of employment in wholesale and retail activities.

St. Albans shows relative strengths in the real estate and business activities and financial intermediation sectors. Given its relatively close location to Hemel, this may indicate sectors that Hemel could build on locally, building on the strength of nearby St. Albans.



**Table B2.4 Physical Characteristics**

Area	P1 Affordable and Ownership(i)		P2 Decent Homes standards		P3 Commercial Market	P4 Connected & Accessible Employment	
	House price : Workplace salary ratio	% Owner occupied households (total stock (ii))	% Overcrowded households (total stock) (i)	Dwellings with basic amenities (ii)	Average Rateable Value £	% of Car / Van Owners - Households	% Travel <2km to work - Resident
Hemel Hempstead	9.49	65	6	96	--	80	25
St. Albans	10.58	73	7	96	-	82	19
Welwyn Garden City	9.59	59	6	98	-	77	30
Harlow	7.82	54	9	97	-	72	26
Stevenage	7.33	63	6	98	-	77	20
Milton Keynes	7.79	60	9	98	-	78	19

Notes:

1. P1i: 'Affordable Housing' - housing cost as multiple of average salary, Land Registry, 2006, District level data
2. P1ii: Outright ownership and owned with mortgage or loan
- 3.. P2 i: 'Over crowded' Occupancy rating of -1 or -2 or less
4. P2 ii: Households with central heating and sole use of bath/shower and toilet

Source: Census 2001, ONS

House prices relative to annual salaries in 2006 appear to be fairly high in Hemel Hempstead compared to the other areas. At 9.49 times the average salary, only St. Albans and Welwyn Garden City are higher at 10.58 and 9.59 respectively. These prices are likely to reflect the popularity of these areas as places to live due to their proximity to London, allowing easier commuting.

Despite the apparent higher cost of housing in Hemel Hempstead there is still a good proportion of owner occupied households with 65% of the population owning the house they live in. Overcrowding also appears to be a relatively minor concern for the local area with only 6% of the total stock of households reporting being overcrowded.

Many of these towns were set up as peripheral commuter locations for London, evidenced by the high proportion of car and van owners among the local populations.

Despite commuting to London, around 25% of the local population in Hemel Hempstead live within 2km of their place of work. Only Welwyn Garden City and Harlow have higher averages with 30% and 26% respectively.

It appears that there is a relatively high standard of living in Hemel Hempstead evidenced by high asset ownership (cars and homes) as well as low levels of overcrowding and the majority of dwellings meeting the decent homes standards of basic amenities. This trend is enjoyed by all of the areas, most of which are new towns with the exception of St. Albans.



**Table B2.5 Social Characteristics**

Area	S1 Deprived Neighbourhoods	S2 Prosperity & Participation in the Labour Market			S3 Diversity	S4 Demography	
	% SOAs in country's most deprived 10%	Average Gross Weekly Wage £	Unemployed (% Econ. Active)	Econ. Active (% working age population)	% Population Non-White	Mean Age	% Pop. School Age (5-15)
Hemel Hempstead	0	522.4	3.5	73	6	38	15
St. Albans	0	609.2	2.6	73	9	38	13
Welwyn Garden City	0	508.8	3.4	71	6	38	15
Harlow	0	383.4	5.2	70	5	38	15
Stevenage	0	462.6	3.9	73	5	37	16
Milton Keynes	4.76	459.3	4.4	75	11	34	16

Notes:  
 S2 i: Annual survey of hours and earnings, 2006, District level data  
 Source: ONS

Average weekly wages are relatively high in Hemel Hempstead at £522 which is significantly above the other areas with the exception of St. Albans which has an average gross weekly wage of £609.

Hemel has a favourable proportion of its population that is economically active (described as all those of working age who are employed or unemployed, therefore does not include students, retired, homemakers etc). This means there is likely to be a good local labour supply. The unemployment rate (2001) is relatively low. Unemployment rates for the area are average at 3.5% of the economically active population being unemployed in 2001.

Hemel Hempstead shows a relatively low level of diversity among its population, with only 6% of the population registering as non-white in the 2001 Census. This is similar to most of the other areas.

In other social indicators such as the mean age of the local population and the percentage of school age persons, Hemel Hempstead scores similarly in relation to the other areas with an average age of 38 years and approximately 15% of the population between the ages of five and 15.

## 2.3 Industrial Structure

The industrial structure, the pattern and type of businesses located in a defined area, can provide useful insight into the relative sector strengths in the local economy. This is based on the assumption that businesses operating in a free market will situate themselves in areas in which they have a comparative advantage, in other words where they are able to produce goods at a lower cost relative to goods produced by businesses in other areas. This can be achieved by minimising factor costs, for example by locating close to markets or suppliers and thereby reducing



transport costs, or in an area with a relatively cheap or appropriately skilled labour force. Therefore the current industrial structure of the area can be used as one indicator of the likely composition of demand for employment land. It is acknowledged, however, that businesses also locate in areas for different reasons, such as to strategically enter a new market or for historical reasons (for example ‘the family has always had a business here’).

In Table B2.6 the industrial structure of Dacorum is presented along with national and regional areas to provide a brief context of sectors that may have a relatively greater local concentration of businesses. Businesses in Dacorum appear to be particularly concentrated in property and business services (37%) relative to the East and nationally where 28% and 29% of businesses respectively are involved in these activities. “According to economic consultants Experian Business Strategies, annual average output growth in office-based economic activities is expected to grow faster than the Eastern M4 region during the next 10 years. This reverses the trend seen during the last 10 years.” Table B2.6 indicates a possible cluster of these types of businesses reflecting recent business growth and investment in the local area. Hemel Hempstead has a number of major business employers (Kodak, Bourne Leisure, Sir Robert Alpine) located there as well as head offices, for example Dixons. “It also has a thriving IT and professional services industry.” These account for the perceived predominance of this type of business activity seen in Table B2.7.

Retailing and wholesale activities are relatively low for the local area reflecting the fact that Hemel’s retail sector has previously been overshadowed by neighbouring centres (Watford, Luton and St. Albans). A major extension to the town centre providing 288,000 square feet of retail space (increasing the retail content of the area by around 50%) and completed in 2005, should however see the value of retail activities rising in the future.

Interestingly the proportion of businesses involved in transporting activities is fairly low, considering Hemel’s strategic location in terms of its proximity to London, its favourable location to major networks such as being close to the M25 and adjacent to the M1 and on the West Coast Mainline Railway.

**Table B2.6 Counts of Enterprises for Census Area Statistics (CAS) Wards by Broad Industry Group, 2004**

Industry	Dacorum		East of England		England and Wales	
	Count	% of total	Count	% of total	Count	% of total
Agriculture	110	2%	11,275	7%	87,125	6%
Production	395	8%	15,070	9%	123,135	9%
Construction	650	13%	23,380	14%	154,265	11%
Motor Trades	160	3%	7,315	4%	55,680	4%
Wholesale	315	6%	10,965	7%	92,850	7%
Retail	400	8%	16,030	10%	155,475	11%



**Table B2.6 Counts of Enterprises for Census Area Statistics (CAS) Wards by Broad Industry Group, 2004 (cont)**

Industry	Dacorum		East of England		England and Wales	
	Count	% of total	Count	% of total	Count	% of total
Hotels and Catering	190	4%	9,460	6%	91,080	7%
Transport	150	3%	6,620	4%	49,440	4%
Post and Telecommunications	65	1%	1,840	1%	13,885	1%
Finance	30	1%	865	1%	9,330	1%
Property and Business Services	1,805	37%	46,100	28%	399,955	29%
Education	45	1%	1,145	1%	9,705	1%
Health	25	1%	865	1%	7,570	1%
Public Admin and Other Services	510	11%	12,540	8%	120,740	9%
<b>Total</b>	<b>4,855</b>	<b>100%</b>	<b>163,470</b>	<b>100%</b>	<b>1,370,240</b>	<b>100%</b>

Source: Counts of Enterprises for CAS Wards by Broad Industry Group, 2004, Office of National Statistics (ONS)

Table B2.7 analyses the make up of businesses in Dacorum in more depth and considers the situation in Dacorum relative to the national context. It shows relative sector concentration (at the two digit Standard Industrial Classification (SIC) level of aggregation) in the local economy by measuring sector location quotients. A location quotient of greater than one in a sector indicates that relatively more people are employed in that sector locally than exhibited nationally. The sectors have also been arranged to show those that have experienced local employment growth over the time period 1998 to 2005. Finally the colours illustrate local employment growth relative to the national trend in that sector. Those sectors shown in blue have grown at a faster rate than the same sectors nationally (or have not declined as fast); those in red have declined faster than the sector nationally (or have not grown as fast).



**Table B2.7 Business concentration (2005) and performance (1998-2005)**

	Location Quotient <1	Location Quotient >1
Local Employment Growth - Positive	<p>Forestry, logging and related service activities            Manufacture of rubber and plastic products            Manufacture basic metals            Manufacture of fabricated metal products, except machinery and equipment            Air transport            Activities auxiliary to financial intermediation            Public administration and defence; compulsory social security  <i>Education</i>            Health and social work            Recreational, cultural and sporting activities</p>	<p>Manufacture of chemicals and chemical products  <i>Hotels and restaurants</i>            Supporting and auxiliary transport activities; activities of travel agencies            Real estate activities            Renting of machinery &amp; equipment w/o operator &amp; of personal &amp; household goods  <i>Computer and related activities</i>            Other business activities</p>
Local Employment Growth - Negative	<p>Agriculture, hunting and related service activities  <i>Fishing, operation of fish hatcheries and fish farms; service activities incidental to fishing</i>  <i>Mining of coal and lignite; extraction of peat</i>  <i>Extraction of crude petroleum and natural gas; related service activities, excluding surveying</i>  <i>Mining of uranium and thorium ores</i>  <i>Mining of metal ores</i>            Other mining and quarry  <i>Manufacturing of food and beverages</i>  <i>Manufacture of tobacco products</i>            Manufacture of textiles            Manufacture of wearing apparel; dressing and dyeing of fur            Tanning &amp; dressing of leather; manu. of luggage, handbags, saddlery, harness &amp; footwear  <i>Manufacture of wood and products of wood and cork, except furniture; articles of straw and plaiting</i>  <i>Publishing, printing and reproduction of recorded media</i>  <i>Manufacture of coke, refined petroleum products and nuclear fuel</i>  <i>Manufacture of other non-metallic mineral products</i>            Manufacture of electrical machinery and apparatus not elsewhere classified            Manufacture of radio, television and communication equipment and apparatus  <i>Manufacture of medical, precision and optical instruments, watches and clocks</i>  <i>Manufacture of motor vehicles, trailers and semi-trailers</i>  <i>Manufacture of transport equipment</i>  <i>Manufacture of furniture; manufacturing not elsewhere classified</i>  <i>Recycling</i>            Electricity, gas, steam and hot water supply  <i>Collection, purification and distribution of water</i>            Construction  <i>Retail trade, except of motor vehicles and motorcycles; repair of personal and household goods</i>  <i>Land transport; transport via pipelines</i>            Water transport  <i>Financial intermediation, except insurance and pension funding</i>  <i>Insurance and pension funding, except compulsory social security</i>  <i>Research and development</i>  <i>Sewage and refuse disposal, sanitation and similar activities</i>  <i>Activities of membership organisations not elsewhere classified</i></p>	<p>Manufacture of pulp, paper and paper products            Manufacture of machinery and equipment not elsewhere classified  <i>Manufacture of office machinery and computers</i>  <i>Sale, maintenance and repair of motor vehicles / motorcycles; retail sale of automotive fuel</i>  <i>Wholesale trade and commission trade, except of motor vehicles and motorcycles</i>  <i>Post and telecommunications</i>            Other service activities</p>

Source: Annual Business Inquiry

Based on the assumption that a cluster should exhibit above average levels of concentration and growth, Hemel appears to have clusters in the following sectors:

- manufacture of chemicals and chemical products;
- supporting and auxiliary transport activities; activities of travel agencies;
- real estate activities;
- renting of machinery and equipment and personal and household goods; and
- other business activities.



Industries that show a relative concentration and growth but whose growth has been below that of national growth in that industry are:

- hotels and restaurants; and
- computer and related activities.

Sectors that have indicated relative concentration but have experienced employment decline over the time period 1998 to 2005 are shown below. Most of these have shown greater rate of decline than the same sectors nationally:

- manufacturing of office machinery and computers;
- the motor vehicle industry;
- wholesale and commission trade; and
- other service activities.

Sectors that may have further future growth potential (those that do not exhibit a current concentration, yet have experienced positive employment growth, greater than the national rate of employment growth in that sector) include:

- various manufacturing activities (rubber and plastic, basic metals, fabricated metal products);
- financial activities; and
- recreational activities.

The 2006/2006 Annual Monitoring Report indicates that for the year 2005/2006 the highest proportion of new business development within Dacorum was for storage and distribution purposes (B8 uses). This indicates an area of major current growth.

For the purposes of identifying future potential for employment land, this analysis has presented an initial indication of those sectors it may be desirable to ensure provision of sites for. For example the strength of 'other business activities' may indicate demand for B1 office space. There also appears to be scope for demand from certain manufacturing sectors.

## 2.4 Land Availability and Development Context

### 2.4.1 Introduction

This section provides an overview of relevant documents relating to the Dacorum area particularly relating to the local economy and issues of demand and supply, constraints and opportunities and available market data.



## 2.4.2 Relevant Regional and Sub-Regional Documents

### **Regional Economic Strategy (RES)**

The RES is the framework for guiding and directing the region's economic performance. It has set the target for the East of England to be one of the top 20 regions in the EU in order of output (GVA) per head by 2021. This target has been utilised as the basis for potential employment projections and future employment land requirements.

- The RES set employment growth targets for 2001-21, aiming to provide for 421,500 net additional jobs in the East of England, of which 64,700 are in Hertfordshire.

### **Regional Spatial Strategy (RSS)**

The RSS sets out the regional strategy for planning and development in the East of England to the year 2021. This strategy has important implications for local employment land policies. In particular the following are relevant:

- Policy E3 requires that existing employment land be considered for alternative uses only where it has been demonstrated that the remaining land supply is adequate, both qualitatively and quantitatively 'to ensure that the objectives of the RES are achievable'.

### **South West Hertfordshire Employment Space Study: Dacorum, Three Rivers and Watford Councils (January 2005, Roger Tym and Partners and King Sturge)**

This study assessed the state of employment land in the three authorities in order to inform their respective employment land policies. In particular it looked at issues such as the quantity or future projections of employment land as well as specific sites and areas that would be suitable and infrastructure needs or other improvements.

#### *Economy and Population*

The economy and the residents of Dacorum are prosperous and productive by national and regional standards, with the expectation that they will remain so in the future. There are no significant economic disadvantages experienced by south west Hertfordshire. Skills and entrepreneurship are good and match the competitive performance of the county as a whole and unemployment remains low.

The local economies of the three areas under review in this document are largely similar in nature, in being service economies with limited manufacturing. Dacorum is reported to be particularly characterised by finance and business services firms, although this appears to have declined in recent years. ICT presents a strong potential growth high tech industry in Dacorum. It has a healthy industrial structure generally biased towards higher value higher growth sectors. The concentration of ICT industries in Dacorum represents one of the only high tech clusters in south west Hertfordshire.

#### *Property Market*

- **Offices:** Whilst SW Hertfordshire in general represents an important office market for Hertfordshire, the perceptions of Hemel Hempstead as an office location are the poorest in this area. This is identified as being partly because the town does not have a clearly defined office area. Growth in office markets has been modest in recent years resulting in high vacancy levels, and in addition to this there is a relatively plentiful supply of land for office development which is unlikely to be absorbed in



the short term. In particular there appears to be a trend of moving towards smaller and medium sized units whilst supply is currently concentrated in larger units which are struggling to attract occupiers. However, the report notes that market evidence and formal property forecasts suggest that the market is in the early stages of a modest recovery.

- **Industrial/Warehousing Space:** Dacorum accounts for more than half the area's industrial stock with Hemel Hempstead being the main industrial market. Hemel caters for large-scale users in south west Hertfordshire and is one of the main distribution locations around the M25 and southern end of the M1. All the local authority areas have however experienced a net decline in their built industrial stock in recent years although the market for industrial floor-space appears to be relatively well balanced. Occupier demand remains relatively strong and floor-space vacancy rates are lower than in offices. The market for industrial land is tight however with a strong demand from developers and a limited supply of available sites.

### *Quantity of Employment Land*

Based on employment targets in the draft RSS, the report estimates that jobs will increase by 25,000 (14%) between 2001 and 2021. Of this increase only 3,000 will be in activities that occupy business space (offices, factories and warehouses) representing an increase of 4% in business space employment of which 800 will be in Dacorum. In all three of the districts, as in the economy as a whole, industrial/warehousing employment falls while office employment grows, continuing structural economic trends which have been in place for many years.

Despite growth in business space employment, the report's estimates in floor space find a reduction in demand because offices, for which demand is growing, use far less space per worker than industrial/warehouses space, for which demand is falling. However this fall in demand represents only 2% of the current floor-space stock which is considered to be insignificant over the 20 year planning period.

Net Change in Floor space Capacity (all 3 Districts)	2001-2021 (m <sup>2</sup> )
Industrial/warehousing space	-157,000
Offices	+286,000
Total business space	+129,000

The estimated figures suggest that Dacorum could lose small amounts of industrial land while still meeting demand. If estimated requirements are to be fulfilled, the bulk of the existing floor-space should be either retained or replaced. The key task will therefore be the management of existing employment sites and areas to ensure that enough land is protected from the pressure of higher-value uses and to facilitate the renewal or replacement of space which becomes obsolete.

In the office market there is estimated to be an oversupply of 20% of the floor-space stock in all three Districts with the major development sites at Spencer's Park (now most likely to be relocated to the Hemel Gateway area) and Leavesden. However if these do not come through within the planning period, the sub-regional office market



would be almost in balance overall with some undersupply in Dacorum. This would however be counter-balanced by oversupply in the other two Districts.

### *Sites in Dacorum*

- Spencer's Park site at Three Cherry Trees Lane is the only new land identified specifically for B1 development in the borough. It has been allocated for Specialised Technological Activities (STA).
- The Council is considering relocating the STA site from Spencer's Park to the Hemel Gateway site. Hemel Gateway has greater prominence and access, a better environment and could provide economies of scale not available at Spencer's Park.
- North East Hemel Hempstead employment areas enjoy high accessibility. If usage of the area is to be intensified in line with current planning commitments however, it will be necessary to address the congestion problems.
- Ancillary facilities in North East Hemel Hempstead are currently inadequate for the size of the daytime population. The area has advantages, particularly for the distribution sector, however office occupiers will be more footloose. This area currently lacks social amenities which affects its overall attractiveness as an employment location.
- Doolittle Meadows is a Core Office Location located some distance from the main urban centre although it does have good public transport links. Its proximity to residential uses means that it is not suitable for general industrial or warehousing uses.
- The Apsley Industrial Estate is an average quality employment site suitable for a range of small-scale light and general industrial uses.
- Nash Mills is an established employment site located alongside the River Gade. It is located in a sensitive environment and the costs of any future redevelopment are likely to be high.
- The Major Developed Sites in the Green Belt should be retained in their existing uses. Bourne End Mills is suitable for a range of industrial and warehousing uses. The Bovingdon Brickworks is an established use in the Green Belt.
- Hemel Hempstead town centre is a valuable source of office supply. Office supply in Hemel town centre needs to be monitored and should only be considered for release to other uses where it is no longer suitable for employment uses.

### **Central Hertfordshire Employment Space Study: Hertsmere, St. Albans and Welwyn Hatfield Councils, (February 2007 Update Note, Roger Tym and Partners)**

This document presents an updated to the Interim Report of the Central Hertfordshire Employment Land Review produced in November 2006. Updated forecasts of employment growth, demand for employment space and demand and market requirements based on these figures are produced.

Employment growth forecasts for the period 2001 to 2021 are estimated to be 60,200 for the whole of Hertfordshire. It is anticipated that the majority of these jobs will be concentrated in the Stansted/M11 corridor



away from Central Hertfordshire. Central Hertfordshire's share in the growth in jobs is estimated at 25,200 and will be distributed as follows: an increase of 11,600 for Hertsmere; 5,900 in St. Albans; and 7,700 in Welwyn Hatfield.

Looking at employment change by type of space, there will be a 7% growth in total employment in B space over the twenty year planning period. This is comprised of an expected decline in industrial employment of 28% (6,100 jobs), but will however be offset by a growth in office space employment of 28% (11,200 jobs) and warehousing employment of 5% (880). St. Albans follows similar trends with a growth in office employment of 18% (3,400), a decline in industrial employment of 22% (1,400) and warehousing employment remaining virtually unchanged. Total B space employment grows by 6% (1,800 jobs).

The future demand for employment space in Central Hertfordshire is based on floor space per head as follows:

- offices: 18m<sup>2</sup> per worker; and
- industrial and warehousing: 31m<sup>2</sup> per worker.

This results in a projected increase in demand for office space in Central Hertfordshire of 201,400m<sup>2</sup> or 26% of the 2001 floor space stock, a fall in industrial/warehousing floor space of 161,900m<sup>2</sup> or 10% of the 2001 stock. Total B floor space increases by 39,500m<sup>2</sup>, 2% of the 2001 floor space stock, which over the three districts and over 20 years is an insignificant change.

In St. Albans industrial and warehousing losses of 47,000m<sup>2</sup> (11%) and office gains of 60,400m<sup>2</sup> (23%) almost exactly offset each other, so that total B space is virtually unchanged.

### 2.4.3 Relevant Local Documents

#### **Dacorum Borough Local Plan 1991-2011, Annual Monitoring Report 2005/2006**

The Annual Monitoring Report helps to measure the performance of existing policies. It reports on monitoring indicators and progress made and milestones achieved in the Local Development Scheme. Some figures and issues relating to business development in the Borough are summarised below.

The majority of employment in the Borough is located in the business area at Maylands Avenue where a number of company headquarters are located. This area is characterised by a variety of service, manufacturing and distribution uses. Maintaining this area as a leading business location is a key planning consideration.

During 2005/06 the highest proportion of new business development within the Borough was for storage and distribution purposes (B8) shown in the tables below. More than 96% of new employment floor-space was located in General Employment Areas (GEAs). In addition nearly all of the new office development occurred within the Borough's GEAs. This is in contrast to the previous year where it all fell outside of these designated areas.



Table 5.1: Amount of floorspace developed for employment by type  
Core Indicator 1a

Use Class	Floorspace (sqm)	
B1(a)	8,669	8,794
B1(b)	0	
B1(c)	125	
B1 mixed	0	
B2	1,573	
B8	42,150	
<b>Total</b>	<b>52,517</b>	

Source: DBC Employment Land Commitments Position Statement No. 30 (1 April 2006)

**NOTES:**

- (1) Figures are gross external floorspace. The difference between gross external and gross internal floorspace is typically between 2.5 and 5%.
- (2) The figure for B1(a) is taken from the corresponding figure in Table 8.1 (Core Indicator 4a).
- (3) The figures relate to completions within the 2005/06 period.

Table 5.2: Amount of floorspace developed for employment by type in General Employment Areas  
Core Indicator 1b

Use Class	Floorspace (sqm)	
B1(a)	8,400	8,400
B1(b)	0	
B1(c)	0	
B1 mixed	0	
B2	0	
B8	42,150	
<b>Total</b>	<b>50,550</b>	

Source: DBC Employment Land Commitments Position Statement No. 30 (1 April 2006)

**NOTES:**

- (1) Figures are gross external floorspace. The difference between gross external and gross internal floorspace is typically between 2.5 and 5%.
- (2) The figures relate to completions within the 2005/06 period.



Table 5.3: Amount of floorspace by type, which is on previously developed land				
Core Indicator 1c				
Use Class	Floorspace (sqm)	% on PDL		
B1(a)	8,669	8,794	100	100
B1(b)	0		-	
B1(c)	125		100	
B1 mixed	0		-	
B2	1,573		0	
B8	42,150		100	
<b>Total</b>	<b>52,517</b>		<b>97</b>	

Source: DBC Employment Land Commitments Position Statement No. 30 (1 April 2006)

**NOTES:**

- (1) The definition of previously developed land (PDL) is taken from Annex C of PPG3 (March 2000).
- (2) The figures relate to completions within the 2005/06 period.
- (3) Figures are gross external floorspace. The difference between gross external and gross internal floorspace is typically between 2.5 and 5%.
- (4) Percentage figures relate to the percentage of all completed floorspace that is on previously developed land (PDL).

Almost three quarters of land comprising the Local Plan Employment Proposal Sites remains undeveloped. Most of this outstanding supply (78%) is accounted for by Site E4 to the north east of Hemel Hempstead. This is designated as a Key Employment Site within both the Hertfordshire Structure Plan 1991-2011 and the Dacorum Borough Local Plan 1991-2011 and set aside for specialised technological activities (STAs) and/or other activities in the national or regional interest. As referred to above, it is likely that these uses will be relocated to the Hemel Gateway area.

Table 5.4: Land designated as Employment Proposal Sites that remains undeveloped  
Core Indicator 1d (i) and DBLP Indicator 4B (Progress on employment proposal sites)

Plan Ref:	Address	Designated Use	Site Area (Ha)	Progress	Land Remaining (Ha)
<b>E2</b>	Buncefield Lane (West)/Wood Land End (South) (Kodak Sports Ground) Hemel Hempstead	B2 / B8	2.8	-	2.8
<b>E3</b>	Boundary Way (North) Hemel Hempstead	B2 / B8	2.9	Part of site developed (Site B) for mixed industrial/storage development.	0.84
<b>E4</b>	Three Cherry Trees Lane (East) Hemel	STAs or other activities in the	16.6	-	16.6



<b>B2 and B8 Business/Industrial/Warehouse</b>	<b>Sq M</b>
Hemel Hempstead	74,233
Berkhamsted	2,808
Tring	4,558
Bourne End	-
Flamstead	-
Kings Langley	560
Long Marston	-
<b>TOTAL</b>	<b>82,159</b>
<b>B1 Office</b>	<b>Sq M</b>
Hemel Hempstead	118,021
Berkhamsted	1,428
Tring	452
Bovingdon	42
Kings Langley	611
Potten End	67
<b>TOTAL</b>	<b>120,621</b>
<b>GRAND TOTAL</b>	<b>203,780</b>

Source: DBC Commercial Property Register

32% of employment land losses were due to residential redevelopment. This loss refers to one site located within a General Employment Area which was permitted as an exception to normal policy.

<b>Core Indicator 1e(ii)</b>		
<b>Use Class</b>	<b>Land (sqm)</b>	
B1(a)	585	585
B1(b)	0	
B1(c)	0	
B1 mixed	0	
B2	275	
B8	0	
<b>Total</b>	<b>860</b>	

Source: DBC monitoring

**NOTES:**

- (1) Figures relate to completions within the 2005/06 period only.
- (2) Figures include all employment land within the Borough (including that within the General Employment Areas).



Table 5.10: Amount of employment land lost to residential development		
Core Indicator 1f		
Former Use of Land	Land (sqm)	
B1(a)	0	0
B1(b)	0	
B1(c)	0	
B1 mixed	0	
B2	275	
B8	0	
Mixed	0	
Total	275	

Source: DBC Employment Land Commitments Position Statement No. 30 (1 April 2006)

**NOTES:**

- (1) These figures relate to all employment land lost to residential, not just that within the Borough's GEAs.
- (2) Figures relate to completions within the 2005/06 period only.

The self containment ratio (representing the excess of resident workers over the number of jobs in the area) has reduced marginally from 1991 to 2001. The 2001 figures mean that 61% of the resident workers work within Dacorum. This figure must be considered in the context of commuting patterns as Dacorum continues to experience high levels of both in and out-commuting.

Table 5.12: Travel to work patterns			
DBLP Indicator 6B (Seek a self containment ratio equal to the 1991 Census figures)			
Number of resident workers in the borough	Workers in the borough	Self containment ratio in 1991	Self containment ratio in 2001
69,276	50,093	0.71	0.61

Source: Census 2001

**NOTES:**

- (1) Self-containment is a measure of people working and resident in Dacorum as a percentage of all people working in the area (i.e. workplace jobs).

**Dacorum Borough and the case for relocation, Inward Investment Prospectus (Dacorum Borough Council, Experian Business Strategies, Stanhope Plc, Morley Fund Management)**

This document provides a useful overview of the local economy of Hemel Hempstead with a view to evaluating Hemel Hempstead against other locations based on a range of factors that may affect business relocation decisions. Some key points are summarised:

- Annual average output growth in office-based economic activities is expected to grow faster in Dacorum than the Eastern M4 region during the next 10 years (reversing the trend seen during the last



10 years). There are a variety of big name companies and headquarters in Hemel Hempstead as well as a burgeoning IT industry.

- The Riverside extension to the Town Centre, completed in 2005, represents a major new extension. Hemel's retail provision is now on a par with Oxford, Slough and Uxbridge.
- The town's location and accessibility remains a major asset. It is close to the M25, adjacent to the M1 (Junction 8) and is on the West Coast Mainline Railway. The A41 provides the principal transport route throughout Dacorum. The M1 is being widened to four lanes between Junction 6a and 10, and Junction 8 is to be greatly improved, easing congestion and improving safety and journey time reliability.
- Office rents in Dacorum are lower than for the Eastern M4 region. From 1995 to 2004 the Dacorum property market has been at a 49% discount to the M4 region. In addition to rents, business rates are also lower across Dacorum with current rates at £6 per square foot per annum compared to £9 per square foot for the Eastern M4 region, representing a 33% discount in Dacorum

## **The Buncefield Oil Depot Incident: Economic and business confidence impact study. Final Report (SQW Consulting)**

This document assessed the impact of the explosion at the Buncefield Oil Depot on the businesses located in the Maylands employment area and the wider economy. Maylands is one of the largest business parks in the Eastern Region and in 2004 it was estimated to have some 630 businesses employing an estimated 16,500 people.

### *Before the explosion*

Some issues relating to the characteristics of the Business Park and demand before the explosion in December 2005 are outlined:

- Local agents report a demand for smaller and medium sized industrial units with rents around £9 per square foot and a particular demand for high bay warehousing where land is achieving around £1M per acre or more.
- Demand for offices appears to have been flat over recent years. (A recent office scheme of around 100,000 square foot had been vacant for around two years prior to the explosion but secured occupiers when companies affected by the explosion were in need of immediate space).
- Its environment is relatively poor in comparison to modern business parks at other locations in the UK. It lacks retail and leisure facilities and attractions which are in demand by today's occupiers and their employees.
- Traffic congestion is a problem and there is inadequate space for car parking.

### *Effects of explosion*

- The degree of disruption to trade varied amongst the businesses and there are many businesses still suffering from the after effects. By far the most important impact was increased operating costs, but other impacts included failure to meet existing orders, the lack of new orders, short term cash flow problems and underinsurance particularly for small and micro businesses.



- A number of companies relocated from Maylands following the incident. Of the surveyed firms, 25 were identified as being seriously affected and of these all but five have relocated all or parts of their operations, with the total number of relocated jobs reported by surveyed companies of 1,422. Larger companies have relocated to other premises spread across the South East of England or further afield whereas smaller companies have relocated to locations closer to Hemel Hempstead including the town centre and locations within a 10 to 15 mile radius of Hemel town centre.
- A high proportion of severely affected (40%) and non-severely affected (close to 30%) businesses are not sure about their future at Maylands. Those that were most uncertain about their future were in 'sales and services' and 'high technology' sectors. Many would like to see various issues resolved before deciding on their future at Maylands.

### *Future considerations*

The explosion has presented some potential issues for future development at Maylands:

- The future layout of the Maylands business park will be dependent on the clarification of the consultation zone around the Oil Depot (size and extent) and what type of development could take place within the zone. The report suggests that some form of warehousing, with low density employment, may be more suitable close to the depot.
- Most importantly the explosion has affected the attractiveness of the estate to potential occupiers. This is being addressed through a marketing campaign including information about the cause of the explosion and actions taken to avoid a re-occurrence.
- Considering making the Gateway area the centrepiece for developing new uses given its good visibility. This would entail a new style of design and potentially a new technology park.
- Consideration of terminating uses at the southern end of the depot to protect the Gateway area.
- Assess the planning uses of the development. At present high values can be obtained from distribution activities which may influence development in favour of high bay warehousing. This may however be at the expense of schemes catering for the technology sector and other knowledge based uses.

### **Maylands Gateway Development Brief, February 2007, Draft for consultation (Llewelyn Davies Yeang)**

This document is the Consultation Draft of the Development Brief for the Maylands Gateway site within the Maylands Business Area. It presents background information relating to the site and options and opportunities for the development of the area.

### *Property Market Appraisal*

The document provides an analysis of the current local property market within the Maylands Business Area as a whole. This is discussed within the context of the two key market sectors, industrial property (incorporating distribution and warehousing) and office property.



## **Industrial Market**

This market exists mainly towards the north of the Maylands area and incorporates a diversity of uses ranging from small workshop accommodation through to mid-range manufacturing and storage and large ‘mega-shed’ logistics and distribution uses.

The balance of floor space across the estate at present is in favour of industrial accommodation (74% industrial compared to 24% office). Recent property investment in the locality has come from investment from the industrial sector and consequently there is a good range of modern premises available.

Demand, particularly from distribution and warehouse operators, is strong resulting in robust values and a good speculative development market over recent years (79% of industrial space developed over the last five years was speculative). The key drivers of this demand are:

- accessibility of the estate (close to London and directly off Junction 8 of the M1); and
- availability of land for large-scale distribution development.

## **Office Market**

Office properties are scattered throughout the estate but are particularly concentrated within the Maylands Gateway area and along Maylands Avenue. There are a large number of office occupiers, including landmark HQ offices and a range of accommodation to meet all budgets, specifications and floor-space requirements.

Although given current market conditions the land in the Gateway area could easily be designated for industrial development, the report suggests an office-based alternative for several reasons.

- Hemel Hempstead has a successful history of attracting a large number of blue-chip occupiers and HQ office operations, many of which it retains today. However conditions for a modern office environment do not exist in sufficient quantity in a single location to create ‘an image of a premier office location that would sell the location further afield’.
- Office products such as a UK science/technology park model or a number of landmark HQ offices or a range of flexible large floor-space accommodation require the high visibility that the Gateway sites provide.
- The provision of modern and quality industrial premises has not been matched with provision of similar quality new-build office accommodation. The absence of this kind of stock makes Hemel appear less competitive as a whole. The location of the Gateway sites provides the opportunity for this to be remedied by putting cutting edge development on show.
- Feedback from agents and occupiers suggest that office development is most viable at the southern end of Maylands where there is already a more distinct high quality environment and corporate identity.
- The report suggests however that the creation of good quality premises alone will be insufficient to attract investment into the area (for example permissions for building good quality office



accommodation have been available without take-up for the last two years on the PeopleBuilding site). The Maylands development could address the strategic factors dissuading occupiers from locating in the area at present. The report identifies some of these perception factors.

- High quality office occupiers require a higher quality environment (both in the built form and landscaping) and a better separation between industrial and office uses. To attract more and major occupiers the developments needs increased prominence and to be clearly defined from industrial areas as this is likely to affect customer perception of their business.
- Transport and access problems need to be addressed to support perceived inaccessibility and congestion of the area, including separation of HGV traffic from car traffic, reduction in local road congestion and improved parking provision and better public transport connectivity.
- Employers are concerned with the well-being of their employees therefore by making the area somewhere where people want to work (through the provision of local services, a higher quality public realm and enhanced visibility and access to green space), employers will start taking the location more seriously. Maylands does not currently score well compared to competing locations.

## **Consultation Zone**

The document presents the options available for the revision of the current planning guidelines surrounding the Oil Depot. Since publication of this document, the outcome of the HSE Consultation has been decided, and Option 4 is the option that will come into effect in Summer 2008. Option 4 involves changing the size of Consultation Distance informed by risk and adopting a new Development Proximity Zone to give more restrictive advice.

This would extend the consultation distance and planning zones around the depot, with the Outer Zone extending to 400m and introduce a new 'Development Proximity Zone' (DPZ) with increased sensitivity levels. The new DPZ would be at a radius of 150m from the site. Within this zone HSE would advise against new development other than that involving not normally occupied structures.

Table B2.8 shows the current land use restrictions as recommended by the HSE.



**Table B2.8 Current land use restriction as recommended by the HSE**

Land Use	Consultation Zone		
	Inner Zone	Middle Zone	Outer Zone
Workplaces for less than 100 occupants or less than 3 occupied storeys.			
Workplaces for 100 or more occupants or 3 or more occupied storeys.			
Parking area with no other associated facilities.			
Hotel accommodation up to 100 beds.			
Hotel accommodation of more than 100 beds.			
Developments for use by the general public with floor space is from 250-5000m <sup>2</sup>			
Developments for use by the general public with a total floor space of less than 250m <sup>2</sup> .			
Housing Developments up to 30 units or density of less than 40 dwellings per hectare			
Housing Developments of over 30 units or a density of over 40 dwellings per hectare			

Key	
HSE Don't advise against	
HSE advise against	

## 2.5 Local Property Market

### 2.5.1 Introduction

This section provides an over view of the local property market and some key considerations for the Gorhambury development from a market perspective. This represents a summary of comments made by Carter Jonas in relation to the Gorhambury proposal.

### 2.5.2 Overview

Hemel Hempstead is currently constrained from reaching its full potential as a prosperous location in the office and industrial markets. It plays an important part in the regional economy and is home to some key blue chip companies however it is generally regarded as a poorer location for offices than Watford. The industrial market is characterised by a scarcity of quality space and its image has recently been dominated by the Buncefield Oil Depot incident.



At present the location does attract speculative investment but often fails to deliver on the perceived potential. An example of this is the People building on Maylands Avenue, an excellent quality office development which, two years after completion, is still looking for occupiers.

### 2.5.3 The Maylands Estate

The Maylands Estate, immediately to the west of the Gorhambury site, is the principal employment area of the town and serves as one of the important business localities in the town. The Town Centre has a number of good offices but there are no other significant modern business locations. The other industrial parks mostly date from the sixties and are characterised by small outdated units with poor access.

The Maylands Estate is one of the largest employment areas in the East of England, and is itself in the process of rejuvenation. It is currently characterised by a range of new buildings of excellent quality but also a number of much older buildings and a number of sites awaiting development. At present the Estate has a mix of old and new buildings and no clear distinction between the industrial and office sectors which contributes to poor overall perceptions. The Estate currently lacks a focal point, though recent developments on the southern end of Maylands Avenue are beginning to focus this as the office element of the Estate, with the People building providing a major start to the process. The take up of this building however remains low and this is probably influenced by the overall impression of the estate, which is not yet one of a modern thriving business park. It needs to create a much better environment if it is to attract the major occupiers of the future. The regeneration of the Maylands Business Park through the preparation of the Maylands Gateway Draft Development Brief by Llewelyn Davies Yeang is in preparation following a period of consultation ending in April 2007.

### 2.5.4 The Gorhambury Site

The potential of the Gorhambury site will be maximised if undertaken in conjunction with the larger Maylands Estate. At present the Maylands Master Plan makes no reference to the Gorhambury concept, since it is not yet part of the planning policy background, but without its potential being taken into consideration a major opportunity will be lost for both developments. Developed in isolation, the developments may continue to achieve demand by virtue of their location and proximity to the road network, but at a much lower quality in terms of job creation. Demand and rents may also remain below their potential, stifling further investment. Utilising the new start opportunities of the Gorhambury site it may be possible to create the atmosphere necessary to attract investment into the area and to give the Maylands Estate the space to redevelop as a whole rather than on the current piecemeal basis. A joint approach for the Maylands and Gorhambury developments will enable them to command the quality of occupiers that the location deserves. It is recommended that the heavy goods vehicle traffic is diverted to the northern areas so that it does not need to pass through the office areas.



## 2.6 Economic and Wider Benefits

### 2.6.1 Introduction

This section provides a brief qualitative assessment of the potential impacts of the development concept as a whole (which includes consideration of the housing and recreational uses associated with the development). The framework for assessing the impacts of the development has been set by considering the following themes: the local economy; local employment and incomes; contributions to a vibrant town centre; and contributions to an inclusive and cohesive community. As the details of the development have not yet been finalised and are still being developed, this assessment is presented as a general overview of possible impacts that would require further consideration in the design process.

**Table B2.9 Assessment of benefits and impacts**

Theme/Receptor	Impacts
<b>Local economy</b>	<ul style="list-style-type: none"> <li>Increased inward investment - promotion of Hemel Hempstead as vibrant new investment destination. Potential to build on image of Hemel as blue chip company destination.</li> <li>Strengthening of existing clusters and potential for development of new ones.</li> <li>Multiplier effects - More money circulating in local economy would have wider impacts leading to general increases in local wealth. More people working and living in Hemel would increase spending on local goods and services which in turn stimulates local production and local incomes.</li> <li>Wider regenerative effects - positive development and investment could spread across rest of town and potentially kick start wider investment in Hemel.</li> <li>Increased diversification - by creating a broader and possibly more diverse base of businesses it would contribute to the creation of a more stable and sustainable local economy.</li> </ul>
<b>Employment and income</b>	<ul style="list-style-type: none"> <li>Employment - increases in number of local jobs.</li> <li>More diverse and sustainable employment offer for residents - broad range of employment types being promoted by the development implying opportunities across all skills levels and industries.</li> <li>Income - more jobs means more income earned in the local area which may have wider impacts by creating further job and income opportunities.</li> </ul>
<b>Contributions to vibrant town centre</b>	<ul style="list-style-type: none"> <li>Improve the overall attractiveness of Hemel, if emphasis on wider quality 'environment' is developed.</li> <li>It could potentially detract from town centre by creating a competing 'centre', although this is unlikely without development of significant retail uses.</li> <li>Development may generate wider investment in town - positive catalytic regeneration effects.</li> <li>Impact on infrastructure and local services - Increased resident and commuter population will increase pressure on local facilities and services. However the development will provide a variety of supporting infrastructure such as open space and community facilities which will have wider positive benefits for the town and local population.</li> <li>Congestion - this is likely to increase given the new housing development and many more workers in the local area. However, the proposals will incorporate new public transport measures and a number of measures aimed at reducing use of the private vehicles.</li> <li>Land and property development - has potential to kick start local property market.</li> </ul>



Theme/Receptor	Impacts
<b>Creating an inclusive and cohesive community</b>	<ul style="list-style-type: none"> <li>• Community cohesion - Development will see a significant growth in local population. The proposals seek to integrate the new and existing neighbourhoods, providing additional services and facilities for use by all.</li> <li>• Effect of increased incomes and wealth - may have positive effects by improving general standards of living, decreasing unemployment, and potential positive effects on crime.</li> <li>• New housing - increase in choice and diversity of housing on offer, in particular will include a significant proportion of affordable housing.</li> <li>• Environment and town life - increased investment in town, particularly where new recreational and public facilities are created. May bring about positive effects for community life and wellbeing.</li> </ul>

Source: Entec

### Consideration for later work

The above provides an indication of potential effects that the development of the Gorhambury area may have. Further work would be required to explore the extent that these, mainly positive effects, may be achieved. The main test relates to the additionality of these effects, for example:

- leakage: the potential that direct and indirect jobs/income generated as a result of the development may benefit the local area;
- displacement: the potential that any proposed public investment in this area may detract from benefits being accrued in other areas (for example a large firm moves into new accommodation in this area, rather than into another area); and
- deadweight: the potential that the effects noted above may occur anyway, without the development taking place (this is unlikely in this instance).

## 2.7 Proposed Employment Uses

### 2.7.1 Introduction

This initial assessment is based on findings from the baseline review and previous studies undertaken with regard to employment space and the property market as well as opinions of property market specialists, Carter Jonas. It gives some indication as to the potential for the two major uses, industrial and office development. It should be noted that, at this stage, the nature of any proposed future employment development is still subject to finalisation of the consultation zone around the Buncefield Oil Depot and any restrictions on types of employment uses within this zone.



## 2.7.2 Summary of Findings

The findings in relation to key potential land use types:

### **Industrial uses**

Hemel has a strong base in the industrial (warehousing and manufacturing) market with Hemel serving as the main industrial market in the SW Hertfordshire area. One of its main assets is its location and accessibility and as such it is one of the main distribution locations along the M25 and southern end of M1. The availability of land for large-scale distribution development has also been a favourable feature. Industrial development would appear to be a key possibility for employment on the site, particularly within the consultation zone which may have restrictions on the density of employment allowed therein.

### **Green employment uses**

In terms of 'green' employment there may be some scope to consolidate such businesses in the area; however the analysis of the industrial structure reveals that the recycling industry does not show particularly strong levels of growth or concentration in the local economy and employment in that sector has declined at a faster rate locally than nationally. This sector does not therefore appear to be a strong potential growth sector at this stage - unless there is a concerted policy driver to develop this. This may be likely given the increasing importance of the environment in developing policy.

### **Office uses**

Hemel Hempstead has a history of attracting blue chip companies and key headquarters to the area. However, the office market in Hemel has been 'sluggish' over recent years with slow take up of land and premises. This may in part be due to the inadequate provision of high quality office premises in a suitable high quality environment which has seen Hemel unable to effectively compete with other locations to attract businesses to the area. Previous market assessments have pointed to a lack of a clearly defined office area in Hemel, contributing to lowering perceptions of Hemel as a premier office destination. The Maylands Development Brief points to the likely development of such high quality premises and local environment in the Maylands Gateway sites. Therefore, the site represents a natural extension to these Maylands sites and a possible opportunity is to develop a similar Gateway area on the Gorhambury site - this could extend and complement the provision of a premier office environment. High quality office occupiers require a higher quality environment (both in the built form and landscaping) and a better separation between industrial and office uses is vital in future development. Further consideration should therefore be given to the necessary facilities to create such an environment as well as the proposed leisure and recreation uses put forward in the development and how these may interact/support the creation of a quality office environment. We note Carter Jonas's suggestion to provide separate access to industrial and office areas.

### **Live/work units**

Live/work units may be more suitable towards urban centres and there has been some debate as to whether they deliver the employment benefits implicit in their design. In addition live/work units would need to be purpose built and meet the dual facility and location requirements of residential and employment uses.



### **Stadium and leisure uses**

It is understood that proposals to develop a stadium and/or other associated leisure uses are being investigated for the site. Such proposals have not been examined in this report as they are at preliminary stages of investigation.

### **2.7.3 Recommendations**

#### **Overall recommendations**

As the proposals are still being progressed and will be developed further, it is not appropriate at this stage to make firm decisions on the most appropriate type of employment uses for the Gorhambury development. However based on the findings presented in this report it appears that none of the proposed uses (B1, B2, and B8) should be discounted at present. Current market conditions suggest that there exists scope to develop all of these uses on the site or a combination of these uses as appropriate. Key considerations for the development include the creation of a quality employment environment in terms of environment and facilities (for instance inclusion of retail, open space, and other amenities) and a clear distinction and separation of industrial and office uses.

#### **Remembering business needs**

It will be important that more detailed planning of the site reflects on some of the key issues that business will consider when selecting potential premises, such as:

- operational costs;
- what the location will mean for their brand;
- how the location will affect distribution and delivery of goods and services;
- their ability to attract staff;
- what technological and other facilities are available;
- flexibility of the site and potential for grow on space;
- potential ongoing operational and contingent liabilities;
- grant/funding availability;
- security; and
- do they require managed/serviced sites or freehold?

#### **Considerations for different use types**

Planning Policy Guidance 4 (PPG4): Industrial, commercial development and small firms notes at paragraph 9 that:

*“Industry and commerce have always sought locational advantage in response to various external factors. These include: the demands of customers; access to raw materials and suppliers; links with other businesses; the*



*workforce catchment area; and various transport considerations. Business often gives high priority to good access to roads, and sometimes rail, airports and ports”*

The following table (Table B2.10) shows how some types of uses may require different levels of facilities and provides an indication of some considerations for the future development of the Gorhambury concept. Table B2.11 follows and provides some further detail of the specific infrastructure requirements of different types of business.

**Table B2.10 General development considerations for different use types**

Potential Use	Potential needs/development criteria	
B1 Businesses - office and light industrial uses (plus high tech R&D)	<b>Site and Premises</b>	<p><b>Site size:</b> range, buildings typically higher employment density than other uses on two or more storeys.</p> <p><b>Plot:</b> High tech/science parks uses tend toward large gated complexes with low building area to total site area ratio. External storage areas less important to offices than light industrial.</p> <p><b>Flexibility</b> to alter or expand premises: less important to offices than light industrial uses.</p>
	<b>Design</b>	<p>Importance of <b>impression to customers, suppliers and potential staff:</b> high importance both internally and externally for office space, less important for light industrial uses.</p> <p><b>Structural requirements:</b> no specific requirements - higher ceilings may be useful in lighter industrial uses.</p>
	<b>Access and Parking</b>	Access and parking space for deliveries, customers, including disabled customers.
	<b>Servicing</b>	Building facilities (power, drainage, communications) - see Table B2.11.
	<b>Amenity</b>	<p><b>Comfort of building:</b> important particularly relating to air-conditioning, lighting, etc. Higher quality premises need to portray a relaxed and professional environment. High quality of facilities and comfort for employees and visitors necessary, particularly for office space - lighting, toilets and kitchen facilities.</p> <p>High quality landscaping important.</p>
	<b>Local Facilities</b>	<p>Employees prefer locations with good local facilities: Recommended <b>distance to local services:</b> 10 to 15 minutes walk for light industrial and less than 10 minutes for higher quality office space.</p> <p>Potential need to make regular trips to banks/post office.</p>
	<b>Customers</b>	Proximity to customers - where people can see product or service or can see you: Passing trade unlikely to be important for such uses.
	<b>Suppliers</b>	Proximity to suppliers - near supplies for quick, flexible service, deliveries will be easier and cheaper with good road and transport links. Likely to be important for light industrial uses by less so for offices.
	<b>Similar uses</b>	May want to be away from competitors or there may be benefits where clusters of similar businesses attract more customers. Neighbours and location affect business image.
	<b>Employees</b>	<p>Proximity to employees - best location easy to travel to, good public transport is essential for employees that do not live within walking distance. Approximate <b>size of labour catchment:</b> 30 to 40 minutes travel time.</p> <p>Recommended <b>distance to public transport nodes:</b> 10 to 15 minutes walk. Highest quality offices should be less than 10 minutes walk.</p>



Potential Use	Potential needs/development criteria	
B2 General Industrial	<b>Site and Premises</b>	<p><b>Site size:</b> range, buildings typically vary in employment density and typically on two or more storeys.</p> <p><b>Plot:</b> External storage areas may be important to general industrial uses.</p> <p><b>Flexibility</b> to alter or expand premises: general industrial uses tend to involve industrial processes that necessitate the development of specific buildings to house different elements of the process. Flexible space helps when modifications to the process or new plant are required.</p>
	<b>Design</b>	<p>Importance of <b>impression to customers, suppliers and potential staff:</b> potentially less important for some industrial uses, however some manufacture, such as pharmaceutical products may require 'clean' sites.</p> <p><b>Structural requirements:</b> Requirements will vary and in addition to high ceilings, some areas may require reinforcement to handle significant loads.</p>
	<b>Access and Parking</b>	<p>Access and parking space for deliveries, customers, including disabled customers. Often served by a very large number of lorries. Service vehicles should be able to load and manoeuvre in the site. Heavy goods vehicles should also be able to enter and leave a premises in a forward direction in the interests of public safety. General industrial firms commonly operate a 'just in time' production process with a steady flow of pick up and deliveries.</p>
	<b>Servicing</b>	<p>Building facilities (power, drainage, communications) - see Table 6.2. May have some significant utility requirements and may include authorised processes.</p>
	<b>Amenity</b>	<p><b>Comfort of building:</b> less important as a rule but still with a need to provide facilities and comfort for employees and visitors.</p>
	<b>Local Facilities</b>	<p>Employees prefer locations with good local facilities: Recommended <b>distance to local services:</b> 10 to 15 minutes.</p>
	<b>Customers</b>	<p>Proximity to customers - where people can see product or service or can see you: Passing trade unlikely to be important for such uses. Depend on efficient distribution systems and require strategic locations capable of serving regional, national and European markets.</p>
	<b>Suppliers</b>	<p>Proximity to suppliers - near supplies for quick, flexible service, deliveries will be easier and cheaper with good road and transport links. Depend on efficient distribution systems and require strategic locations capable of serving regional, national and European markets.</p>
	<b>Similar uses</b>	<p>May want to be away from competitors or there may be benefits where clusters of similar businesses attract more customers. Clusters may be more important to manufacturing businesses as there may be supply chain efficiencies.</p>
	<b>Employees</b>	<p>Proximity to employees - best location easy to travel to, good public transport is essential for employees that do not live within walking distance. Approximate <b>size of labour catchment:</b> 30 to 40 minutes travel time.</p> <p>Recommended <b>distance to public transport nodes:</b> 10 to 15 minutes walk.</p>
B8 Storage and Distribution (excluding retail warehouses)	<b>Site and Premises</b>	<p><b>Site size:</b> large, buildings typically lower employment density than other uses on one or two storeys.</p> <p><b>Plot:</b> External storage areas may be important.</p> <p><b>Flexibility</b> to alter or expand premises: Most are 'big sheds' and expansion required may relate to areas of storage only.</p>
	<b>Design</b>	<p>Importance of <b>impression to customers, suppliers and potential staff:</b> front of office operations need to be of sufficient quality for employees.</p> <p><b>Structural requirements:</b> High single span ceilings preferred.</p>



Potential Use	Potential needs/development criteria
<b>Access and Parking</b>	<p>Access and parking space for deliveries, customers, including disabled customers.</p> <p>Often served by a very large number of lorries. Service vehicles should be able to load and manoeuvre in the site. Heavy goods vehicles should also be able to enter and leave a premises in a forward direction in the interests of public safety.</p> <p>Best located away from residential and urban areas, where the nature of the traffic is likely to cause congestion. Access by rail and water transport may be important.</p> <p>Signage important to visiting delivery drivers.</p>
<b>Servicing</b>	<p>Building facilities (power, drainage, communications) - see Table B2.11. May require cold storage or similar facilities.</p>
<b>Amenity</b>	<p><b>Comfort of building:</b> less important particularly relating to air-conditioning, lighting, etc.</p>
<b>Local Facilities</b>	<p>Employees prefer locations with good local facilities: Recommended <b>distance to local services:</b> 10 to 15 minutes walk.</p>
<b>Customers</b>	<p>Proximity to customers - where people can see product or service or can see you: Passing trade unlikely to be important for such uses. Depend on efficient distribution systems and require strategic locations capable of serving regional, national and European markets.</p>
<b>Suppliers</b>	<p>Proximity to suppliers - near supplies for quick, flexible service, deliveries will be easier and cheaper with good road and transport links. Depend on efficient distribution systems and require strategic locations capable of serving regional, national and European markets.</p>
<b>Similar uses</b>	<p>No issues being in proximity to similar uses.</p>
<b>Employees</b>	<p>Proximity to employees - best location easy to travel to, good public transport is essential for employees that do not live within walking distance. Approximate <b>size of labour catchment:</b> 30 to 40 minutes travel time.</p> <p>Recommended <b>distance to public transport nodes:</b> 10 to 15 minutes walk.</p>

Source: Entec



**Table B2.11 Infrastructure needs of businesses**

SECTOR	ICT Infrastructure	Storm Water	Foul Water	Mains Water	Gas	Electricity	Highways & Transport	Employee Skills
<b>E- Commerce and E-Campus</b>	Critical - high demand	Dependant on impermeable area in scheme				Critical Regular Supply	Proximity to University and business services, good environment, amenities, road links and public transport and pedestrian/cycle provision important. Less of a need for cars/HGVs.	Critical ICT skills
<b>Manufacturing, Food and Drink</b>	To become more important	Dependant on impermeable area in scheme					Critical Factor - Access to Motorways, Freight Terminals and Ports and site access suitable for LGV and HGVs.	'Higher' skills for managerial positions
<b>Manufacturing, Printing and Publishing</b>	Critical - high demand	Dependant on impermeable area in scheme					Access to Motorways, and site access suitable for LGV and HGVs.	'Higher' skills for managerial positions
<b>Manufacturing, Furniture Manufacture</b>		Dependant on impermeable area in scheme					Access to Motorways, and site access suitable for LGV and HGVs.	Medium to High skill depending if 'bespoke'
<b>Manufacturing, Chemicals and Plastics</b>		Dependant on impermeable area in scheme					Access to Motorways, Freight Terminals and Ports and site access suitable for LGV and HGVs.	High skills to include HandS training
<b>Manufacturing, High Tech Products</b>		Dependant on impermeable area in scheme				Critical	Critical Factor - Access to Motorways, Freight Terminals and Ports and site access suitable for LGV and HGVs.	High skills to include HandS training
<b>Manufacturing, Mechanical Engineering</b>	To become more important	Dependant on impermeable area in scheme					Critical Factor - Access to Motorways, Freight Terminals and Ports and site access suitable for LGV and HGVs.	High skills to include HandS training
<b>Distribution/Logistics</b>	Critical - high demand	Dependant on impermeable area in scheme					Critical Factor - Access to Motorways, Freight Terminals and Ports and site access suitable for LGV and HGVs.	'Higher' skills for managerial positions

Note: Relative need: **HIGH**, **MEDIUM**, **LOW**

Source: Adapted by Entec from Woolwich and North Bexley Partnership - Crayford to Charlton Development Corridor Research Feasibility Study, Hyder Consulting 2002



## More specific recommendations

One of the key points raised in the previous section is that the Gorhambury site should build on the potential benefits of the proximity of its location to the Maylands development. It is considered that it would be more beneficial to develop these sites in conjunction with one another rather than in competition with one another. Close consideration of the Maylands Development and the Maylands Gateway Development plans should be taken into account to see how the Gorhambury plans can build on and expand on this development.

Concepts that would require further consideration include:

- Office development should be created within a wider environment that supports a range of recreational uses, retail and other facilities and open space to create an attractive wider office environment.
- Creating and developing the industrial/Buncefield area. This should be kept as separate as possible from the office environment so as not to detract from the high quality environment. It is recommended that separate access for all HGVs be created further north of the 'gateway'. This could form part of a wider industrial area created by the Maylands development.
- Creating a gateway for the Gorhambury development that presents an attractive and high profile gateway off the M1. This would likely be a good location for a high tech business park. This could provide an opportunity for the expansion or linkage to the facilities and environment being created at the southern end of Maylands Avenue. Table B2.12 presents features of business parks surrounding Cambridge to illustrate different categories of business park and the importance of either public or private institutional links.

**Table B2.12 Categories of business park around Cambridge, UK**

Category	Examples	Institutional Links	Facilities	Average size of single building	Average size of site	Types of firms
A. Biotech / pharmaceutical science park	Granta, Genome, Gt Chesterford	✓✓✓	↑ High level (campus) ↓ Low level (Parking)	Large	Large	Large Corporate
B. University linked / institutional park	Cambridge Science Pk, Norwich Research Pk	✓✓✓		Range	Range	Mix Uni spin outs + Corporate R&D
C. Single occupier Venture capitalist / Consultants	Harston Mill, PA Tech Centre			Large	Medium	Single occupier with Spin out / JV Co's
D. Innovation centres	Framlington, Keystone, St Johns	✓✓		Small	Small	Mix of small Co's / spin outs
E. Technology / Business Parks	Melbourn, Cambridge Business Park			Range	Range	Mix range of businesses, some smaller Corporate

Source: PACEC, Haverhill Technology Park Feasibility Study, 2006



## 2.8 Conclusions

This chapter has set out an employment and socio-economics evidence base which has been used to inform opportunities for employment development at Gorhambury, as part of a mixed use development. The baseline review of the local economy and local property market demonstrates that the residents of Dacorum are relatively prosperous, particularly in terms of skills and entrepreneurship. In the office market there is a particular shortage of quality space, and there has been slow take up of office space in Hemel Hempstead in recent years.

Joint working with the proposed development at Maylands and in particular the Maylands Gateway is recommended. The proposed development should build on the proximity of Maylands by seeking to extend a new high quality office environment, creating a high profile and attractive Gateway site off the M1. This joint approach offers the opportunity to create a more attractive gateway environment to the town from the M1 junction rather than just from the Maylands Gateway area. There is scope to develop a variety of employment uses including B1, B2 and B8. A key consideration is the need for the development to include creation of a quality employment environment and facilities and to ensure clear separation of industrial and office uses. It will also be necessary to propose appropriate land uses within the HSE Consultation Zone. Market conditions closer to the time of development will be key in determining appropriate uses.



## 3. Community Facilities

### 3.1 Introduction

A development of the scale being proposed at Gorhambury will result in a need for local services and facilities. An advantage of this scale of development is that it offers the opportunity to provide for such facilities, which is often not possible with smaller scale developments. The purpose of this chapter is to identify the availability and accessibility of key facilities in and around the proposed Gorhambury/East Hemel Hempstead development area, considering:

- the accessibility of these facilities to the proposed development at East Hemel Hempstead; and
- the absence of certain facilities within the local area that could be provided by the Gorhambury development.

In this way it will be possible to identify any gaps in provision and ensure that any development proposed for the Gorhambury site is able to provide its residents with access to a full range of basic commercial and community facilities. These will also benefit the existing population in neighbourhoods close to the proposed development area.

### 3.2 Service Requirement

Hemel Hempstead currently has a population of around 82,000. Table B3.1 shows the facilities likely to be supported by a population of this size based on commonly used catchment population figures.

**Table B3.1 Facilities requirement based on population size**

Facility type	Catchment population per unit	Approximate requirement of Hemel Hempstead (pop 82k)	Maximum distance for new dwellings assuming density of 40dph (m)
Nursery/First School	2,000	41	600
Primary/Middle School	4,000	21	800
Secondary School	8,000	10	1,200
Secondary School (large)	16,000	5	1,500
Health Centre (4 doctors)	10,000	8	1,200
Local Shop	1,500	55	500
Public House	6,000	14	1,000
Post Office	5,000	16	800



Facility type	Catchment population per unit	Approximate requirement of Hemel Hempstead (pop 82k)	Maximum distance for new dwellings assuming density of 40dph (m)
Community Centre	4,000	21	800
Local Centre	6,000	14	1,000
District Centre/Superstore	24,000	3	1,900
Leisure Centre	24,000	3	1,900
Library*	12,000-30,000	7-3	Not specified
Place of Worship*	9,000	9	Not specified
Major Commercial Centre*	Not specified	Assume 1	5,000
General Hospital*	Not specified	Assume 1	5,000
Railway Station*	Not specified	Assume 1	800

## 3.3 Audit

### 3.3.1 Assessing Availability of Resources to Support Development at Gorhambury

The first step in determining whether sufficient facilities are available to support the proposed development is to identify those facilities with a catchment population small enough to be provided onsite by the development. Table B3.2 shows those facilities that can be supported entirely by the estimated population on the development site, based on the catchment populations shown in Table B3.1, assuming two neighbourhoods of 6,000-7,000 residents. For this exercise it is assumed that the site will definitely be able to support two units of facilities with catchments of 6,000 or less, and may be able to support one unit for facilities with catchments of between 6,000 and 13,000. This will depend on the location of these facilities and how accessible they are to members of the other neighbourhood.

**Table B3.2 Facilities that can be supported on the proposed development site at Gorhambury**

Facility Type	Catchment population per unit	Ability to be supported by the development
Nursery/First School	2,000	Yes
Primary/Middle School	4,000	Yes
Secondary School	8,000	Maybe
Secondary School (large)	16,000	No



Facility Type	Catchment population per unit	Ability to be supported by the development
Health Centre (4 doctors)	10,000	Maybe
Local Shop	1,500	Yes
Public House	6,000	Yes
Post Office	5,000	Yes
Community Centre	4,000	Yes
Local Centre	6,000	Yes
District Centre/Superstore	24,000	No
Leisure Centre	24,000	No
Library*	12,000-30,000	Maybe
Place of Worship*	9,000	Maybe
Major Commercial Centre*	Not specified	No
General Hospital*	Not specified	No
Railway Station*	Not specified	No
Cinemas/Entertainment*	Not specified	Maybe
Citizens Advice Bureau*	Not specified	Maybe
Hotels*	Not specified	Maybe

This preliminary analysis shows that each of the neighbourhoods in the development is of sufficient size to support basic services such as a primary school, local shop, post office and community centre. Jointly they should be able to support a secondary school, and health centre.

Those facilities listed in Table B3.2 for which the suggested catchment population is larger than the Gorhambury development are still important facilities to which site residents will require access but cannot be supported on the site. The second step of the audit is to assess how easy it will be for site residents to access those facilities that are already available in the locality.

Table B3.3 shows the distance to facilities that cannot be supported on site by the development, these can be compared to suggested standards for travel distance for these facilities. Travel distance is based on road travel at the shortest distance, from the central point of each neighbourhood. Figure B3.1 (found at the end of the chapter) shows the location of all the key services and facilities in the vicinity of the site and the wider area of Hemel Hempstead.



**Table B3.3 Travel distance from the site to local facilities**

Facility type	Catchment population (per unit)	Maximum distance for new dwellings (km)	Distance from the centre of neighbourhood		Acceptability of facility distance
			North	South	
Nursery/First School	2,000	600	Leapfrog Day Nursery at 1.2km	Tiny Toes Nursery at 1.3km	Nursery and First Schools are too far from most dwellings in both north and south neighbourhoods
Primary School	4,000	800	Brockwood Primary School at 1.3km	Leverstock Green C of E Primary School at 1.2km	Primary Schools are too far from most dwellings in both north and south neighbourhoods
Secondary School	8,000	1,200	The Astley Cooper School at 2.8km	Longdean School at 3km and Adeyfield School at 3km	The local secondary schools are too far from the furthest dwellings at both the north and south sites
Local Centre	6,000	1,000	Sainsbury's supermarket and other shops in Woodhall Farm (Shenley Road) at 1.5km	Local shops in Leverstock Green (Leverstock Green Road) at 1.3km	Local shops are too far from most dwellings at both the north and south sites
Post Office	5,000	800	Woodhall Farm (Shenley Road) at 1.6km	Bennetts End (Bennetts Gate 3.4km)	Post offices too distant from north site and in particular south site.
Health Centre (4 doctors)	10,000	1,200	Woodhall Health Centre (Valley Green off Shenley Road) at 1.5km	Everest House Surgery (Everest Way) at 2.8km	Each neighbourhood should be able to support its own doctor however both sites appear to be too far from a health centre
Library	12,000-30,000	Not known	Adeyfield library at 3.4km	Leverstock Green (Leverstock Green Road) at 1.2km (and Adeyfield library at 3.5km)	Library facilities may be too distant from the northern part of the development site, however the Woodhall Farm area (2.2km from the site) is currently served by a mobile library
Community Centre	4,000	800	Woodhall Community Centre at 1.9km	Leverstock Green Community Centre (Leverstock Green Road) at 1.6km	Distance to community centre may be too great for ease of use by most residents
Leisure Centre	25,000-40,000	2	Around 4.8km to Hemel Sports centre in Park Road.	Hemel sports centre at 3.7km in Park Road.	Distance to municipal sports centre is too far for ease of use by Gorhambury residents
Superstore/District Centre	25000-40000	2	Sainsbury's at 1.4km off Shenley Road	Superstore at 3.7km in Jarman Park	Distance to nearest superstore is too far for ease of use by Gorhambury residents



Facility type	Catchment population (per unit)	Maximum distance for new dwellings (km)	Distance from the centre of neighbourhood		Acceptability of facility distance
Major Commercial Centre	Not specified	5	Marlowes shopping centre at 5.4km	Marlowes shopping centre at 4.7km	Distance to major commercial centre generally acceptable for both neighbourhoods
General Hospital	Not specified	5	Hemel General Hospital at 4.8km in Hillfield Road	Hemel General Hospital at 5.3km in Hillfield Road	Distance to major commercial centre generally acceptable for both neighbourhoods
Railway Station	Not specified	0.8	7km to Hemel mainline station 7.1km to Apsley station	6km to Hemel mainline station 5.4km to Apsley station	Distance to station is too far, however the rail line does not pass close to the site
Cinemas/Entertainment	Not specified	Not known	4.8km to Jarman Park with cinema, ice rink, bowling, skiing etc. Old Town Hall cultural centre at 5km	3.7km to Jarman Park with cinema, ice rink, bowling skiing etc. Old Town Hall cultural centre at 5km	A very large entertainment centre is relatively close to both neighbourhoods

Many of the facilities listed above are within a reasonable distance of the nearest perimeter of the proposed development sites at Gorhambury. However, because the development areas are relatively large and elongated and are at the margins of the town the furthest dwellings will be too far from some facilities for convenient use by residents. For example, although the shops, community centre, church and library in Leverstock Green are only a few hundred metres from the nearest perimeter of the site they are still around 2km from the eastern side of the southern neighbourhood. As a result they may be too distant to be used easily by residents in this area.

Major regional facilities are in general an acceptable distance from the Gorhambury site (at around 5km), for example the major commercial centre, general hospital and entertainment centre. However, the municipal sports centre is too far even from the nearest perimeter of the site and the mainline railway station is a considerable distance from the proposed development.

The main roads at the westerly perimeter of both ends of the site (Leverstock Green Road to the south and Redbourn Road to the north) are served by bus stops leading into Hemel Hempstead town centre.

For facilities with smaller catchments it may be possible to site facilities between the two neighbourhood areas in order to create a sufficiently large combined catchment to make the service viable.

### 3.4 Opportunities to Provide Services Currently Absent or Under-Provided in the Region

Hemel Hempstead appears to be well served with the major public and private facilities including:



- cultural centre and proposed Civic Centre redevelopment;
- two running tracks;
- sports centre;
- leisure centre with multi-screen cinema, bowling, ice skating and swimming;
- regional shopping centre;
- hotels;
- playing fields and open space;
- general hospital; and
- railway station.

A need has been identified in Hemel Hempstead for a new town stadium. Hemel Hempstead Town Football Club is looking for a new site to relocate to and there are options for ground sharing, possibly with St. Albans Football Club. It is Dacorum Borough Council's intention that this would be a significant sized stadium complex which could provide for other sporting and related facilities. The Crown Estate's land, at the gateway to Hemel Hempstead could provide land for such a facility as part of comprehensive development of the area.

With regard to more local facilities it is worth considering whether there are sufficient facilities of each type to meet the needs of the local population and whether the proposed development at Gorhambury would place an additional strain on services that are already serving a large catchment population. Table B3.4 indicates the current level of service provision in the Hemel Hempstead area relative to the range of facilities that might be expected for a town of this size. It should be noted that Table B3.4 does not specifically consider the scale of facilities that are provided within the town. For instance, large facilities will have been counted once, although may be equivalent to two standard size facilities.

**Table B3.4 Approximate sufficiency of facility provision in Hemel Hempstead**

Facility type	Catchment population per unit	Approximate requirement of Hemel Hempstead (pop 83k)	Number of facilities within Hemel Hempstead
Nursery/First School	2,000	41	37
Primary/Middle School	4,000	21	33
Secondary School	8,000	10	7
Health Centre (4 doctors)	10,000	8	9
Local Shop	1,500	55	Unknown



Facility type	Catchment population per unit	Approximate requirement of Hemel Hempstead (pop 83k)	Number of facilities within Hemel Hempstead
Post Office	5,000	16	8
Community Centre	4,000	21	9
Local Centre	6,000	14	Unknown
District Centre/Superstore	24,000	3	3+
Leisure Centre	24,000	3	3

Table B3.4 shows that while there is adequate provision of most facilities in the Hemel Hempstead area, there are a number of facilities where the existing level of provision is below that which could be required based on the population level. These include:

- post offices;
- community centres;
- youth clubs; and
- secondary schools.

These are all facilities that are outside the viable travel distance of the proposed development at Gorhambury and could be provided onsite as both a local and district enhancement. Given the ‘elongated’ nature of the development it may be that expansion of existing secondary schools is more appropriate, as it could be nearer for pupils living in the new community than a new secondary school to serve the new northern and southern neighbourhoods.

## 3.5 Conclusions

Hemel Hempstead is well served with large facilities such as a regional shopping centre and entertainment facilities. However, there is an identified need in the town for a town stadium to act as a multi-purpose facility and to provide a new base for Hemel Hempstead Town Football Club. There is potential to incorporate a new town stadium on The Crown Estate’s land to the east of the town as part of the proposed mixed use development and this opportunity should be carefully considered by the local authorities. This would be a significant benefit to the town and would also be located on a new Gateway into the town from the M1, offering the opportunity to make significant improvements to this part of the town. Such a stadium could perhaps be combined with conference facilities and sports training facilities for sports clubs and local children.

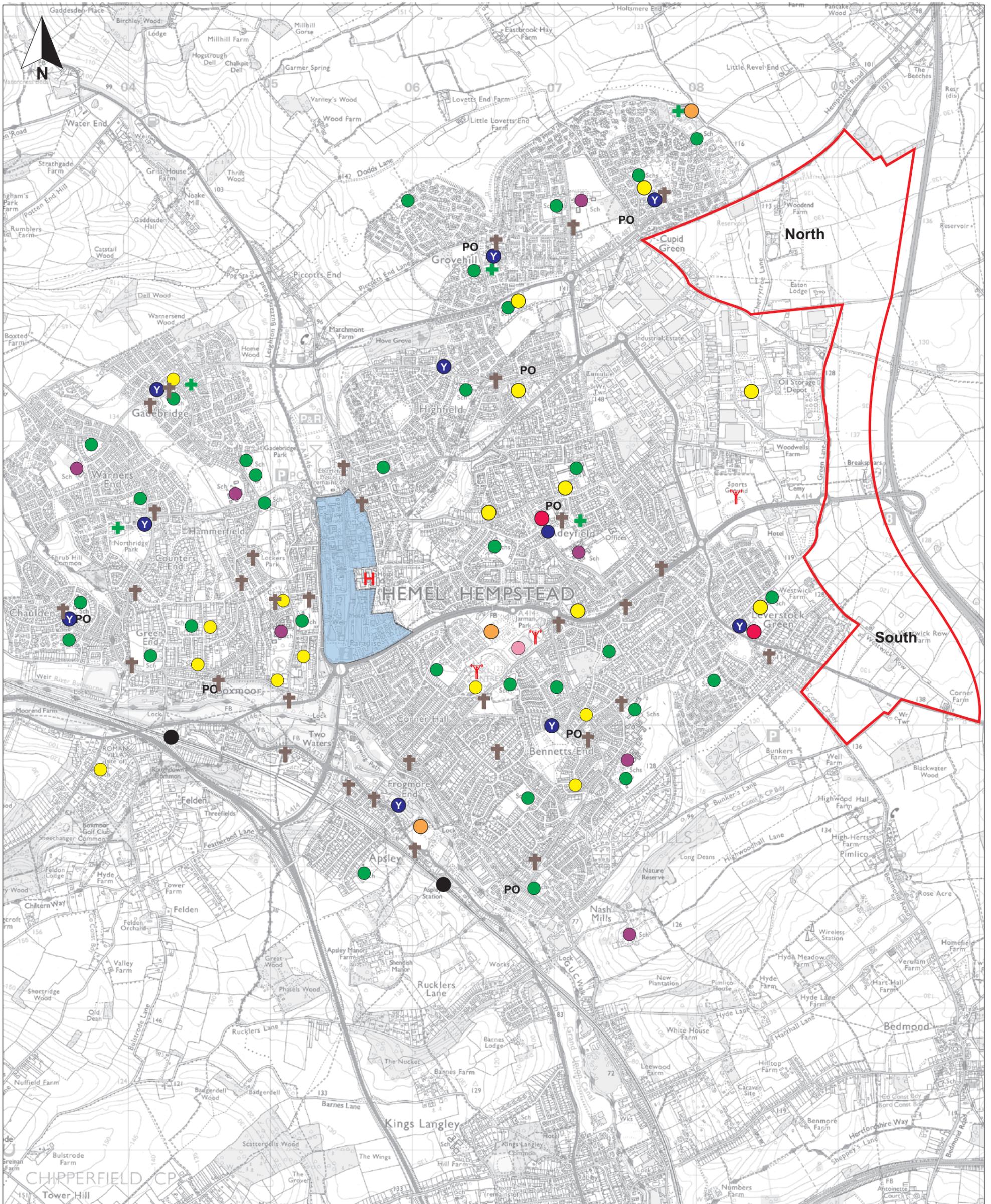
Based on a simple review of the number of facilities present in Hemel Hempstead relative to its population size it appears that there are sufficient numbers of most facilities. When taking into account the increase in population accompanying the proposed Gorhambury development, it is apparent that there is a need for more community



facilities within Hemel Hempstead. Additional post offices, community centres and possibly an additional secondary school or expansion of existing schools would be necessary to support an increased population to ensure that facilities are close enough for new residents to easily access.

Given the size of the proposed development, the potential access to services from the sites and the current provision of community facilities within Hemel Hempstead, it is possible to assess which facilities could be provided within the Gorhambury development. As suggested, post offices, community centres and secondary schools are all underprovided in Hemel Hempstead although a schools review is currently underway and some school closures and amalgamations are taking place in the town. While the catchment populations of the neighbourhoods could support a post office, community centre and primary school each, a secondary school could possibly be supported between the combined catchment populations of the neighbourhoods. A local centre and health centre between both neighbourhoods may also be necessary to provide adequate provision to these facilities from the eastern side of the development. Such facilities would be most suitably provided within the neighbourhood centres.





<b>Key</b> Site boundary Nursery Primary School Secondary School Post Office Health Centre Library Place of Worship Youth Club Community Centre Sports Centre Superstore / District Centre Major Commercial Centre General Hospital Railway Station Cinemas / Entertainment			The Crown Estate Gorhambury LDF Submission  <b>Figure B3.1</b> <b>Community Facilities and Services</b>
0 km  1.5 km Scale 1:25,000 @ A3		November 2007 05907-L65.cdr bernb 	

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## 4. Landscape and Visual Context

### 4.1 Introduction

The purpose of this section of the report is to outline the landscape and visual considerations that should influence the content of the proposed development, the Gorhambury Concept. This includes a review of the landscape and visual context (baseline); a landscape and visual appraisal of the proposed development; and the identification of the principal opportunities and constraints that should be addressed in both the design of the proposed development and in the appraisal of the suitability of such proposals.

### 4.2 Methodology

Initially a desktop study was undertaken to review the previous studies that have been completed for the study area (indicated on Figure B4.1). This was augmented by gathering more detailed information during a field survey. These baseline studies also helped identify the opportunities and constraints for the proposed development and formed the basis of the landscape and visual appraisal.

The landscape and visual appraisal was carried out to consider the potential effects on landscape elements and character, landscape designations, and visual receptors affected by the proposed development. The methodology used was based on the industry standard 'Guidelines for Landscape and Visual Impact Assessment' (GLVIA, 2002) published by the Landscape Institute (LI) and the Institute of Environmental Assessment (IEA).

Landscape and visual effects are appraised as separate issues under the following broad criteria:

- landscape effects: these consist of the changes in the fabric, character and quality of the landscape that is predicted would result from the proposed development; and
- visual effects: these result from changes in views or visual amenity of people who will have views of the proposed development.

The visual appraisal identifies the full range of potential visual receptors for the proposed development and predicts an estimated visual envelope surrounding the development i.e. the area or areas from within which it is predicted that people would have a view of the proposed development.

### 4.3 Landscape Character

Landscape character is defined as a distinct and recognisable pattern of elements that make each landscape different. It is a combination of tangible elements such as visual, ecological and historical components and intangible aspects such as tranquillity and sense of place.



The study area is comprised of both urban fringe and semi-rural agricultural landscape character areas. The northern and southern parts of the study area are semi-agricultural comprising large scale arable fields with smaller areas of pasture near houses and upon steeper sloping ground. Numerous woodland blocks are scattered throughout the study area although there is a greater concentration within the southern part. The landform is gently undulating, comprising a series of broad plateau tops and dry valleys that cut across the study area in a west-east direction.

The character of this landscape, especially within the central and western parts of the study area is heavily influenced by the detracting presence of urban elements including large/small scale industrial/commercial development along the eastern edge of Hemel Hempstead, the M1, overhead transmission lines and pylons, and fly-tipping. The overwhelming feeling of landscape change is a key landscape characteristic; this is associated with construction/demolition works associated with Buncefield Oil Depot, Breakspears Park and the M1 widening project.

The landscape character of the study area has been assessment within a hierarchy of recent landscape character assessments:

- Regional Level - 'The Character Map of England Map Volume 7: South East and London'. Countryside Agency 1999; and
- Sub-Regional Level - 'Landscape of Hertfordshire - Character Assessment'. 2004.

#### 4.3.1 Regional Level

At a regional level the study area is located on the south-eastern periphery of the 'Chilterns' (Character Area No. 110). This landscape character area covers an extensive area from Reading in the west to Stevenage in the east. The key characteristics applicable to the local landscape context of the study area are:

- Small fields and dense network of ancient hedges, often on steep ground. The agricultural landscape is often dominated by hedges, trees and small woodlands.
- Scattered villages and farmsteads, some of medieval origin, displaying consistent use of traditional building materials including flint, brick and clay tiles.
- A network of ancient green lanes and tracks linking numerous archaeological sites and settlements.
- The enclosed and intimate landscape of the valleys, contrasting with the more open plateau tops and extensive views.

#### 4.3.2 Sub-Regional Level

At a more detailed level Hertfordshire County Council Landscape Character Assessment has identified five distinctive character types within which the study area is located (see Figure B4.7).



The northern part of the study area lies within the far western part of the 'Upper Ver Valley' landscape character area. The key characteristics of this area which are applicable to the local landscape context of the study area include pockets of pasture along urban edges and the dry valley between Redbourn and Hemel Hempstead; open and gently undulating valley slopes; and lack of field boundaries on valley slopes.

Directly south of the 'Upper Ver Valley' is the 'Buncefield Plateau' landscape character area. The key characteristics of this area which are applicable to the local landscape context of the central part of the study area include: arable farmland; upland and dry valleys; M1 transport corridor; discontinuous field and cultural patterns; commercial and urban fringe influence; overhead power lines; narrow lanes and isolated properties.

The southern part of the study area is located within the 'St. Stephen's Plateau' landscape character area of which the key characteristics applicable to the local landscape context include visually interlocking woodlands; medium-large arable fields; undulating plateau; narrow winding lanes; dispersed settlements with scattered farmsteads; and significant extent of motorways.

## 4.4 Landscape Designations

The study area falls within a 'Landscape Development Area' as designated within the City and District of St. Albans District Local Plan Local Plan Review Statement 1994. This designation covers a wider tract of land along the eastern edge of Hemel Hempstead and is in recognition of the concern that significant visual and environmental problems are accumulating in many valuable parts of the Green Belt. This policy seeks to give priority to landscape improvement within this area through creation, conservation and enhancement.

## 4.5 Topography and Drainage

The study area has a gently undulating topography comprising a series of rounded hills and plateaus which steadily slope into small valleys. Chief landscape features within the study area include three elevated plateaus and three valleys that extend westwards towards Hemel Hempstead. The southern part of the study area, north of Blackwater Wood, is the highest point of the site at 140m Above Ordnance Datum (AOD). From this broad plateau the landform gently falls away to the north towards the central part of the study area. Here the landform falls into a small valley at 115m AOD, rises again to reach a broad central plateau at 137m AOD and then falls into another valley at 125m AOD. The land to the north of this central area rises to form a broad plateau at 135m AOD. Dry valleys incise this plateau creating prominent rounded hills and small narrow valleys; and to the north the land falls quite steeply toward the dismantled Nicky Line railway with its man-made embankments.

There are very few water features within the study area; these are restricted to small ponds and ditches. There are no watercourses which cross the study area; the nearest being the River Ver approximately 1.5km to the north east. The only large water body within the immediate vicinity of the study area is a reservoir adjacent to the Nicky Line off Cherry Tree Lane.



## 4.6 Vegetation

The vegetation of the study area can be divided up according to the area's main land uses: agriculture, transport corridors and rural residential areas.

**Agricultural areas:** The majority of the study area comprises arable fields used for cereal or break crops. Improved pasture is restricted to steeper sloping ground and land near residential areas and is mainly used for horse grazing. The hedgerows that divide fields in the southern part of the study area are generally in good condition and well managed. These surround arable fields and are quite thick with numerous species. However, to the far south the majority of hedgerows are thin, species poor and degenerate in places with only a line of brambles or a remnant bank to indicate former boundaries.

Generally hedgerows connecting to woodland blocks, adjacent to roads and near Westwick Row Farm are well managed with numerous hedgerow trees. Hedgerow tree species are dominated by mature oak with smaller proportions of holly, beech sycamore and ash. Within the northern part of the study area the hedgerows tend to be taller with varied structures and with a larger proportion of hedgerow trees and scattered specimens. The central part of the study area consists of large open arable fields bounded by gappy hedgerows of varying height and structure. Predominant hedgerow species include hawthorn (*Crataegus monogyna*), hazel (*Corylus avellana*), elder (*Sambucus nigra*), holly (*Ilex aquifolium*), oak (*Quercus spp.*), bramble (*Rubus fruticosus*) and blackthorn (*Prunus spinosa*) with smaller proportions of beech (*Fagus sylvatica*), ivy (*Hedera helix*), and dog rose (*Rosa canina*).

Interspersed between these agricultural fields are small woodland blocks the majority of which are located within the southern part of the study area. The largest block is Blackwater Wood (see Photographic Viewpoint 5 Figure B4.5) which is an area of semi-natural ancient woodland. Woodland in the northern portion of the study area is located mainly within the far north eastern corner where it consists of plantation woodland and small deciduous copses. A linear corridor of woodland grows along the dismantled railway line called Nicky Way, which is now a popular cycleway and footpath.

**Transport Corridors:** There are numerous narrow country lanes and roads which run through the study area and are mainly bounded by hedgerows or woodland blocks. The majority of the hedgerows adjacent to roads within the northern portion are very tall and in some cases form an over-arching canopy. Cherry Tree Lane, Punchbowl Lane and Hogg End Lane are good examples although their rural character is undermined by the urban fringe influences of the M1 bridges and fly-tipping. Hedges adjacent to roads in the southern part of the study area tend to be thick and well managed with the majority having small hedgebanks. Roads entering Leverstock Green have a wooded appearance due to the tall hedgerows. The rural nature of Punchbowl Lane and Hogg End Lane has been enhanced by the planting of woodland belts on either side, reinforcing the hedgerows.

**Rural Residential Areas:** Properties within the study area are mainly rural farms and houses. These houses often have large gardens which contain mature trees and ornamental shrubs, which can be important local visual features e.g. the avenue of Lombardy poplar to the south east of Leverstock Green adjacent to the field boundary.



## 4.7 Land Use

The study area is currently in agricultural use; predominantly large scale arable fields with smaller areas of pasture near houses and upon steeper sloping ground. The arable fields are a mix of cereal crops with a smaller proportion of break crops or pulses and oil-seeds. Generally these are divided by managed hedgerows in varied condition. There are also several woodland blocks the majority of which are within the southern part of the study area. The study area is also used for informal recreation; there are several footpath networks which seem well marked and used. Interpretation boards for the public are also provided by The Crown Estate in Blackwater Wood and a new footpath created to link the wood to the highway.

Land use within the surrounding areas can be divided into four categories:

- agriculture to the north, east and south;
- industrial and business areas to the west, in particular the Buncefield Oil Depot and elevated Brakespear Park are distinct visual features on the horizon;
- residential areas are also located to the west and form the eastern fringe of Hemel Hempstead; and
- the M1 motorway forming the eastern boundary of the study area.

## 4.8 Condition

The condition of the study area is varied and largely dependant upon urban fringe influences. Nearby Hemel Hempstead and the M1 exert considerable influence over the majority of the study area. Urban features such as fly-tipping, prominent overhead transmission lines and electricity pylons and lines, high noise intrusion from the M1, and ongoing construction/demolition works detract from the rural agricultural character of the landscape.

## 4.9 Landscape Capacity

Landscape capacity is defined by the Landscape Institute as "...the magnitude to which a particular landscape character or type is able to accommodate change without unacceptable adverse effects on its character". Capacity is likely to vary according to the type and nature of change proposed.

This broad analysis has followed the approach to landscape sensitivity and capacity as set out in Topic Paper 6 Techniques and Criteria for judging Capacity and Sensitivity (Countryside Agency and Scottish Natural Heritage (2004).

For the purposes of this appraisal and due to the scale and complexity of landscapes within the study area, we have defined four separate areas which exert different degrees of sensitivity and capacity to receive the proposed development (see Figure A5.1).



The entire study area lies within a designated 'Landscape Development Area' which recognises the need for landscape improvement through creation, conservation and enhancement of existing landscapes. Within the study area the landscapes are either in poor condition and require landscape creation; or in parts are in better condition though there is a requirement for conservation and enhancement.

The landscape capacity of the north-eastern part of the study area may be considered as low due to its high visual sensitivity; having very open with extensive long distance views towards Redbourn and the wider countryside to the north and east. In addition, this large arable field and associated plantation wood/small deciduous woodland blocks located to the south and west is considered of moderate landscape quality and condition and has a moderately sensitive landscape value. A requirement of the Landscape Development Area is for the conservation and strengthening of its existing features, i.e. hedgerows and woodlands.

The north-western part of the study area is considered to have a moderate landscape capacity due to its enclosure within the valley associated with the Nicky Line. Landscape capacity reduces on the more elevated parts of the study area; these are open and have long distance views towards a number of isolated residential properties and residential receptors located within the study area. The landscape character has a moderate sensitivity; comprised of arable fields, well defined by woodland blocks/plantations and hedgerows which are in moderate condition. The landscape value is considered to be of moderate sensitivity due to the presence of woodlands and hedgerows that should be conserved and strengthened.

The landscape capacity of the central part of the study is considered to be high due to its relative enclosure between the eastern urban edge of Hemel Hempstead and the M1 corridor. The landscape is poor in quality and condition; comprising large arable fields separated by a few gappy hedgerows. Subsequently, this part of the study area is considered of low landscape character sensitivity. Lacking in any significant landscape features/qualities, this part of the study area requires significant landscape creation/management proposals to enhance the existing edge of Hemel Hempstead. In addition, this part of the study area has a low visual sensitivity due to low number of residential properties able to view the proposed development, their location at long distance from the study area and the existing nature of their view, i.e. the M1 and large scale industry associated with Buncefield Oil Depot and Breakspears Park.

The southern part of the study area is considered to have a moderate landscape capacity. This part of the study area is enclosed by hedgerows in good condition (with numerous trees) and woodland blocks/plantations, the M1, Hemel Hempstead Road and the existing edge of Hemel Hempstead. The area is considered to have a moderate visual sensitivity due to the presence of residential receptors within the study area and within the peripheries of Hemel Hempstead, Pimlico and Bedmond. This visual sensitivity varies throughout the site and is at its most sensitive where the proposed development is located on the plateaus to the south of the study area and adjacent to existing residential properties. Many fields within the study area itself are well enclosed. Comprised of a number small-medium arable fields, hedgerows and woodland this landscape is in moderate condition and exhibits moderate landscape character sensitivity. Due to the presence of a number of woodlands and hedgerows that should be conserved and strengthened, the landscape value is considered to be of moderate sensitivity.



## 4.10 Important Landscape and Visual Features

Important features of the agricultural landscape include the narrow slightly sunken country lanes with their diverse hedgerows. Other remnant agricultural features include the traditional brick and flint vernacular farm buildings. Woodland blocks are important features that break up the open rolling agricultural landscape and, in views from the north and south, dominate on the skyline.

However, most of the visually striking landscape features are associated with the modern urban environment and include the prominent Brakespear Park buildings, the water tower off Bunkers Lane, telecommunications masts, overhead transmission lines and electricity pylons, the M1 motorway and Buncefield Oil Depot and large industrial and retail buildings (see Photographic Viewpoint 4 Figure B4.4).

## 4.11 Predicted Trends

Within the short term, should large scale development not happen, it is anticipated that there are unlikely to be any notable changes within the study area, with predominantly arable farming continuing as present. Hedgerows within the study area are generally well managed although gappy in sections. With the continuation of current management techniques this agricultural scene is unlikely to change significantly although in the absence of management hedgerows will certainly continue decline or become overgrown. However, The Crown Estate has an ongoing policy to work with tenants to improve hedgerows which is resulting in the gradual replanting of faded sections and could be hastened if required.

Advance landscaping works were undertaken in 1989 and the early 1990's at various locations within the site. These included locations within the northern portion of the study area near Wood End Farm and also at Westwick Row Farm in the southern portion of the study area. This planting will continue to mature and provide a strong landscape framework for this area.

In the longer term it is anticipated that small scale housing development and employment sites will be built. Existing local plans for Dacorum and St. Albans identify sites in and around the study area that have been allocated as future employment and housing sites. The M1 is currently being widened between Junctions 7 and 9 which has resulted in loss of agricultural land and highway planting. Combined with ongoing demolition/construction work associated with the Buncefield Oil Depot and other small scale development, the eastern edge of Hemel Hempstead is constantly undergoing change.

### 4.11.1 Potential Landscape Effects

Landscape changes are those which cause effects upon a landscape resource i.e. the character and quality of the landscape. These effects may be temporary, such as movement of construction plant, or permanent, such as the construction of a new building.



## *Potential effects on sub-regional landscape character*

The introduction of development within this part of the landscape character area would result in a significant change in land cover i.e. from rural agricultural landscape to the introduction of new buildings and roads affecting the landscape character of this dry valley. The degree of landscape change would affect the landscape character of the 'Upper Ver Valley'.

The introduction of development within the central part of this study area will result in a change in land cover from arable fields to buildings and roads and will subsequently affect the character of the 'Buncefield Plateau' landscape. The proposed development does however provide an opportunity for effects to be beneficial through the introduction of woodland blocks/screening along the M1 and within a network of new open spaces. These aspects of the development would potentially reduce the ongoing negative influence of industrial eastern edge of Hemel Hempstead and the M1.

The introduction of development within the southern part of the study area will result in a change in land cover; with arable fields being replaced by new buildings and roads. This will change the rural character of the 'St. Stephen's Plateau' landscape, however the retention of existing woodland blocks/hedgerows combined with landscape enhancement proposed and the sensitive design and location of introduced built form may reduce the severity of potential effects.

The predicted changes and their effects are summarised.

- Loss of existing farmland, to be replaced by an urban land use, will be a major modification to the landscape character through the expansion of urban elements within a semi-rural setting. However, the M1 and urban fringe of Hemel Hempstead have already undermined the areas original rural character. This has been further exacerbated by the current widening of the M1 motorway.
- The introduction of large scale planting and continued maturation of previous planting will become a positive landscape effect as it matures and screens potentially negative elements such as new buildings and existing negative elements such as the Oil Depot and M1.

The precise nature of landscape change and resultant effects generated by the potential development will be dependant upon the detailed location, layout and design of the individual components. However, it is certain the majority of the predicted landscape effects will be negative due to the probable scale of development. For example, the central portion of the study area is outlined as having an employment/business use which indicates a need for large scale buildings.

Nevertheless the establishment of woodland screen planting as part of the establishment of a comprehensive framework will be a positive landscape effect, the significance of which will increase with maturity.



## 4.11.2 Potential Visual Effects

### Estimated Visual Envelope

The estimated visual envelope reflects the anticipated scale/form of the proposed development and takes into account the surrounding topography and screening elements and is indicated on Figure B4.1. The primary determinant of the extent of the visual envelope to the west is the urban fringe of Hemel Hempstead with its large scale industrial and business buildings, residential areas, intervening vegetation and topography. The principal determinants in other directions are the undulating topography and areas of intervening vegetation. Woodland blocks and hedgerows are particularly important in screening views of the study area from rural dwellings. The estimated visual envelope for the proposed development extends approximately 2.0km north to include isolated residential properties east of Hemel Hempstead; 1.5km east to include isolated residential properties, PRoWs, the M1 and local road network; 2.0km south to include residents of Pimlico and Bedmond, PRoW and local road network; and 0.5km west to include the eastern edges of Hemel Hempstead.

The northern corner of the study area has not been considered within the visual envelope. It is assumed that this will be left undeveloped to provide an effective gap between Hemel Hempstead and Redbourn and will be managed for biodiversity.

Visual impacts are those which cause effects on 'receptors' i.e. people. This section considers the predicted effects of any development upon the identified visual receptors within the study area. The predicted impacts and effects on each of the main receptors or groups of receptors are summarised below.

Principal views of the proposed development would be available from receptors located within the study area (associated with isolated residential properties/commercial properties, PRoWs and the local road network) and receptors located immediately adjacent to the study area (associated with the eastern edge of Hemel Hempstead, PRoW, M1 and the local road network).

#### *Residential Receptors*

There are a number of residential receptors beyond the immediate study area (indicated on Figure B4.1) who will potentially experience views of the proposed development as follows.

To the north isolated residential properties associated with the local road network north of Hempstead Road will gain clear long distance views (2.0km) of the proposed residential development located to the east of Woodend Farm (see Photographic Viewpoint 1 Figure B4.3). In addition, residential properties within the northern edge of Hemel Hempstead will gain medium to long distance views (0.5-1.0km) of the proposed development, however these will be interrupted by intervening vegetation and restricted to the large arable field adjacent to the reservoir (see Photographic Viewpoint 2 Figure B4.3). Potential views from the settlement of Redbourn to the north-east of the study area will be restricted by the presence of screening woodland within the northern corner of the study area, which is to remain undeveloped. Whilst clear and long distance views (1.8km) of this large north facing field are available from housing located on the south facing slopes of Redbourn, views beyond into the proposed



development are restricted to the presence of screening woodland blocks. However, due to the condition of these woodlands (thinning and gappy in areas), partial views of the proposed development will be available (more so in winter) although the degree of visual change is likely to be small in scale and filtered through vegetation (see Photographic Viewpoint 3 Figure B4.4).

To the east residential properties including Southend Farm (0.6km), nearby cottages and Kettlewells Farm will have long distance views (1.0km) of the proposed development located beyond the M1 and below a skyline already dominated by the Oil Depot and other large buildings in the area (see Photographic Viewpoint 4 Figure B4.4). These views will be limited due to the M1 motorway and intervening hedgerows/vegetation. The effect from the Parkland of Gorhambury House could be greater and could be resisted by the 'old' estate.

To the south of the study area, residents (approximately six to eight properties occupying an elevated position) located within the eastern part of Pimlico will have extensive long distance views (0.8km) of the southern edge of proposed development located immediately north of Hemel Hempstead Road (see Photographic Viewpoint 5 Figure B4.5). In addition, residents located on the northern edge of Bedmond will experience similar views, although at greater distance (1.0km) from the proposed development the potential effects will be reduced (see Photographic Viewpoint 6 Figure B4.5). Other isolated properties which overlook the southern part of the proposed development include residents of Rose Acre Farm and nearby houses where views will be limited by intervening hedgerows; and also residents of Beech Tree Cottages off Hemel Hempstead road, who will gain medium to long distance views of the southern portion of the proposed development.

To the west residents located within the southern periphery of Leverstock Green will experience extensive views of the southern part of the proposed development. Of these, residents to the north of the Hemel Hempstead Road will have interrupted views due to the line of poplar trees along this boundary. In contrast, residents to the south will potential have uninterrupted views of the study area due to the lack of existing boundary vegetation (see Photographic Viewpoint 7 Figure B4.6).

Within the immediate study area indicated on Figure B4.1 there are a number of residential receptors that will have views of the proposed development. These are described in the following paragraphs.

Within the northern part of the study area, isolated residential properties associated with Punch Bowl Lane and Cherry Tree Lane, including Woodend Farm, will all have extensive short distance views of the proposed development. The extent and magnitude of the visual change will be dependant upon screening factors such as vegetation, topography and orientation of properties.

Within the southern part of the study area, a number of isolated properties associated with Westwick Row and the Hemel Hempstead Road will experience varying views of the proposed development due to the presence of screening vegetation. Isolated properties between Westwick Row Farm and Leverstock Green will have limited views to due to the presence of mature trees and vegetation within gardens, although extensive short range views of the proposed development would be obtained from upper storey windows (see Photographic Viewpoint 8 Figure B4.6). Similarly properties along the Westwick Row Lane and the Farm itself will all sustain extensive short range



views to varying degrees. The nature and extent of visual change will be dependant on the orientation of the proposed development and intervening vegetation/topography. One of the most sensitive receptors will be occupants of the recently built large brick property adjacent to Corner Farm, who will have extensive views across the south eastern parts of the proposed development.

### *Users of Public Rights of Way and Surrounding Roads*

Short to long distance views of the majority of the proposed development are available for motorists using the M1. The motorway occupies quite an elevated position which enables motorists travelling north in particular to sustain extensive views. However views are limited from several sections of the road due to intervening vegetation, e.g. the small woodland near Junction 8 and trees and shrubs growing on the embankment at Junction 7.

Extensive short to long distance views of the central and southern parts of the proposed development are available from the A414 between the M1 and the roundabout at Breakspear Park. Motorists using the Hemel Hempstead road will also experience short distance views of the proposed development, however these are limited due to localised variations in topography, intervening woodland blocks and hedgerows.

Views from the surrounding country lanes are again dependant upon the intervening vegetation and topography. Motorists using Bedmond Road will have limited views of the proposed development due to an existing tall hedgerow. Similarly drivers and pedestrians using other lanes such as Cherry Tree Lane and Punch Bowl Lane will have limited views of the potential development due to intervening hedgerows and topography.

There are several Public Rights of Way (PROWs) which cross the study area. The dismantled railway line within the northern portion of the study area is part of the Nicky Line national trail and is used as a footpath and cycleway. Southerly views of the proposed development from the Nicky Line are restricted by the dense secondary woodland that has grown up on the railway embankment, however intermittent views of the northern part of the development will be available.

Extensive short to long distance views are available from the other footpaths within the southern portion of the study area, and also from the isolated public footpath which runs from Green Lane to the Breakspears mast.

As well as visual effects upon recreational receptors using PROWs within the study area, visual effects have to be considered for users of PROWs which lie outside the immediate study area but provide views which encompass parts of the proposed development. There will be some views across the southern portion of the proposed development from the small number of PROWs around Pimlico and Bedmond. More extreme views are likely to be available for users of the PROW network to the east of the M1, although obviously all their views will be across the widened M1 corridor which will be likely to be a prominent visual component in all such views.

## Business and Industrial Receptors

There are potentially a large number of business and industrial receptors working in the extensive employment area on the eastern fringe of Hemel Hempstead such as the Buncefield Oil Depot. However, it is considered that the



vast majority of employees will only have glimpsed, occasional views due to the design of the industrial premises and the large number of intervening elements, principally other buildings.

Potentially notable exceptions to this generalisation include the offices at Breakspear Park and the adjoining Forte Post Hotel. This is due to their elevated position separate from the bulk of the employment area. Employees and hotel guests are likely to experience some extreme views of any development in the central position of the study area.

## 4.12 Landscape - Opportunities and Constraints

Opportunities and constraints are set out below.

### Opportunities

The principal landscape and visual opportunities identified by the field survey and desktop studies are illustrated in Figure B.4.2 in the main report and include the following.

- The study area demonstrates several characteristic of urban fringe areas such as gradual loss of some agricultural functions and the visual dominance of adjoining urban elements. It has long been recognised by The Crown Estate that any extensive development should be carefully planned in order to ensure that it occurs within the context of a comprehensive landscape framework. New landscape planting, to compliment that already carried out by The Crown Estate should be introduced at the earliest opportunity over as large a proportion of the study area as possible. This will allow individual phased development to be introduced upon sites with an established framework e.g. shelterbelts, wildlife corridors, small woodlands. This framework could further ensure the early screening of potentially intrusive developments as well as providing an attractive setting for potential residents, businesses etc. Likewise existing negative elements presently visible from within the study area can be further screened in advance of development e.g. the M1 corridor.
- The study area contains many important features including the narrow sunken country lanes with their diverse hedgerows, field patterns and associated hedgerows to the east of Leverstock Green, traditional brick and flint vernacular farm buildings, and woodland blocks that break up the open and rolling landscape and dominate the skyline. Through the incorporation of these intrinsic landscape characteristics and in combination with historic landscape characteristics, i.e. medieval footprint of Westwick and medieval field patterns, the proposed development has potential to provide a cohesive landscape structure that contributes to the creation of a distinctive sense of place.
- Despite extensive planting and management some hedgerows have become very gappy. Further opportunities exist to manage and plant up gaps of specific hedgerows that might be identified as having strategic value. Additional hedgerow sections and hedgerow trees could also be provided. These will further strengthen the landscape framework and provide partial screening for sensitive visual receptors. In addition, opportunities may exist to design a layout which takes advantage of these degraded hedgerows and potentially concentrate development within these areas, instead of uprooting more valuable hedgerows within the study area.



- Existing agricultural and domestic buildings within the study area could be incorporated into future development to help provide a strong sense of place. The development should consider the use of sympathetic materials to complement existing buildings characteristic of the area.
- Limited opportunities exist to provide further screening of negative visual elements such as the M1 motorway and Oil Depot. Additional large scale planting of woodland species to compliment planting undertaken earlier would provide a buffer between the M1 and residential receptors. This would further reduce negative visual impacts associated with the motorway.
- The development of the study area could create new formal and informal recreational resources and improve public access linking to other footpaths within the wider countryside and explore potential development opportunities linked to Geoffrey Jellicoe's original design plans for Hemel Hempstead.
- There may also be opportunities to diversify existing agricultural land and manage areas to enhance its potential for wildlife value and recreational purposes. For example, planting additional woodland or expanding existing woodland areas and creating grasslands.
- A continued programme of hedgerow management planting up gaps, replacing hedgerow trees and managing with ecological and landscape objectives could be followed. This would maximise their potential value as wildlife corridors and where applicable utilise existing hedgerows as the basis of a new landscape framework.

## Constraints

The principal landscape and visual constraints identified by the field survey and desktop studies are illustrated in Figure B.4.2 and include the following.

- Key landscape features which should be retained and integrated as part of any future development. These would include woodland blocks, hedgerows, individual mature trees and also the leafy country lanes which run through the study area.
- Underground oil pipelines will restrict the types of plant species or built development which is allowed above or within a certain distance of the pipeline.
- Careful consideration will need to be given to the layout and landscape planting within future development areas to limit views of intrusive elements adjacent to the study area such as the Oil Depot, M1 and Breakspear Park buildings.
- Careful consideration should also be given to retaining areas of land for use as a buffer between existing residential areas in Hemel Hempstead and Redbourn to prevent coalescence of the two settlements.
- Future development proposals should take into consideration the visual sensitivities associated with the northern and southern plateaus to avoid visual intrusion and provide a high quality landscape setting to the urban edge of Hemel Hempstead.



- Future development will need to consider the preservation of practical and visual links to the countryside for existing residents. For example, retaining the footpath access currently available across the study area to the Blackwater Wood. Also, consideration should be given to retaining existing rural views available to a number of sensitive receptors. In particular residential receptors within the village of Pimlico presently enjoy uninterrupted views of the rolling farmland countryside.
- At present the study area provides local people with an area of informal recreation. Any future proposals should consider retaining the majority of these footpaths and incorporating them into the design layout as part of a comprehensive landscape framework.

## 4.13 Conclusions

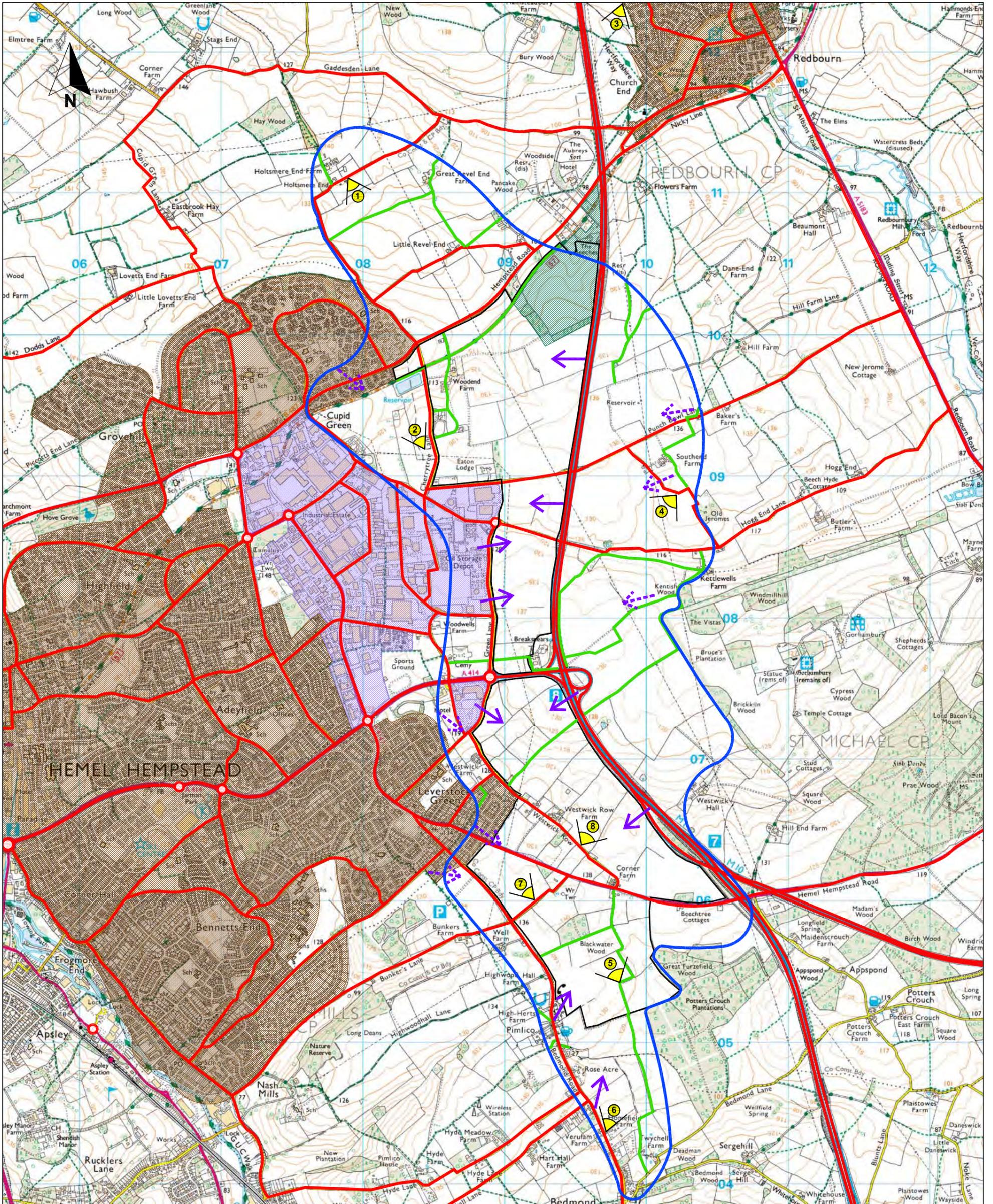
This chapter has identified the landscape and visual considerations that influence the proposed development. The study area is made up of both urban fringe and semi-rural agricultural landscape character areas. The landform is gently undulating, comprising a series of broad plateau tops and dry valleys that cut across the study area in a west-east direction. The character of the landscape is heavily influenced by the detracting presence of urban elements including industrial/commercial development along the edge of the town, the M1, overhead transmission lines and pylons and fly-tipping.

The proposed development area falls within a 'Landscape Development Area' as designated within the St. Albans Local Plan (1994). This seeks to give priority to landscape improvement. The condition of the study area at present is varied and largely dependant upon urban fringe influences.

The analysis of landscape capacity identifies varying levels of capacity, with the north-western part of the study area being considered to have a moderate landscape capacity, the central area is considered to have high capacity and the southern part of the study area has moderate landscape capacity. Advance landscaping works were undertaken in the early 1990's at various locations within the site in order to provide a strong landscape framework for the area. Further advanced planting is proposed to ensure early screening of development. There are also opportunities to strengthen and manage existing hedgerows, many of which are very gappy.

The proposed development would seek to retain and integrate existing landscape features, provide appropriate buffers between existing residential areas and take into account visual sensitivities associated with the northern and southern plateaus to provide a high quality landscape setting to the new urban edge.





**Key**

-  Site boundary and study area
-  Estimated visual envelope
-  Photo viewpoints
-  Biodiversity enhancement zone

**Potential Visual Receptors**

-  Industry / business
-  Settlement / residential
-  Motorists on M1 and other roads
-  Footpaths

-  Principle views into study area
-  Broken views into study area

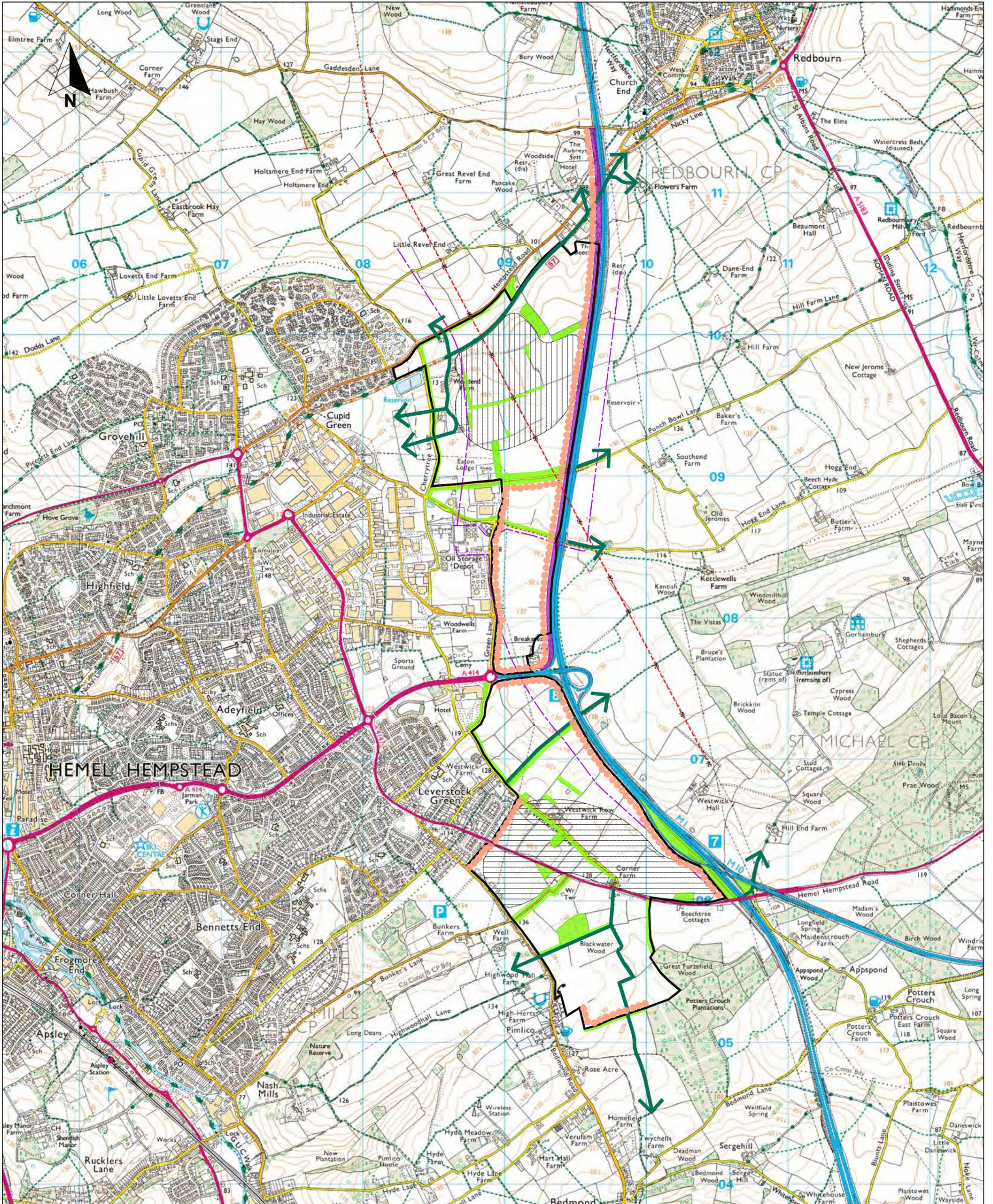
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The Crown Estate  
Gorhambury LDF Submission

**Figure B4.1**  
**Visual Analysis**

November 2007  
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**Entec**



- |   |  |
|---|--|
| <b>Key</b>  | M1 widening (approximate extent of landtake)       |
| Site boundary and study area  | Key vegetation to be retained and enhanced         |
| Existing footpaths to be retained and extended / linked to countryside beyond | Overhead powerlines                                |
| Northern plateau  | Existing underground pipeline                      |
| Southern plateau  | Edge landscape - opportunities for screen planting |

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The Crown Estate  
Gorhambury LDF Submission

**Figure B4.2**  
**Landscape and Visual Constraints and Opportunities**

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