



LAND EAST OF COWLEY HILL, BOREHAMWOOD
Conceptual Proposals

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About the Document

This Concept Document has been prepared on behalf of Gliston Investments Ltd to support the promotion of land to the east of Cowley Hill, Borehamwood, as a sustainable urban extension. This document demonstrates that the site is fully deliverable and should be identified for development within the Core Strategy following a review of the greenbelt boundary. This document has been informed by a robust evidence base and should be read in conjunction with the consultation response prepared by Woolf Bond Planning.

The indicated development is set within a proposed greenbelt release and is to be developed during the plan period to 2027 and beyond. This option will deliver the improvements to infrastructure and services needed to facilitate growth in the Borough and ensure the delivery of an appropriate number and type of housing during the plan period.

The only feasible option to provide the growth infrastructure, services improvements and larger family housing required in the Borough is to release suitably located sites from the greenbelt. The land to the east of Cowley Hill is well related to the existing development in Borehamwood and is in close proximity to a number of services as demonstrated in this report. It is therefore considered to be the most suitable greenbelt site for an allocation for residential development.

This Concept Plan Document provides full evidence to support the allocation of up to 950 dwellings, however Gliston Investments Ltd. is happy to work further with the Council will regard to the site area and overall number of dwellings to be provided.

What is Proposed?

The preliminary development proposals are set out within the indicative illustrative masterplan which has been prepared to define the broad parameters for the development. The plan indicates up to 950 residential units in line with the level of growth envisaged by the emerging Core Strategy, as well as open space provision and an indicative location for future mixed uses. Key elements include:

- Up to 950 residential units of private and affordable housing of mixed type.
- Land for a mixed use local centre, such a site could provide suitable accommodation for small scale neighbourhood retail, community and facilities.
- A new primary school and associated facilities set within 1.7ha of land.
- Community woodland buffers to the north and east boundaries to provide linkage and reinforcement of the existing woodland copses on these boundaries.
- Sustainable green infrastructure including dedicated bus, cycle and footpath links to the surrounding neighbourhoods.
- Informal open space, playing fields and children's play areas and allotments.
- Linkages to the Hertswood Secondary School and Leisure Centre from within the proposed development by a new 'green infrastructure' link.

Development Objectives

The proposals are designed in order to help the district achieve a long term sustainable vision for the growth of Borehamwood. Indeed the proposals provide an opportunity to:

1. Promote the right development in the right place.

The proposals contribute towards the maintenance and enhancement of Borehamwood as a prosperous and vibrant town. Placing new homes within easy reach of jobs and services including education, training, healthcare and recreation should not only enhance the town as a major service centre but also promote self-containment within the town, enabling people to live, work and relax locally whilst enjoying a high standard of life.

The proposals should also relieve pressure on the more valuable and sensitive parts of the countryside. Indeed, unlike other locations there is no overriding landscape, ecological or hydrological constraints.

2. Enhance the existing advantages of connectivity and sustainable transport.

The site is located in a sustainable location. Development in this location provides the opportunity to significantly reduce the need for travel and make it safer and easier for new and existing communities to travel to jobs and key services by improving sustainable forms of transport such as public transport, walking and cycling.

3. Reflect local character and distinctiveness.

The proposals should reflect the built heritage and historic character of the town by ensuring that new development is appropriate in terms of scale, location and character to their local environment.

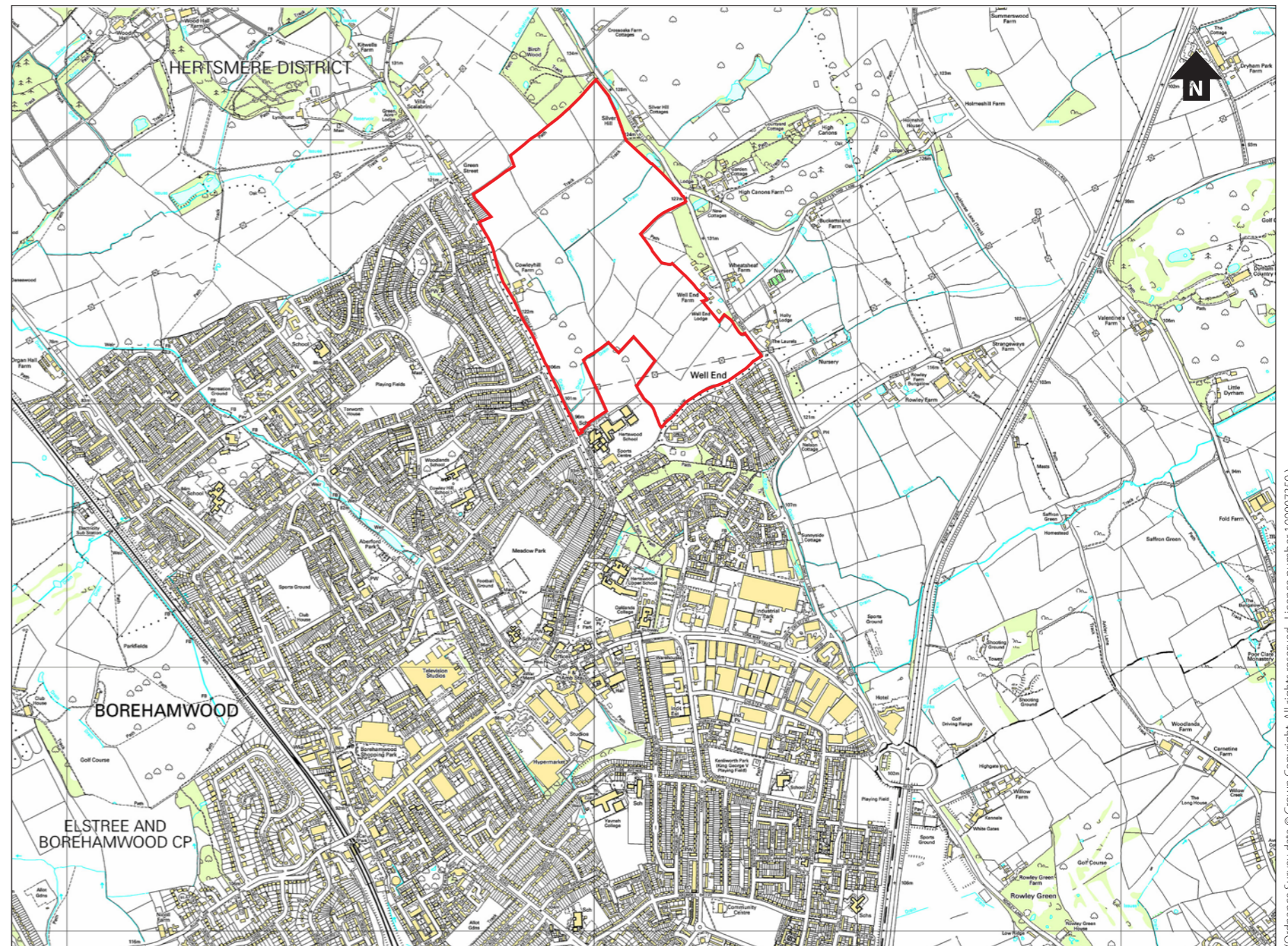
4. Environmentally Friendly Design.

The Proposals should promote and secure high quality, environmentally friendly design in order to create sustainable, attractive, safe and healthy places in which to live and play. In doing so new development should seek to make the most of scarce natural resources in both construction and everyday life. The development should meet best practice criteria set out under the Code for Sustainable Homes to address the following issues:


- Energy
- Water
- Materials
- Surface Water Run Off
- Waste
- Pollution
- Health & Wellbeing
- Management
- Ecology

5. Provide homes matched to local needs and local services based on local requirements.

Importantly the development should contribute to meeting the housing needs of all sections of the community by providing an adequate amount, range and quality of accommodation, in particular affordable housing.



Local Context Plan - 1:20,000

 Site Boundary

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Site Location

The proposed development site is situated adjacent to the northeast corner of Borehamwood and comprises approximately 67ha of arable farmland. The site is bordered by Cowley Hill Road to the west, Potters Lane and Hertswood School to the south, Well End Road and Silver Hill Road to the east, and agricultural fields and woodland to the north. The site comprises arable fields bordered by mature hedgerows and drainage ditches. The site also contains Cowley Hill Farm and its associated buildings.

Site Townscape Context

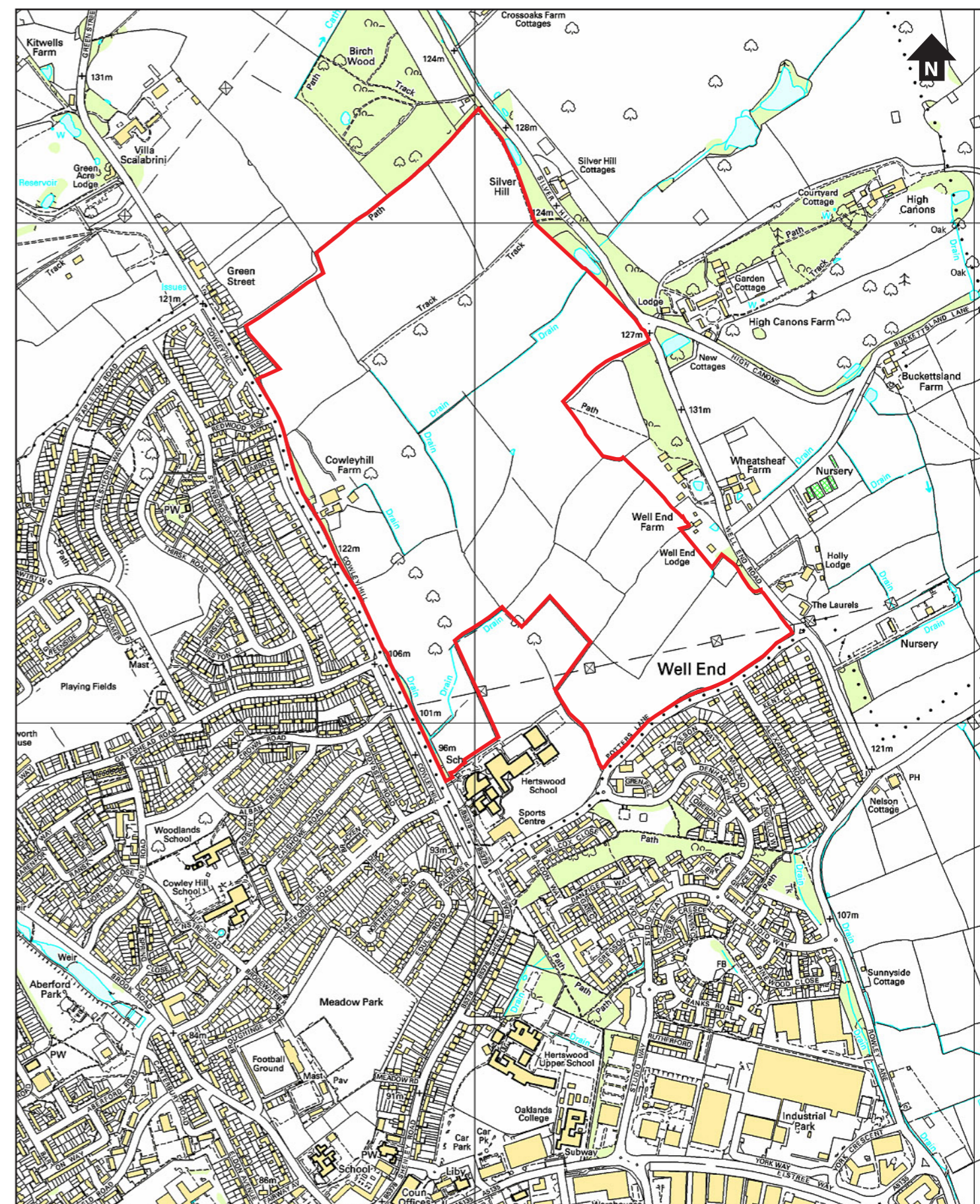
Borehamwood, which is formed by the parishes of Elstree and Borehamwood, experienced significant growth during the post war periods. Following World War II, the town's population greatly increased, with large areas of council housing set up for displaced Londoners, many of which are now in private ownership. The town has evolved to provide varied employment opportunities, particularly those connected with the well-known Elstree Film studios.

The townscape character of Borehamwood immediately to the south and west of the site is mixed. To the immediate west of the site and Cowley Hill Road there is extensive post war housing, comprising predominantly two storey detached and semi-detached brick dwellings. The estate dates from around the 1950's onwards and is suburban in character with wide streets and generous front gardens, with several parks and open spaces interspersed throughout the estate, including Meadow Park and the Borehamwood Football grounds. While the area is predominantly residential there are facilities including the Cowley Hill Primary School and Woodlands Primary School and Cannons Public House.

The Hertswood Secondary School is located to the immediate south of the site and adjacent to this Borehamwood Leisure Centre both set within substantial grounds for sports pitches.

Potters Lane, which runs along the southern boundary of the site, includes further post war housing and some recent modern housing off Denham Way which in part backs onto the lane. To the east of Potters Lane there is some early 20th century two storey housing and bungalows fronting the lane.

Well End Road and Silver Hill Road, which run along the eastern boundary, have a distinctly rural character, being heavily wooded. There are several farmsteads along the road comprising groupings of agricultural buildings and farm cottages. These include Well End Farm, Wheatsheaf Farm and Cannons Farm.



Location Plan - 1:10,000

— Site Boundary

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Local Amenities & Facilities

Education

The site is bordered to the south by Hertswood School. Hertswood School is a secondary school with a sports centre facility. The closest primary school from the site is located approximately 800m away on Shenley Road. Oaklands Further Education College is located on Elstree Way and is accessible by bus B3 or by cycle.

Employment

Elstree Way strategic employment zone is located approximately one kilometre to the south of the site. This employment zone can be accessed by bus as well as by cycle. This is a major provider of jobs and also offers further recreational facilities such as a cinema.

The Stirling Way employment zone to the south of Borehamwood (adjacent to the A1) is accessible by bus route 107 from Elstree Way and is within cycling distance of the site (approximately 3.2km).

Community

The Hertswood Leisure Centre is located immediately to the south of the site and is therefore accessible on foot. The leisure centre offers full gym facilities as well as a sports hall offering badminton and squash courts.

The Venue Leisure Centre provides a swimming pool and gym facilities and is within cycling distance of the site (approximately 1.6km) or can be accessed by bus route B3. Adjacent to the leisure centre is Borehamwood Library.

The Allum Way Community Centre is located in Borehamwood Town Centre near the railway station and is therefore accessible by bus from the site.

Shenley Park is located approximately 2.5 kilometres to the north of the site and features a visitors centre and children's play area. The site is accessible by cycle and also by private vehicle.

Health

A doctor's surgery is located approximately 1.6 kilometres from the site on Fairway Avenue. Barnet and Chase Farms Hospitals (both in Barnet) are located approximately 4.3 kilometres from the site and are accessible by bus from Elstree Way. A dentist is located on Hartford Road and is located approximately 500 metres from the site.

Retail

The site is located approximately 1.5km from the centre of Borehamwood. Within the town centre there are a range of shops as well as health facilities such as doctors and dentists. Bus routes 655 and B3 directly connect the site with the Tesco Extra store in Borehamwood.



Constraints & Opportunities

The following section sets out the assessment of the technical constraints and opportunities relating to the site. A considerable amount of background work has been undertaken to date by Scott Wilson, consulting engineers, including desk top and detailed technical studies which have informed the findings. The work undertaken provides a robust evidence base to demonstrate that the site is deliverable within the constraints.

Landscape

It is proposed to retain nearly all of the existing linear woodland plantations and hedgerows (and all the hedgerow trees) around the periphery of the site, as well as most of the existing hedgerow corridors which currently divide the existing fields.

The proposed residential development will clearly change the character of that part of the land which is currently undeveloped. However, positive landscape proposals with new open space areas and strategic landscape corridors could be designed to reinforce the local landscape character and result in an overall neutral effect on the local landscape character.

The site is generally well screened from the surrounding countryside by existing woodland. New strategic boundary planting and on-going management of the existing structural landscape would ensure the site remains integrated with both the local townscape and the southern and eastern edge of Borehamwood. It will be possible through additional planting proposals and management of existing vegetation, to improve on the current situation by strengthening the northern and eastern boundaries, with new community woodland planting which will better link the pockets of woodland along Silver Hill and Wells End Road, to provide enhanced opportunities for biodiversity and habitat corridors as well as natural screening of views.

Ecology

Scott Wilson, consulting engineers, have carried out an ecological desk based assessment for the site. The study indicates that there are no statutory sites designated for their nature conservation value are present within 2km of the site

There are currently no records of protected species within the site boundary, although there are records of nine protected species within 2km of the site.

While the site contains habitat that is potentially suitable for protected species, field surveys would be required to confirm the presence of these species. Should any of these species be present on site then future development could represent a direct impact to that species. However, there is currently no evidence to assume that the site cannot either avoid any impacts through the masterplanning stage, or meet the mitigation requirements associated with each species.

Species-rich or mature hedgerows within the site should be retained within any development to act as green corridors for protected species such as bats.

Transport

The site benefits from relatively good bus connections and cycle facilities. The site is also situated in close proximity to facilities in the centre of Borehamwood and there are several amenities located within walking and cycling distance, such as retail, employment, health and community facilities. The Hertswood Secondary School is located adjacent to the southern boundary and is therefore in walking distance of the site.

Pedestrian

There is no footway bordering the site on Cowley Hill. However, a three metre segregated footway/cycle path runs along the western side of Cowley Hill adjacent to the site. The path crosses over onto the eastern side of Cowley Hill at a toucan crossing just south of the junction with Hartford Road outside Hertswood School. The segregated facility then continues south on the western side of Cowley Hill and crosses Potters Lane at another toucan crossing. The path then continues into the centre of Borehamwood.

Cycling

On Cowley Hill there is an existing three metre segregated footway/cycleway that runs along the western side of Cowley Hill from Gateshead Road to the north of the site to Hertswood Secondary School. The facility then continues from the secondary school to the B5378/A5135 roundabout, approximately 1km away. From here, continuing on the B5378 Shenley Road, there are short on-road cycle lanes on the approaches to the B5378 Shenley Road/Eldon Avenue roundabout which is a further 300m south linking with the Tesco superstore. The cycle path continues along Elstree Way allowing access to the Venue leisure centre, the library and the strategic employment area.

Bus services

Bus routes 655 and B3 directly connect the site with the Tesco Extra store in Borehamwood. Journey times typically take approximately five minutes.

Rail

Elstree and Borehamwood Rail Station is the closest main line rail station to the site and is located approximately 2km to the south, a walking time of 25 minutes or a cycle time of nine minutes.

Noise

An initial noise assessment report has been prepared by Scott Wilson and finds that the site falls within noise category NEC B and is therefore suitable for residential development.

Air Quality

The proposed development is unlikely to result in a significant increase in traffic related air pollution along the proposed routes. An initial assessment by Scott Wilson has determined that the annual mean NO₂ and PM₁₀ are below 40µg/m³ and therefore acceptable for development.

Flood Risk

The Environment Agency's flood map indicates that the site lies within Flood Zone 1 (less than a 1 in 1,000 chance of fluvial flooding in a calendar year). There is a small unnamed watercourse that runs through the site in a north-easterly direction and discharges surface runoff to a pond located near to the eastern site boundary, on the eastern side of Silver Hill in close proximity to the Silver Hill Cottages.

Riparian Zone

For ordinary watercourses in the area, Hertsmere Borough Council is the responsible drainage authority, with permissive powers to maintain local watercourses. The Hertsmere Borough Council byelaws are more onerous than the Environment Agency requirements, as they stipulate that no development shall take place within nine metres of the landward toe of the watercourse bank where there is an embankment.

Drainage

Surface Water

Space will need to be set aside across the development to facilitate the management of storm water generated by the development. Any site run-off will be required to be attenuated to the Greenfield run-off rates. The Environment Agency maps indicate that whilst the site is located within a Catchment Abstraction Management Strategy (CAMS) area, it is not situated within a groundwater Source Protection Zone (SPZ). It is therefore likely to be feasible to use infiltration systems to discharge non contaminated surface water runoff from roof areas, providing that the infiltration systems are not situated in areas where clay or contaminated ground is present.

Foul Sewerage

The Drainage Strategy will determine surface water attenuation requirements and present an outline drainage system. The Drainage Strategy will follow the principles of PPS25 and best practice, seeking to employ SuDS across the site to meet the discharge requirements for the site. In addition the Drainage Strategy will also propose appropriate maintenance and adoption measures, to enable the storm water management system to be adopted and/or maintained.

Thames Water have stated there is insufficient spare capacity for foul water drainage, and that they are planning increased works capacity to allow for some future growth in the catchment. It would need to be determined if the specific growth considered for Borehamwood has been included in this figure.

Archaeology












An archaeological desk based assessment will need to be undertaken as part of any development proposals, however, initial findings suggest that sites are generally of relatively low archaeological value. It is not considered that there are any archaeological features, which would affect the deliverability of the development.

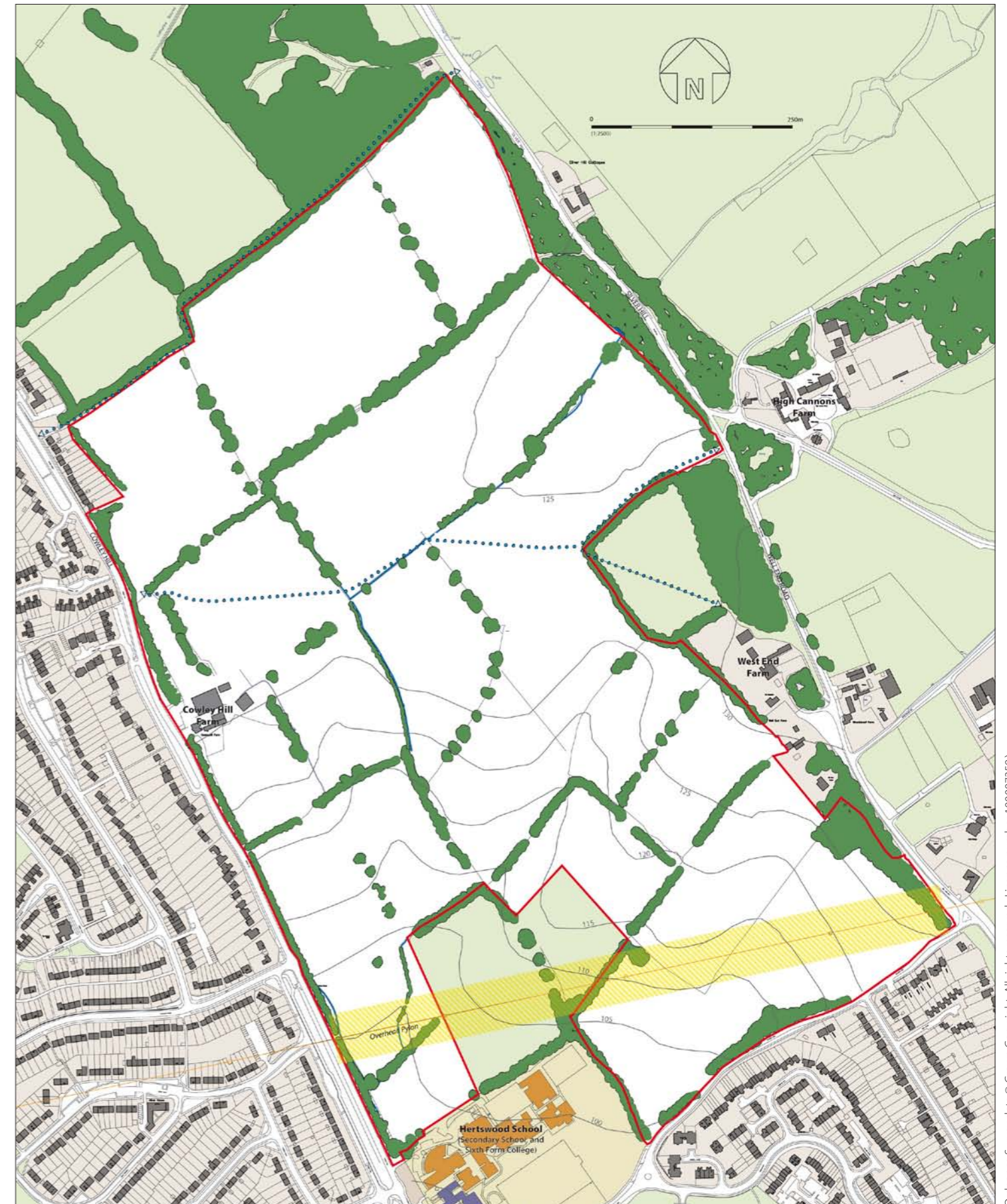
Constraints & Opportunities

Utilities

Investigations have been undertaken to ensure that there are no constraints in respect of the availability of services for the proposed development, principally gas, electricity and water. A summary of the findings is set out as follows:

- High voltage overhead transmission lines pass through the site, which will sterilise a portion of the site.
- Off-site improvements likely to be required to potable water and foul network.
- Medium-pressure gas main situated in close proximity to the site, which increases likelihood of supply without major reinforcement.
- Off-site water pumping stations do not need reinforcement.
- 33kV substation located in vicinity that may be capable of supplying proposed development.
- Telephone Exchange located within 1.5 miles of site.

KEY	
	Site Boundary
	Existing Trees and Hedgerows
	Overhead Electricity Pylon (50M Easement)
	PROW Footpath Through Site
	Watercourse
	Hertswood School
	Leisure Centre
	Existing Surrounding Buildings
	Surrounding Residential Development
	Surrounding Open Space
	Contours



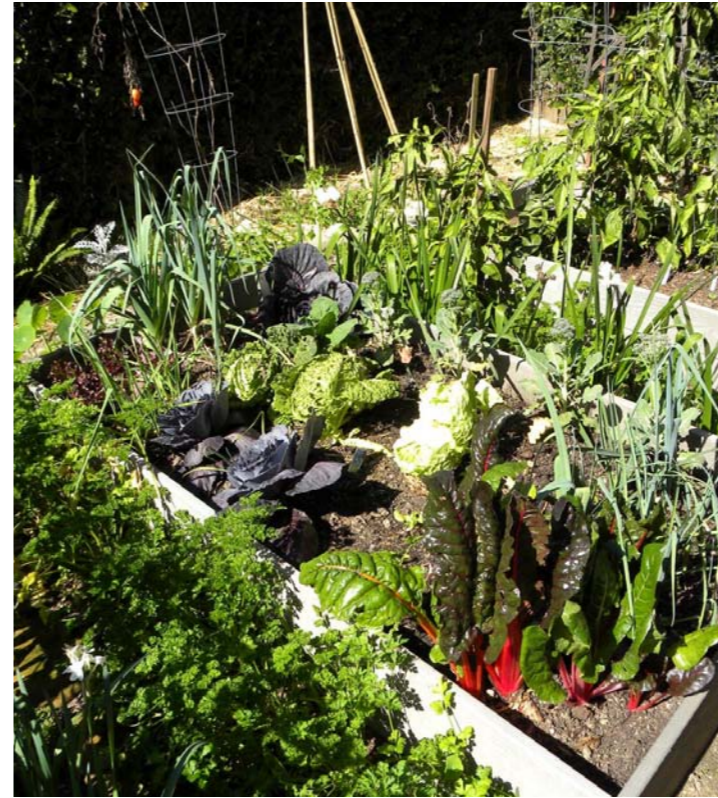
Constraints & Opportunities Plan (not to scale)

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Vision

The vision for the land east of Cowley Hill development aims to create an aspirational and sustainable place for living and working which is locally distinctive and creates a positive sense of place. The vision will be achieved through addressing the following aims:

- The creation of a sustainable environment for living and working with proposed mixed uses and sustainable connections to the existing town centre and employment areas.
- A sustainable development which responds to best practice and the criteria of the Code for Sustainable Homes; to minimise energy use, sustainably manage water, responsible source materials and manage waste and ecology.
- A new neighbourhood with varied character that responds to the locally distinctive vernacular and built context to reinforce a distinct sense of place.
- Retention of the existing natural landscape structure which has shaped the morphology of the masterplan as a direct response to the site context.
- A development which preserves and enhances biodiversity by retaining natural features on the site and reinforcing them by creating opportunities for new habitat areas.
- To encourage and enhance the opportunities for sustainable movement, through the provision of new linkages to the neighbouring facilities; including the employment areas.
- Provision of a green infrastructure network linking through the site to promote sustainable movement by bus, cycling and walking.
- To create a sustainable mixed community providing a balance of housing tenures.



General Development Principles

The development proposals set out on the following pages reflect current government guidance on creating high quality development and improving the design quality of the urban environment and in particular draw upon guidance within the following documents:

- NPPF: National Planning Policy Framework (2012)
- By Design (2000) CABE
- Manual for Streets (2007)
- Better Places to Live: A Companion Guide to PPG3 (2001)
- Urban Task Force Report - Towards an Urban Renaissance (1999)
- Planning for Sustainable Development: Towards Better Practice (1998)
- Sustainable Settlements: A Guide for Planners, Designers & Developers (1995)
- Design & Access Statements; How to Write, Read and Use Them' CABE

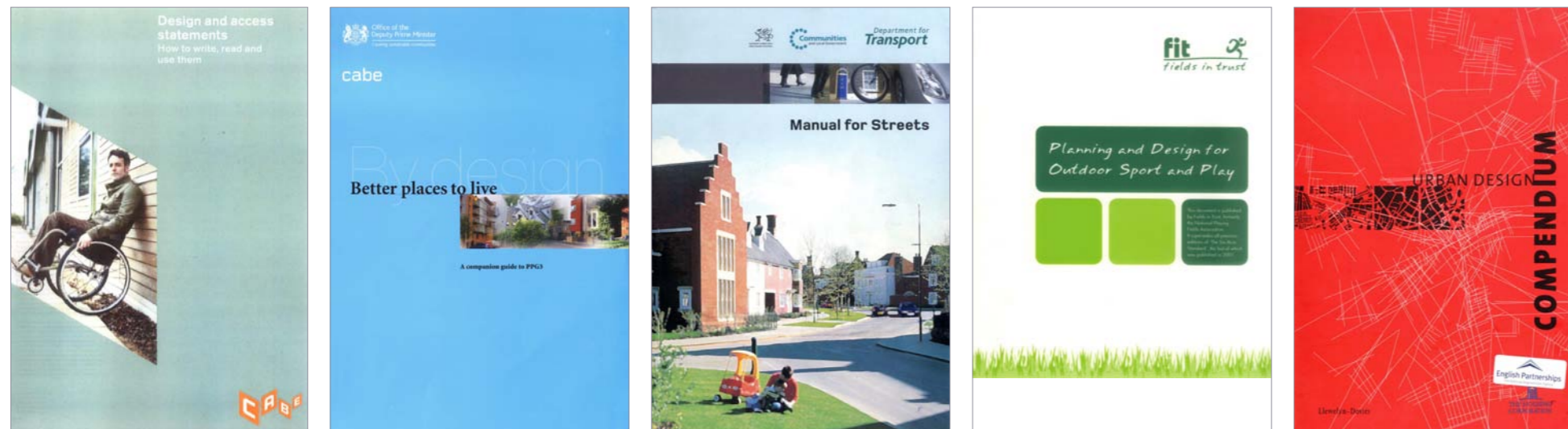
The above set out objectives to create sustainable and well designed efficient developments, planned to respond positively to local context and promote environmentally friendly activity patterns.

To this end an opportunity exists to produce a unique development proposal. The scheme should respect its setting and strive for quality in design of the built environment, townscape and landscape. Design of the public realm should be paramount; creating a sense of place that reinforces civic pride and promotes a community spirit.

The principal points to consider in meeting these objectives are:

- **Identity:** Creating an environment that has its own sense of identity whilst retaining positive characteristics of its local environment.
- **Legibility:** Making a place that people can understand and negotiate with ease.
- **Permeability:** Creating sustainable connections within the development and to the wider area.
- **Sustainable Transport:** Encouraging walking and cycling and making public transport widely available to reduce social exclusion.
- **Energy Conservation:** Settlement designed to reduce resource consumption and promote the use of environmentally friendly materials.
- **Landscape Enhancement:** Safeguarding and enhancing the existing landscape framework and mitigating the impact upon existing wildlife.
- **Sustainable Drainage:** Provision of SUDS designed to blend with the existing landscape features.

These principles have influenced the way in which the proposals for land east of Cowley Hill, Borehamwood have been evolved.



Publications referred to for guidance

Masterplan Framework

The masterplan framework has evolved from an understanding of the site constraints and opportunities and best practice design guidance, which have helped structure and form the layout.

The key development principles are:

- Provision of a mixed use community including a new primary school, residential, mixed uses and local centre.
- To provide a visually strong frontage character along Cowley Hill and a positive approach into the development by the use of distinctive high quality architecture and landscape.
- Development will protect and front the significant existing hedgerows and trees which form wildlife corridors.
- Reinforced landscaping to the north and eastern boundaries with planting of new hedgerows and community woodland.
- Site access from Cowley Hill.
- Green infrastructure led approach to form network of sustainable movement routes for pedestrian, cycle and bus movement, using the existing north / south hedgerow lines as a movement spine to link all the proposed neighbourhoods to Hertswood School to the south.
- Provisions of children's play facilities within secure and overlooked areas of public open space.
- A variety of perimeter block sizes are provided, which provide permeability for vehicles and pedestrians.
- Development with a series of key spaces that will aid legibility.
- The character of the north and eastern development parcels is low density development to limit visual impact from views from surrounding area. The development is grouped in low density neighbourhoods each focused around a village green.
- Medium and higher density development located to the south and west of the scheme around the school and fronting Cowley Hill.
- Sustainable drainage to be provided through a network of interconnecting swales which run through the landscape corridors.
- Where development fronts the countryside edge this is served by non-adopted private drives to avoid light pollution from adopted lighting.

Summary of the Key Points:

- **Up to 950 Residential Units**
- **A mixed use local centre (0.44ha)**
- **Primary School (1.7ha)**
- **Mixed use employment (1.05ha)**
- **Community woodland to north and east boundaries.**
- **Informal open space, childrens play areas, sports pitches and allotments**

KEY	
	Site Boundary
	Proposed Residential Development
	Proposed Mixed Use Development
	Proposed School Site
	Attenuation Pond
	Proposed Woodland Planting & Trees
	Public Open Space
	Green Infrastructure Pedestrian/Cycle Routes
	Primary Vehicular Loop Road
	PROW Footpath Through Site
	Potential Vehicular Site Access
	Proposed Position Of LEAP
	Proposed Position Of NEAP
	Surrounding Residential Development
	Surrounding Open Space
	Existing School & Leisure Centre
	Existing Surrounding Buildings
	Existing Trees and Hedgerows
	Overhead Electricity Pylon
	Contours



Masterplan (not to scale)

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Movement Framework

Vehicular Access

Two points of access are proposed off Cowley Hill linking to a primary loop road through the development. Initial work undertaken by Scott Wilson indicates that this could take the form of a roundabout at each junction.

Bus




The existing bus service is to be routed through the development to offer convenient access for all the proposed neighbourhoods. It is envisaged that the bus will enter the site off Cowley Hill and circulate around the primary loop road exiting back onto Cowley Hill.

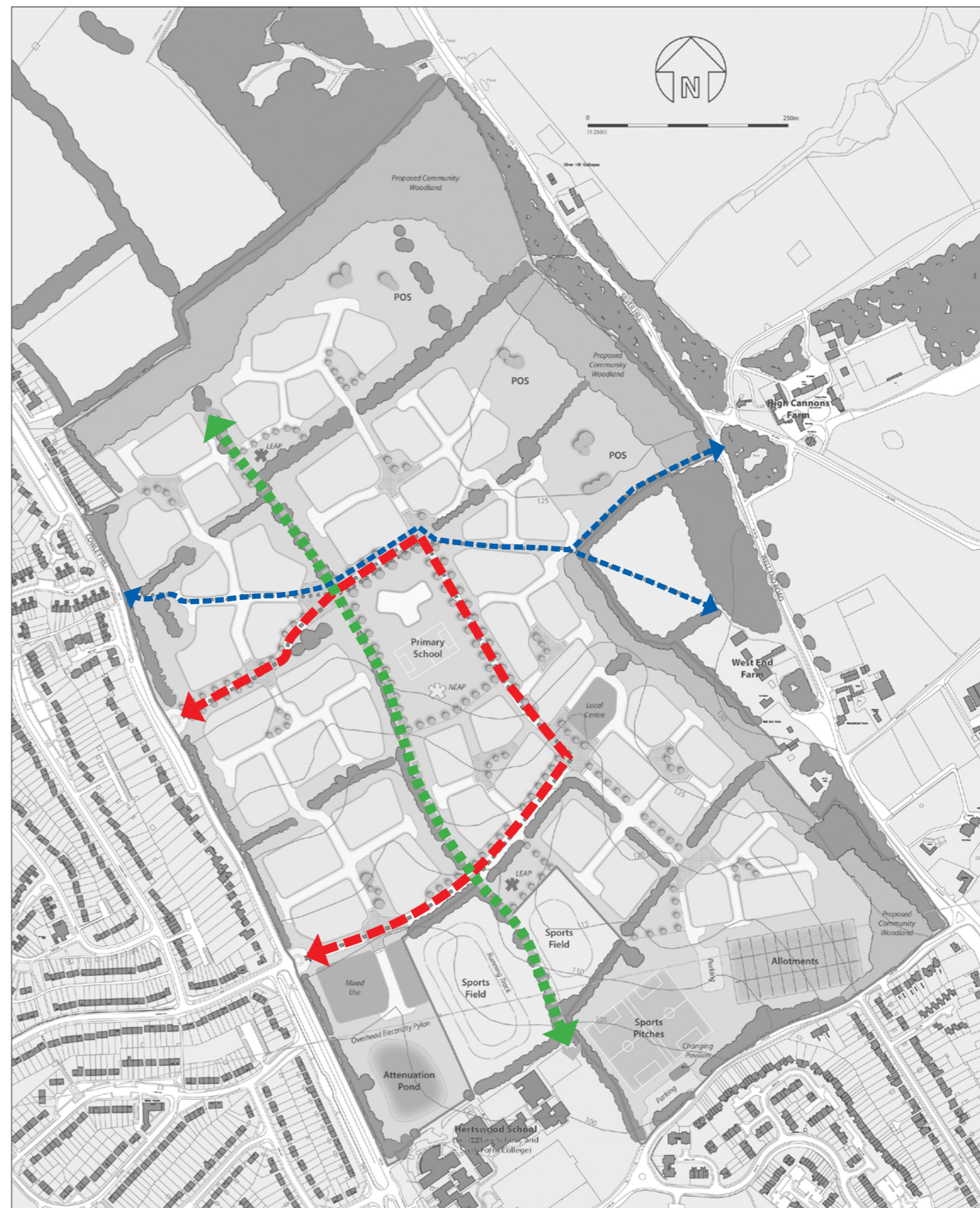
Pedestrian / Cycle Facilities

A green infrastructure approach to the masterplan has established a network of dedicated pedestrian and cycles routes linking the neighbourhoods. The main pedestrian and cycle links within the site are to be formed along the existing lines of retained field hedgerows which can form a spine for sustainable movement through the scheme running north to south. The green infrastructure offers the potential to link with Hertsmere School and the Leisure Centre to the south providing a route for sustainable movement.

Internal Highway Layout

The internal highway layout has been designed to automatically promote low speeds of 20mph and below without uncomfortable traffic calming features or reliance on an oversupply of obtrusive traffic signs. The internal road arrangement and design will be designed to respond to the design criteria set out within best practice guide 'Manual for Streets'.

KEY	
	Primary Vehicular Loop
	Green Infrastructure Pedestrian/Cycle Route
	Public Right of Way Footpath



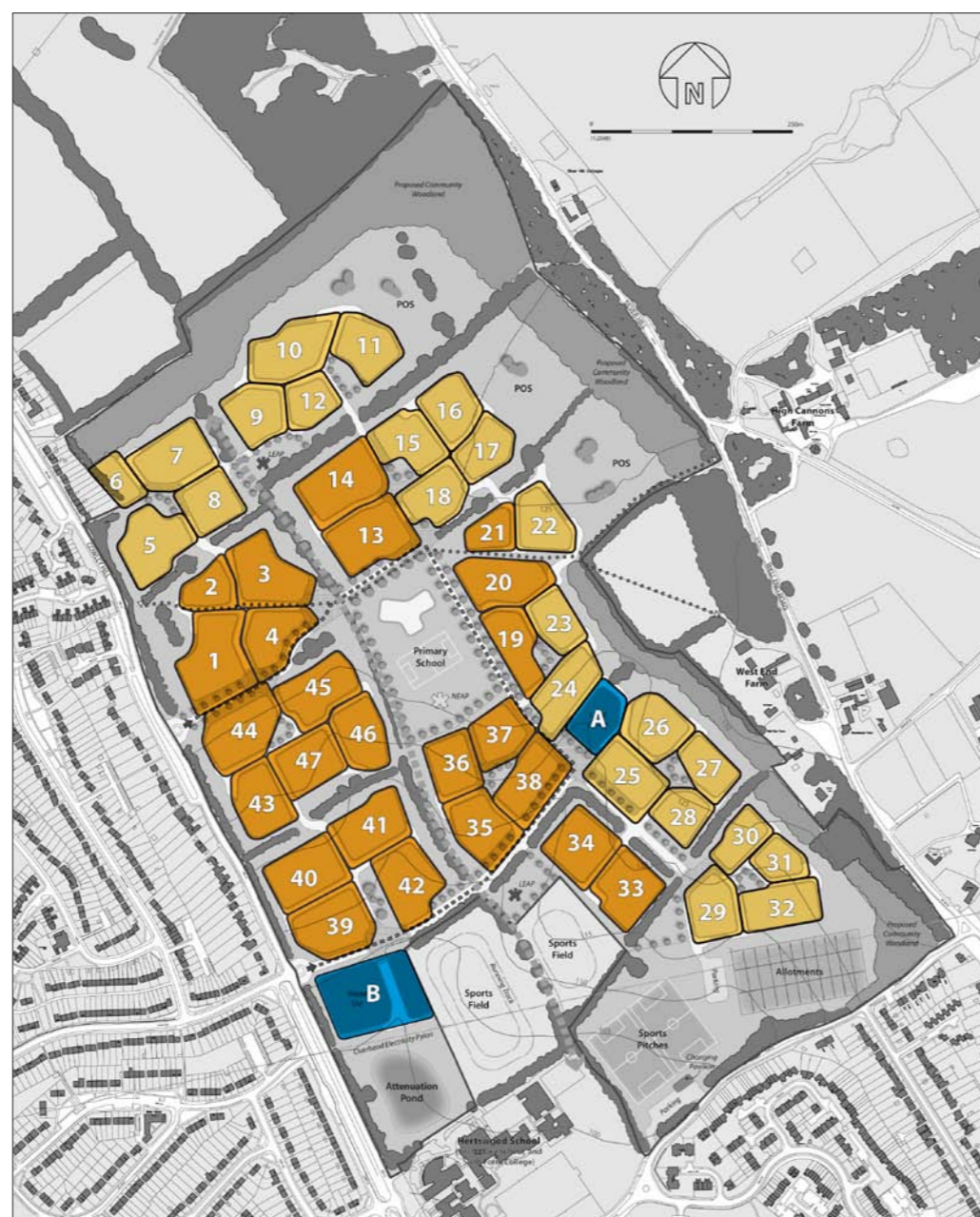
Movement Framework Plan (not to scale)

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Site Capacity

The assessment of the residential capacity of the site has been made based upon a range of densities to suit the varying character and locations of the land parcels. Based upon this initial assessment the site has the capacity for up to 950 dwellings (including much needed affordable housing), with densities ranging from 32 dph up to 42 dph.

As assessed by the council in preparation of their SHLAA and detailed in this concept brochure there are no overriding constraints that would otherwise preclude development in the plan period. Timescales for delivery of housing completions will be dictated in part by the timing of any greenbelt review and thereafter the granting of subsequent planning permissions. However, the site is developable and can contribute to meeting identified housing needs in a sustainable location during the plan period.



KEY	
	Low Density
	Medium Density
	Mixed Use/Local Centre

Parcel Density Plan (not to scale)

Parcel	m ²	ha	Density	Dph
1	8727.25	0.87	42	37
2	3441.46	0.34	42	14
3	6961.09	0.70	42	29
4	5708.91	0.57	42	24
5	6253.86	0.63	32	20
6	2703.14	0.27	32	9
7	6383.28	0.64	32	20
8	4584.12	0.46	32	15
9	4881.91	0.49	32	16
10	6924.01	0.69	32	22
11	5198.61	0.52	32	17
12	3659.21	0.37	32	12
13	7215.82	0.72	42	30
14	7605.59	0.76	42	32
15	5159.68	0.52	32	17
16	4847.62	0.48	32	16
17	4211.5	0.42	32	13
18	4789.92	0.48	32	15
19	4841.24	0.48	42	20
20	6157.75	0.62	42	26
21	2904.89	0.29	42	12
22	5028.82	0.50	32	16
23	3931.65	0.39	32	13
24	5619.07	0.56	32	18
25	6355.05	0.64	32	20
26	5255.51	0.53	32	17
27	3923.07	0.39	32	13
28	3725.64	0.37	32	12
29	5017.92	0.50	32	16
30	3512.3	0.35	32	11
31	2948.4	0.29	32	9
32	5305.73	0.53	32	17
33	5572.05	0.56	42	23
34	5777.19	0.58	42	24
35	5933.57	0.59	42	25
36	4591.09	0.46	42	19
37	4618.46	0.46	42	19
38	6130.52	0.61	42	26
39	6954.03	0.70	42	29
40	6444.92	0.64	42	27
41	6074.78	0.61	42	26
42	6279.38	0.63	42	26
43	5499.32	0.55	42	23
44	7468.06	0.75	42	31
45	6149.97	0.61	42	26
46	5144.45	0.51	42	22
47	5562.83	0.56	42	23
A - Local Centre		0.44		
B - Mixed Use		1.05		
Total		26.69		948

Land Parcel Schedule (not to scale)



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