

## **4.8 Sustainability**

- 4.8.1 Maylands Gateway has the potential to become a showcase for sustainable development in the UK and a benchmark for business parks elsewhere.
- 4.8.2 Sustainable development is a fundamental design issue that needs to be the guiding principle through all the stages of the design process. It cannot be achieved through the addition of technologies to a building or development that is, in itself, unsustainable, and any attempts to do so are frequently expensive. For this reason a number of objectives and principles have been identified to ensure that sustainability is considered from the start, and that the vision for a Green business area is delivered in practice.

## **4.9 Protect and enhance the area's natural resources and minimise resource use**

- 4.9.1 Development proposals should take their lead from what the area currently has to offer and seek to establish a rich variety of species and habitats as appropriate to the area. The landscape design aims to achieve a high level of ecological connectivity, linking with the larger green grid of open space and achieving run-off rates and quality comparable to what it would have been as a greenfield site.
- 4.9.2 Further detailed design will seek to create both general and niche habitats, linked by functional ecological corridors, at strategic locations between Maylands and the surrounding countryside. The proposals also include measures such as green and brown roofs, rainwater harvesting, and a hierarchy of sustainable urban drainage schemes (SUDs) to optimise the efficiency of resource use associated with the development. Protecting and enhancing the natural resources of the area will also require attention to pollution prevention (air, water, ground, noise, and light), and safeguarding of specific sensitive resources.

## **4.10 Adopt an 'energy hierarchy' as an integral part of the design approach**

- 4.10.1 A target of Zero Carbon buildings has been set. This means starting with a design that is geared towards energy efficiency, from initial orientation and design of the buildings, to the materials used. Achieving zero carbon means achieving BREEAM 'excellent' at the very least, and an improvement of around 60% above current Building Regulations. This means a highly energy efficient design will have to be supported by strategies to generate the energy needed for operating the buildings from renewable sources. Some of this can be dealt with at an individual building level, but a well co-ordinated larger scale scheme will also be required. All developments should thoroughly explore options for on-site renewables.
- 4.10.2 The creation of a Green Energy Centre is a key element of the overarching Master Plan. This concept is being actively explored by the Borough Council, with support from Hertfordshire County Council and the Renewables East.

## **4.11 Search for innovative solutions for the handling and treatment of waste and recycling**

- 4.11.1 Maylands offers an opportunity to implement innovative approaches to waste management. The feasibility of an automated waste collection system, such as that to be implemented for the new housing complex near Wembley Stadium in north west London, is one possibility that could be considered. The scale of the development also means that a locally based recycling and waste treatment

operations could be viable, including initiatives to recover energy from waste. Further detailed investigations will explore these and similar options as part of a bid to create the highest quality, business-led environment.

#### **4.12 Plan for sustainable transport**

- 4.12.1 Planning for the integration with public transport is a fundamental requirement for achieving sustainable development. The Gateway proposals seek to achieve this, and further aim to reduce reliance on the private car, by encouraging other forms of sustainable transport (e.g. cycling) and by complementary measures such as the potential Park and Ride and establishment of Green Travel Plans. Walking should be promoted through the creation of a pedestrian-friendly environment.

#### **4.13 Ensure social sustainability of local communities and workers**

- 4.13.1 The design proposals should seek to contribute to a socially integrated and vibrant mixed community within the wider area, where all workers and residents have access to good quality recreation, education, health care and employment opportunities. This will require an approach focused on inclusive spaces that people will want to use, and feel safe to use.

#### **4.14 Ensure economic sustainability of local communities**

- 4.14.1 To ensure the economic sustainability of the area, the proposals seek to create a place where people would like to work and spend time. Economic sustainability also requires consideration of the mix of businesses, and the need for ancillary functions (infrastructure and services) required to make this business park work well in the long term.

## **5. Indicative Design Concepts and Proposals**

- 5.1 This section presents the design concept upon which development of the Gateway should be based.
- 5.2 Indicative layouts and drawings are also provided as a guide to development, together with a visual representation of what the Gateway could achieve in terms of the built environment.

### **5.3 The Design Concept**

- 5.3.1 An indicative layout of the Gateway is shown in Figure 5.1. Key features of the intended design are described below.

### **5.4 Structure and Urban Grain**

- 5.4.1 The urban structure of the Gateway can be summarised as a linear open space running west-east, overlooked by a series of blocks of varying size (between 3-4 storeys). Development is anchored at each end by buildings on the key landmark sites at the main entry points.
- 5.4.2 The key element of the structure of the Gateway is the relationship between the development blocks and the central area of open space running west-east through the development. This provides a social, human and environmental focus to the development and aims to balance the needs of pedestrians, vehicles, and ecology.
- 5.4.3 This area is appropriate for use primarily for the 'daytime' community, such as employees, but also for the wider community such as Leverstock Green, Adeyfield and Hales Park – all of which are within walking distance. The establishment of strong pedestrian connections are an important part of the development, to encourage access from surrounding communities.
- 5.4.4 North-south and west-east routes should be provided through the development to provide ease of vehicular movement (including public transport) both through the Gateway site and also connect into the wider street pattern and road hierarchy of the rest of the Maylands area (see Figure 6.1).
- 5.4.5 The Gateway adopts a consistent urban grain through the development, consisting of large block development, whilst allowing for a range of sizes of buildings and floorplates to build in flexibility in terms of the offer to the market.
- 5.4.6 Buildings should create an active frontage and positive relationship with the access roads to promote pedestrian movement and human activity within the site. Buildings should also address Breakspear Way, as their scale and the natural topography of the site means they will be visible from Breakspear Way. Proposals should also promote activity adjacent to the water feature and open space.
- 5.4.7 Parking is expected to be provided through both dedicated parking for each block, either through underground or undercroft parking for buildings along Breakspear Way, or dedicated parking blocks to the rear and side of other buildings. The treatment of parking aims to strike a balance between design aspirations, financial viability and maintaining accessibility.

- 5.4.8 Both the structure and the urban grain are designed to integrate with the proposals made for further development around the PeopleBuilding and with the wider structure of Maylands and Maylands Avenue in particular.



*Office buildings set around a central open space, here with significant water features.*

## **5.5 Building Heights**

- 5.5.1 A range of building heights are envisaged throughout the site. Building heights have been suggested in order to both reflect the importance of the prominent 'gateway' sites at the southern corners of the Gateway, adjacent to the existing roundabouts, and for the buildings to be visible from Breakspear Way. These are indicated in Figure 5.2.

- 5.5.2 Recommended building heights are therefore:

- At the North West corner of the Maylands Avenue/Breakspear roundabout, a building of up to 3 storeys, will reflect the prominence of the site and act as a signature building at the entrance to the Business Park. This is dependent upon detailed consideration of the impact of development on traffic and surrounding uses, which will be addressed at pre-applications stage.
- Up to 6 storeys for the other key gateway site, nearest to the Breakspear Way / Green Lane roundabout. Again, this will reflect the prominence of the site and along with the building on the roundabout to the west, will frame the remainder of the buildings in the Gateway.
- The remainder of the buildings within the Gateway are recommended to be between 3 and 6 storeys. Such heights are required to ensure development visibly addresses Breakspear Way, raises the profile and impact of the Gateway and provide sufficient scale to the central area of open space.

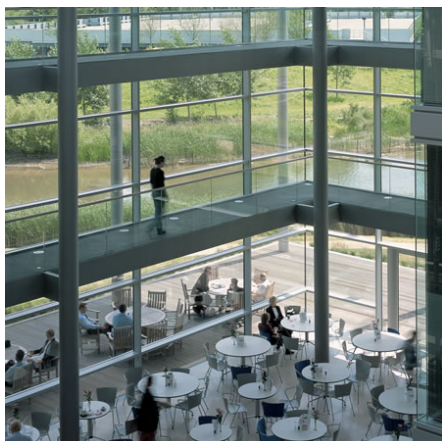




*3 storey office buildings focused around public realm*

## **5.6 Appearance and Building Form**

- 5.6.1 Specific architectural guidelines are not specified for the new development. However, all buildings will be expected to be of high quality and sustainable. Additionally, the design must be to a high architectural standard and reflect the vision of the Gateway in terms of its emphasis on providing a high quality, business park, set within a landscaped setting.
- 5.6.2 Distinct architecture to provide an identity for this part of the Maylands will be encouraged on the two prominent gateway sites at the roundabouts along Breakspear Way.
- 5.6.3 In terms of building form, a key aspect is for all buildings to have entrances facing towards the open space, with servicing to the rear. However, all buildings will be expected to create a positive relationship to Breakspear Way and the new access road. The location of servicing will need careful consideration. Incorporating flexibility in the building floorplates through allowing subdivision between occupants will be encouraged to ensure their suitability to a range of possible tenants and to extend the lifetime of the buildings beyond a single tenant.
- 5.6.4 Small scale commercial development such as a coffee shop or kiosk will be encouraged on the ground floor of appropriate buildings within the Gateway. Outdoor seating will be encouraged to add human activity and vitality adjacent to the open space.



*Food and drink or commercial activity can add activity and vitality to the public realm.*

## 5.7 Open Space and Environment

5.7.1 Achieving a high quality-working environment is one of the principal aims of the Development Brief and has been identified in the Master Plan as being essential to making Maylands a first rate business park, providing a high quality environment in which to invest, do business and work.

5.7.2 Key features of the open space elements of the Gateway include:

- The continuous water body at the centre of the development, overlooked by development blocks. This will be topped up by surface run-off from the surrounding buildings, and swales will be incorporated into car parks to collect further run-off. It should be designed so as to maximise habitat creation i.e. through the use of sloping banks and appropriate marginal planting.
- At one side of this water feature will be a continuous promenade encouraging pedestrian movement, which will incorporate a series of soft-landscaped areas for passive recreation.
- The main vehicular route running north-south through the development should be developed as a 'boulevard' style tree-lined avenue.
- A landscaped belt is proposed for the southern edge of the development site, which will strengthen the existing tree line and maintain ecological links with the woodland on the southern side of Breakspear Way. This should comprise low-level planting to protect the visibility of new buildings from Breakspear Way. Appropriately spaced gaps in this belt will allow views of the new development from Breakspear Way.
- Swales should be incorporated into the parking areas to allow surface run-off water to top-up the watercourse.
- A buffer will be created between the Gateway site and other uses such as the residential area and the cemetery, primarily through tree planting.
- Materials used, including natural stone, timber and stainless steel will create a robust and high quality environment, whilst cowled street lighting and ground recessed feature lighting will create a safe and dynamic working environment, whilst avoiding unnecessary glare.
- Public Art should be provided, with careful consideration given to appropriate themes and locations.



*Example of how 3 storey office buildings can successfully integrate with an active public realm*

Figure 5.1: Maylands Gateway Indicative Layout





Figure 5.2: Maylands Gateway - Building Heights Plan





Figure 5.3: Perspective Drawing Showing Indicative Gateway Layout



## **5.8 Sustainable Development**

5.8.1 The Gateway site poses a number of sustainable development challenges. Key issues include:

- How to maximise the ecological value of the site and make sure it connects with a larger green grid of open space;
- How to manage natural resources in the most sustainable manner possible;
- How to provide the energy required for this development in the most sustainable manner possible;
- How to reduce reliance on private car and encourage public transport;
- How to manage the waste arising from the development sustainably and efficiently;
- How to ensure that the buildings delivered as part of a scheme on this site achieve the highest level of efficiency and environmental performance
- How to ensure the development contributes to a healthy and sustainable Maylands in the long term.

5.8.2 The work to date has explored potential solutions for these issues. These are listed below. These issues will form a fundamental part of discussions with potential developers and will be expected to form an integral part of design and build processes.

## **5.9 Ecology**

- A series of green open spaces, linked to ecological corridors and the countryside beyond. This is reflected through the distribution of open space indicated in the design concept and in the Open Space Strategy for the wider Maylands Master Plan.
- Potential for niche habitats in strategic locations, e.g. badgers, bats.
- Inclusion of green and/or brown roofs, which could be tailored as habitats for specific species.

## **5.10 Water**

- A drainage system aimed at using run-off water as close as possible to its source.
- Rain water harvesting on roofs and large hard surfaces – to be used for irrigation of landscape, flushing of toilets etc.
- Retention pond(s) – to limit the amount of run-off from the site
- Measures for treatment of run-off water.
- Permeable landscape surfaces on all areas to increase infiltration rates.

## **5.11 Energy**

- The creation of a Renewable Energy Centre and local distribution network is a key aim of the over-arching Master Plan, with the aim of creating a business park that is self-supporting in terms of its energy needs.
- Potential wind turbine(s) to generate renewable energy – the number and size to be confirmed pending calculation of energy load, based on floor area.
- Ground source heating to be developed – e.g. a horizontal system under one of the car parks.
- A Biomass burner / Combined Heat and Power/ Trigenation system, and local cultivation of biomass.
- Seasonal heat store – suitably covered ‘pool.’
- Integration of photo voltaic or solar collectors into building design.
- Use of photo voltaic for landscape lighting.



- Potential use of waste heat from industrial facilities in the area for space heating in office blocks.

5.11.1 Further information is contained within the Supplementary Planning Guidance on 'Energy Efficiency and Conservation' (July 2005).

## **5.12 Transport and access**

- Bus stop within 500m of all workplaces to encourage use.
- Secure, covered cycle facilities and provision of lockers and showers in office buildings.
- Financial incentives to encourage sustainable transport, e.g. season ticket loans, incentives for car clubs, shuttle services, and a benefits structure that encourages buying more sustainable cars.
- The production of Green Travel Plans, linking with an overarching strategy for the wider Maylands area – as recommended in the accompanying Maylands Master Plan.

## **5.13 Waste**

- Provision of adequate waste and recycling storage facilities, including the exploration of innovative methods of separation and collection.
- Potential automated waste transfer system

## **5.14 Sustainable buildings**

- Office buildings to achieve a BREEAM excellent rating (or equivalent standard).

## **5.15 Social issues**

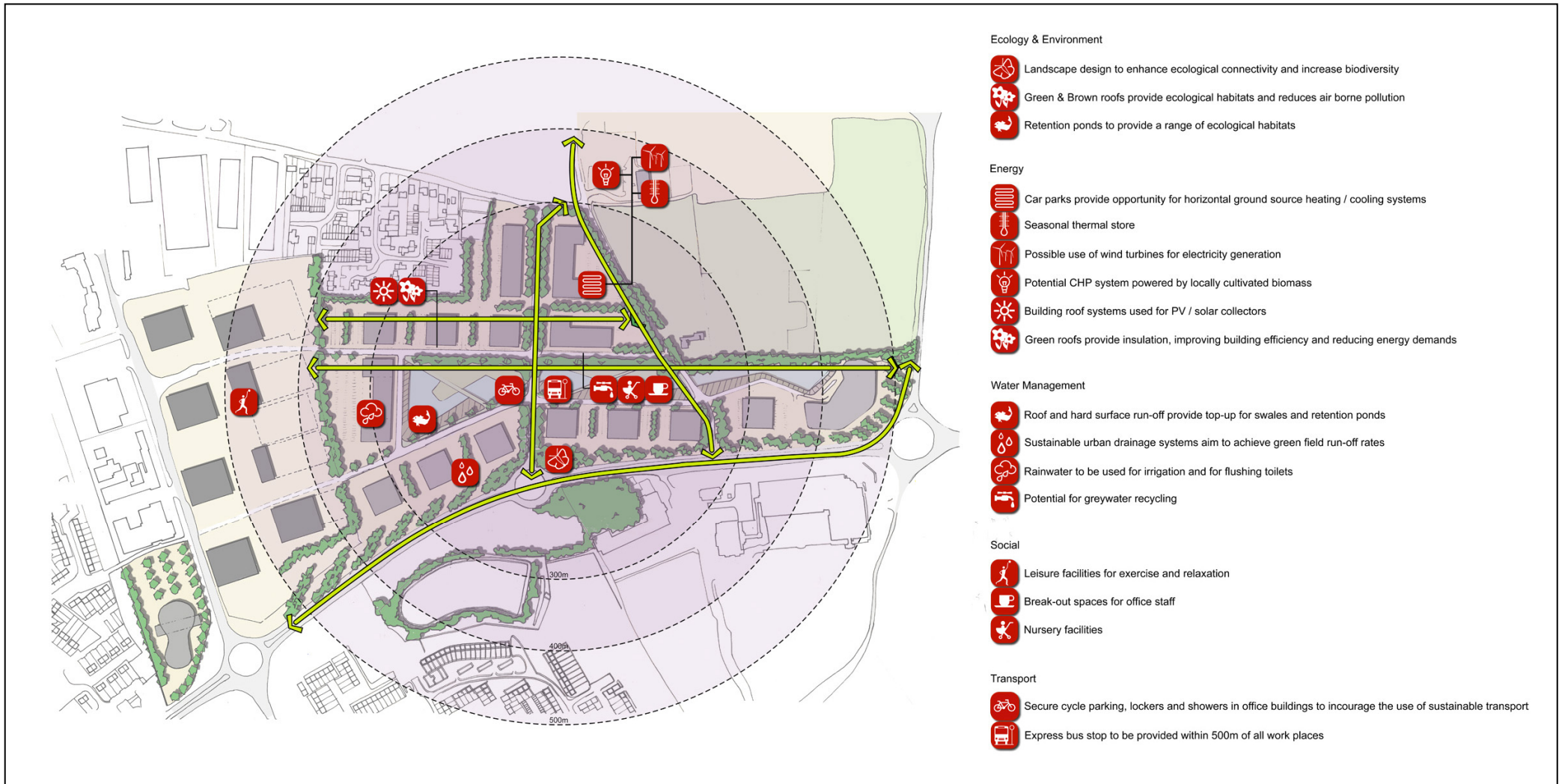
- Provision of a nursery school, should the current facility to the south of Boundary Way relocate.
- Opportunities for relaxation, informal exercise and break out spaces.

## **5.16 Future Management**

5.16.1 Maintenance and continued funding and support is vital to underpin the elements above. This should be pursued through the creation of a Business Improvement District, and through the work of the Maylands Partnership.

5.16.2 Figure 5.4 shows suggested locations for a number of projects which should form part of the overarching Sustainability Strategy for the Gateway.

**Figure 5.4: Sustainable Development Projects**





## 5.17 Indicative Development Capacities

5.17.1 This section provides indicative development for the layout as shown in Figure 5.1.

5.17.2 The numbered blocks in Figure 5.5 refer to the block numbers in Table 5.1.

**Figure 5.5: Indicative Layout Development Capacities Plan**



**Table 5.1: Gateway Development Capacities**

<b>Blocks</b>	<b>Programme</b>	<b>Number Storey-Building</b>	<b>Area (m2 – approx.)</b>	<b>Parking (%)</b>	<b>Parking (spaces – approx.)</b>
1	Office	GF+2	A. 4800	P. 100%	P. 140
2	Office	GF+2	A. 4800	P. 100%	P. 140
3	Office	GF+2	A. 4800	P. 100%	P. 140
4	Office	GF+2	A. 4800	P. 100%	P. 140
5	Office	GF+2	A. 4800	P. 100%	P. 140
6	Office	GF+2	A. 4800	P. 100%	P. 140
7	Office	GF+2	A. 4800	P. 100%	P. 140
8	Office	GF+2	A. 4800	P. 100%	P. 140
9	Office	GF+2	A. 4800	P. 100%	P. 140
10	Office	GF+2	A. 4800	P. 100%	P. 140
11	Office	GF+2	A. 10500	P. 100%	P. 300
12	Office	GF+2	A. 7000	P. 100%	P. 200
13	Office	GF+2	A. 9000	P. 100%	P. 260
14	Mixed use	GF+2	A. 7000	P. 100%	P. 210
15	Headquarters	GF+5	A. 21500	P. 100%	P. 620
16	Hotel	GF+2	A. 9600	1 space per room	P. 300
<b>Total</b>			<b>A. 135000</b>		<b>p. 3290</b>
<b>Indicative PeopleBuilding Further Developments</b>					
A	Office	GF+3	A. 9504		
B	Office	GF+3	A. 9504		
C	Office	GF+3	A. 9504		
D	Office	GF+3	A. 9504		
E	Office	GF+3	A. 9504		
F	Office	GF+3	A. 9504		
H	Office	GF+3	A. 7200		
G	Office	GF+3	A. 9504		
<b>Total</b>			<b>A. 73728</b>		

5.17.3 The blocks proposed as part of the Gateway, excluding those proposed as further stages of the PeopleBuilding Development, could provide over 135,000m<sup>2</sup> (gross external) of development.

5.17.4 Using the English Partnerships job density guidelines, and assumptions over the net development space, it is estimated that the Gateway could provide over 5,700 jobs, with the later stages of the PeopleBuilding providing a further 3,000 jobs.

## **5.18 Uses to be Retained and Relocated**

5.18.1 There are a number of sites within or adjacent to the Gateway for which the Development Brief recommends the current use be retained. This may be a result of planning policy protecting a use, planning constraints, or a site's unsuitability for redevelopment.

5.18.2 Uses to be retained are:

- The existing Woodwells Cemetery
- Balancing tank to the south of Breakspear Way

5.18.3 Redevelopment of other sites is not precluded in the future. However, the existing use must be relocated, or appropriate relocation assistance provided, when the current site is developed as part of the Gateway. These are:

- Caravan Club site
- Sports pitches
- Woodwells caravan storage facility, located to the north of the Cemetery.
- Land allocated for expansion of Woodwells Cemetery in the Dacorum Borough Local Plan

## **6. Transport and Movement**

### **6.1 Introduction**

6.1.1 This section incorporates the main transport and movement principles of the Master Plan. However, that document contains the important proviso (paragraph 1.3.3) that the highways and transportation schemes are at a conceptual level. More detailed investigative work will be required. It will be necessary to review the proposals in the light of:

- (a) the Hertfordshire Infrastructure and Investment Strategy (transportation infrastructure investment requirements);
- (b) the transport model for the Hemel Hempstead area; and
- (c) the Hemel Hempstead Urban Transport Plan.

6.1.2 Developers with an interest in the Maylands Gateway should contact the Highway Authority at an early stage to discuss their plans for the redevelopment of this area in the context of the above advice.

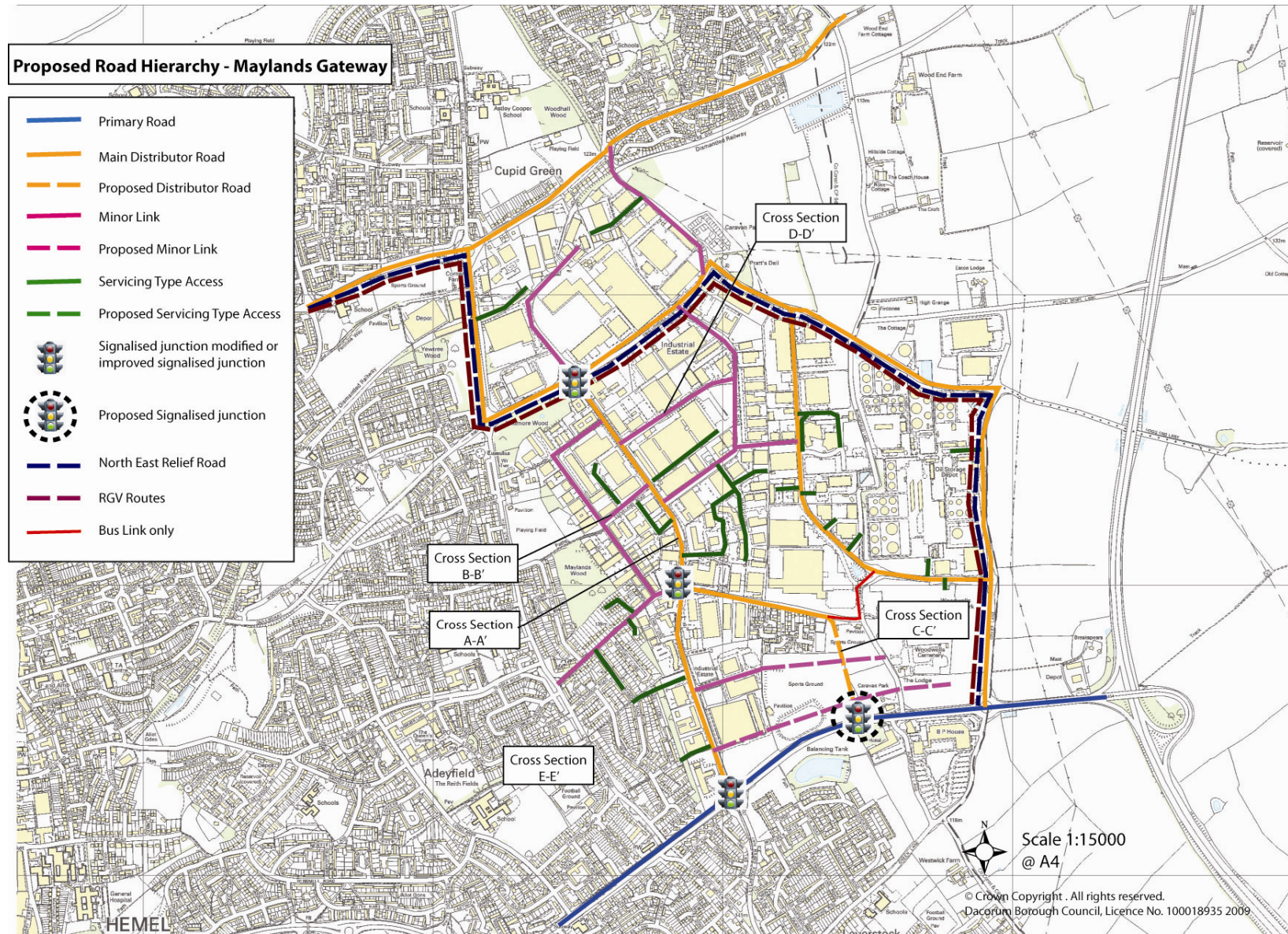
### **6.2 Road Hierarchy**

6.2.1 A road hierarchy and changes to the road network within the Gateway may be required to ensure traffic movements are managed in the new developments and to contribute to controlling congestion in parts of the current network that are near capacity.

6.2.2 A road hierarchy for the whole Maylands area is shown in Figure 6.1. It indicates how the hierarchy for the Gateway area fits into the overall hierarchy. There are four levels of road: Primary Road (A414 Breakspear Way / St Albans Road), main distributor roads (Maylands Avenue and Green Lane), minor links (the more minor roads linking into specific areas of business) and servicing/ 'mews type' access. The lower level of road would be designed for low speeds and would include shared surfaces.



Figure 6.1: Proposed Road Hierarchy - Maylands Gateway



### 6.3 Parking Standards

6.3.1 The Dacorum Borough Local Plan 1991-2011 specifies maximum car parking standards for different types of development based on the Use Classes Order. These standards also incorporate a demand-based approach with defined 'Accessibility Zones' to reflect the degree of accessibility to key services and facilities by public transport, walking and cycling.

6.3.2 The table below indicates the current maximum parking standards for key relevant land uses.

**Table 6.1: Maximum Parking Standards**

Use Class and Description		Maximum Car Parking Standard (GFA for 1 space)	Cycle Parking Standard (employees or GFA for 1 space)
B1 – Business Uses (Offices, R&D, Light Industry)		Offices: 30 sqm  R&D Light Industry: 35 sqm	1 short term space / 500 sqm GFA  1 long-term space / 10 full time staff
Business Parks – Mixed B1 / B2 / B8		40 sqm	1 short term space / 500 sqm GFA  1 long term space / 10 full time staff
Hotels – C1(a)		1 space per bedroom (including staff accommodation) plus 1 space per manager plus 2 spaces per 3 staff (minus spaces related to staff bedrooms) plus spaces for drinking, dining and conference functions plus a minimum of 1 coach parking space per 100 bedrooms.	1 long term space per 10 beds plus 1 long term space per 10 maximum staff on site at any one time.
Food and Drink	Restaurants and Cafes	5 sqm for dining + 3 spaces for 4 employees	1 short term space / 100 sqm GFA
Fitness Club		1 space per 15 sqm GFA	1 short term space per 25 sq m plus 1 long term space per 10 full time staff