

06 Masterplan Framework

This chapter illustrates and explains how the Concept Masterplan has evolved through the exploration of its component parts relating to green infrastructure, access and movement, land use and building heights. This exploratory process has led to a greater understanding of the potential of the Site and has instilled confidence in fixing the important spatial parameters to be consented through the Outline Planning Application. While the framework plans do not form part of the Outline Planning Application, they highlight the level of design thinking that sits behind the Parameter Plans. Beyond the Outline stage, they will inform design codes and detailed design proposals.

Overview

The Masterplan Framework, adjacent, illustrates a composite approach to:

- A landscape-led masterplan that responds to and protects existing landscape character and features while introducing a diversity of spaces and places at East Hemel
- A movement network which prioritises active travel and public transport connectivity while recognising the role of the private car, and integrates East Hemel into its wider context
- The distribution of land uses which co-locates activity and intensity in two local centres and a network of smaller community cores within two residential-led neighbourhoods, and introduces a range of employment typologies
- A compact urban form with a fine grain network of blocks and streets
- An approach to heights and typology which supports sustainable urban living, transport orientated development and diverse communities

The following sections explain the core and interconnected layers of the masterplan framework, below, and illustrates how this design evolution has informed the parameters applied for in the Outline Planning Application:

- Green infrastructure framework
- Access and movement framework
- Land use framework
- Heights framework

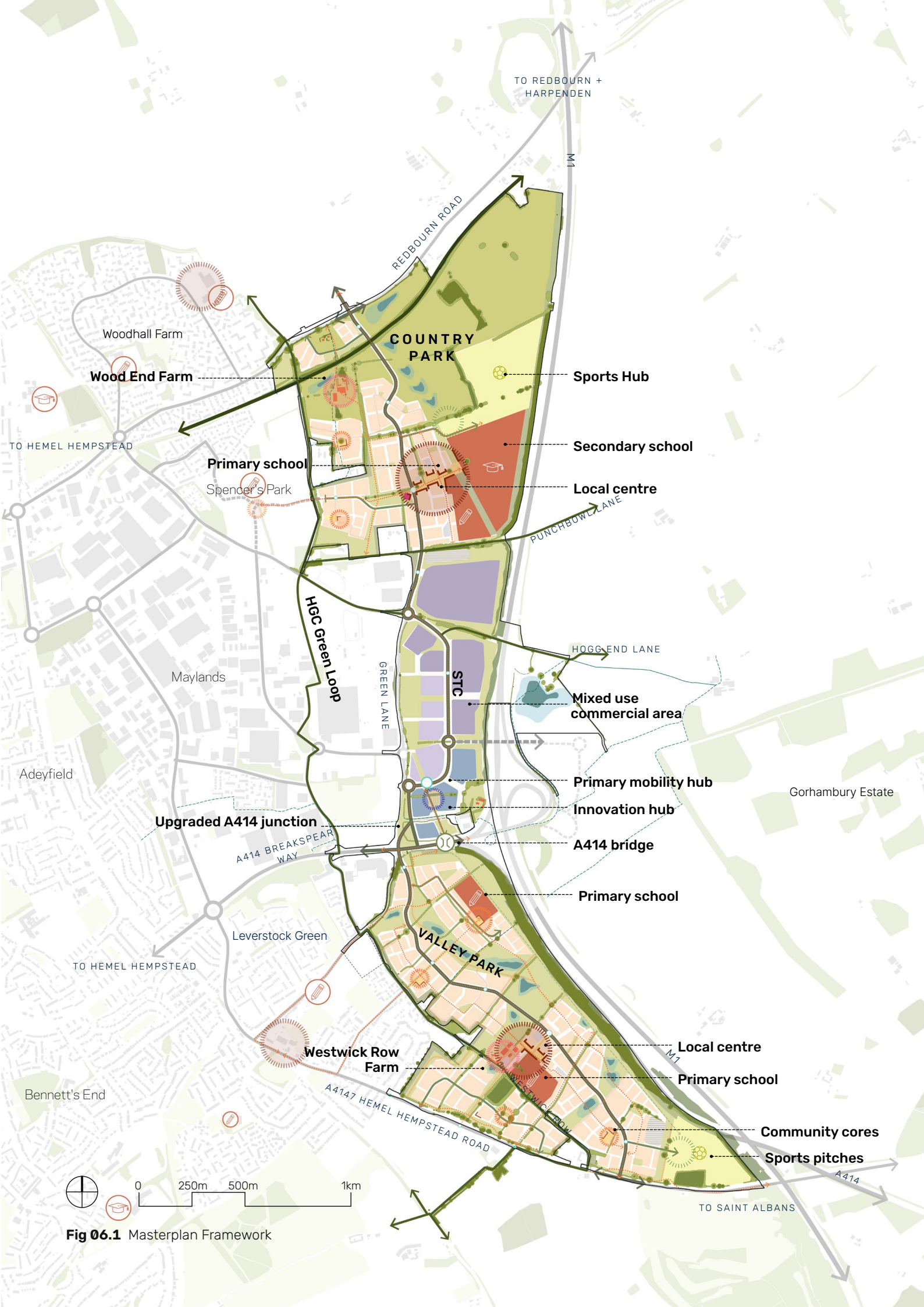


Fig 06.1 Masterplan Framework

Green Infrastructure Framework

06.2.1

Overview

The Green Infrastructure Framework is founded on an understanding of place. The Crown Estate's vision of nurturing our natural world, long-term environmental value, and community benefit—shaping a connected, resilient network that integrates the development with its landscape setting and is capable of supporting a thriving, well-connected community.

The framework brings together a range of open space typologies, habitat areas, connecting corridors, and edge landscapes into an integrated network that meets recreation, amenity, biodiversity, drainage, and movement needs. It ensures access to parks, natural spaces, community squares, and play areas for all. It embeds an active travel network, complementing objectives to prioritise walking and cycling, and integrates strategic HGC active travel links including the HGC Green Loop, Nickey Line, and lanes.

These components will work together to serve the community and the natural environment and ensure opportunities for activity, nature, and connectivity are well distributed across the Site. This section describes each component, and how they have informed the Green Infrastructure Parameter Plan.

The Green Infrastructure Framework for East Hemel provides:

- Over 45% of the Site area as open space
- Over a third of the Site area west of the M1 as publicly accessible open space
- A public open space network which includes playspaces, parks, gardens, productive landscapes, green corridors, community sports and SANGs—linking key destinations such as centres and schools
- Amenity space and landscape setting for the commercial area, including a local square at the heart of the innovation hub
- Landscape edges to sensitive boundaries including with transport infrastructure, existing woodland and hedges, and adjacent properties and neighbourhoods
- Opportunities for areas focused on habitat creation and nature conservation with limited public access

	Application boundary
	Natural, Semi-Natural Open Space (including SANGs)
	Neighbourhood Parks
	Local Squares
	Sports Areas
	Allotment and Productive Landscapes
	Green links for community & ecology
	Edge Landscapes
	Sustainable Transport Corridor
	Habitat creation opportunity areas
	Ponds

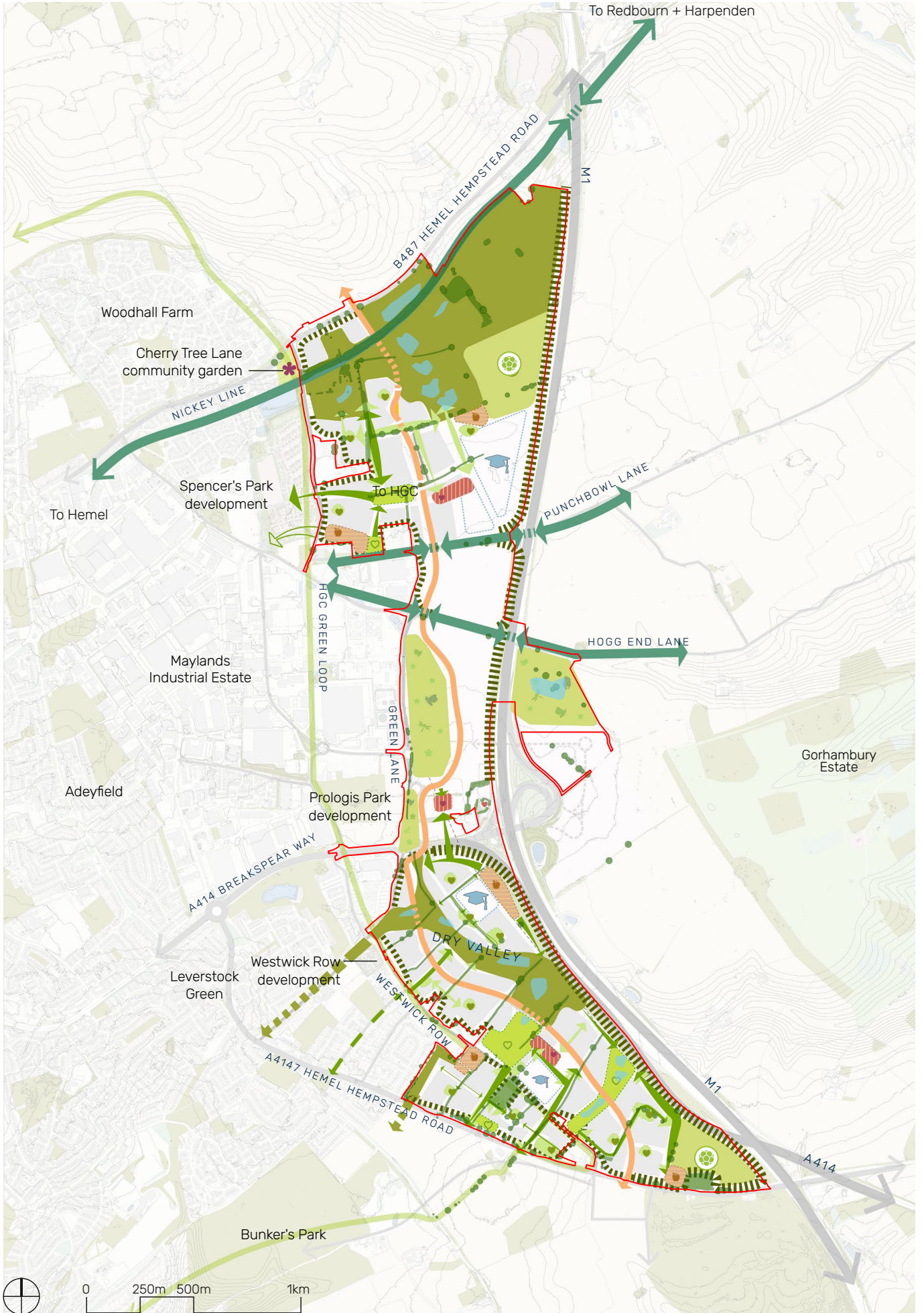


Fig 06.2 Green Infrastructure Framework Plan

06.2.2

Public Open Space Provision

The Green Infrastructure framework includes a provision for public open spaces (POS). These spaces, designed as a connected network, serve a range of purposes from encouraging activity and everyday recreation and play to quieter moments with nature, while also contributing to biodiversity, sustainable drainage, and unique site character.

The network is planned as a range of typologies to ensure all residents have convenient access to a variety of spaces, meeting SADC policy standards on provision and access. Typologies of POS at East Hemel include:

- Natural & semi-natural open space (including Suitable Alternative Natural Greenspace (SANG))
- Parks and gardens
- Amenity greenspace
- Allotments
- Sports

The role and function of each typology are described over the following pages.

The public open space provision for East Hemel has been planned on a site-wide basis, reflecting the cohesive nature of the masterplan and its delivery as a single comprehensive application.

This approach has been agreed through the pre-application process with the local planning authorities, acknowledging that while individual allocations (H2 and H4) may show slight variations in open space typology provision, the masterplan as a whole meets—and exceeds—the overall public open space policy requirements for the proposed number of homes.

The SADC Reg 19 policy Public Open Space (POS) requirements and the provision in the Masterplan Framework is summarised below.

Public Open Green Spaces			
	Reg 19 Policy (m²/person)	Required total area for East Hemel (hectares)	Masterplan Framework provision (hectares)
Natural & Semi-Natural	34.6 m ² /person	33.21 hectares	83.9 ² hectares
Parks and Gardens	7.1 m ² /person	6.82 hectares	9.42 hectares
Amenity Greenspace	15.3 m ² /person	14.68 hectares	14.75 hectares
Subtotal of Multi-Functional Green Space	57 m²/person	54.71 hectares	105.9 hectares
Allotments	4.5 m ² /person	4.32 hectares	4.32 hectares
Sports³	N/A	N/A	19.80 hectares
SANGs	8ha/ 1000 population	76.8 hectares	78.59 hectares

NOTES:

1) 1 hectare = 10,000 m²

2) Natural & Semi-natural Open Space areas include SANGs provision

3) Sports provision policy is based on Sport England Pitch Calculator guidance

4) The above areas do not include the outdoor amenity and open space provision in the Commercial Area (H3) as POS requirements are based on residential population and H3 does not include any residential use.

5) The areas do not include the part of the site east of the M1 motorway as the area is proposed for habitat creation with limited access.

6) Area requirements assume a household occupation rate of 2.4 person per dwelling.



Integrated attenuation features, Barton Park



Residential Community Garden



Flexible social space | The Crown Estate's proposed scheme at Wootton, Bedford (CGI)



Lawn areas for picnic



Residential Park | The Croppings, Telford



Outdoor yoga classes | Elephant Park, London



Food growing and educational opportunities



Community orchard

Natural and Semi-Natural Open Space

Natural and semi-natural open spaces form a key component of the public open space network. They are defined in the SADC Regulation 19 Open Space Study as spaces that “support wildlife conservation, biodiversity and environmental education and awareness.”

Through the pre-application process, it has been agreed that SANG provision qualifies as natural and semi-natural open space due to its naturalistic character and multifunctional role. SANG areas are therefore included within this typology.

Natural and semi-natural spaces at East Hemel are designed to connect people with nature while contributing to a wider network of ecological corridors and nature recovery areas. They offer opportunities for informal walking, cycling, quiet enjoyment of the landscape, and awareness of natural systems and environments.

To support biodiversity, the landscape character for these spaces will favour native species, meadow-rich grasslands, and varied woodland edges, with amenity grass limited to areas of active play or recreation. They bring variety and richness to the landscape, from open meadows and damp grasslands to areas of wet woodland, creating seasonal interest and valuable habitats.

Water elements such as ponds will enhance both the ecological function and visual character of these spaces, supporting sustainable drainage while offering moments of calm, reflection, and informal learning.

As a whole, the natural and semi-natural spaces establish an ecological network that supports biodiversity, encourages well-being, and helps embed the new community within its landscape setting.

Suitable Alternative Natural Greenspace (SANG)

SANG refers to new or enhanced greenspaces specifically designed to attract recreational use that would otherwise occur at sensitive designated sites, such as the Ashridge Commons and Woods SSSI and Chilterns Beechwoods Special Area of Conservation (SAC). Their provision is required by SADC policy, as outlined in Chapter 2.

The design of SANGs is guided by principles set out in the Chilterns Beechwoods SAC Mitigation Strategy (2024) and Natural England’s guidance. These include:

- Providing circular walking routes of at least 2.3–2.5 km, with clear wayfinding
- Having a semi-naturalistic landscape character with a range of habitats (for sites over 12 hectares)
- Incorporating gently varied topography which creates interest
- Allowing access for walkers and dogs, with space for off-lead exercise
- Ensuring parking provision where the SANG serves an area further than 400m
- Including low-key visitor facilities
- Offering visual interest points, like water features or viewpoints
- Linking into wider green infrastructure networks and open spaces
- Creating a naturalistic, immersive experience of nature

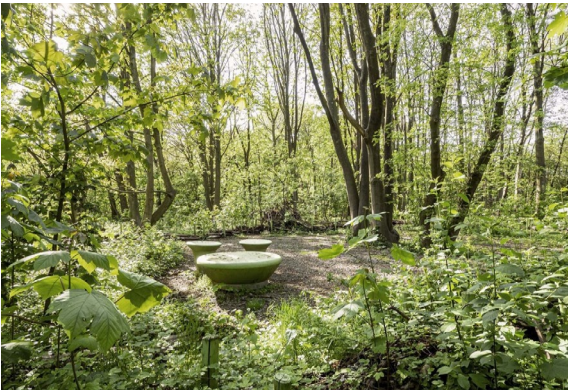
The two large parks proposed in the Masterplan Framework—the Country Park (north) and the Valley Park (south)—form a key part of the site-wide open space strategy and provide SANG for East Hemel. Large-scale, multifunctional spaces with a naturalistic character, the parks will offer accessible, attractive settings for informal recreation—helping mitigate recreational impacts by diverting visitor pressure from the Chilterns Beechwoods SAC—while also providing high-quality public open space for residents and the wider community.



Calcareous grassland



Integration of cycle routes to expand on recreational offer



New woodland planting



Port Sunlight River Park, Liverpool

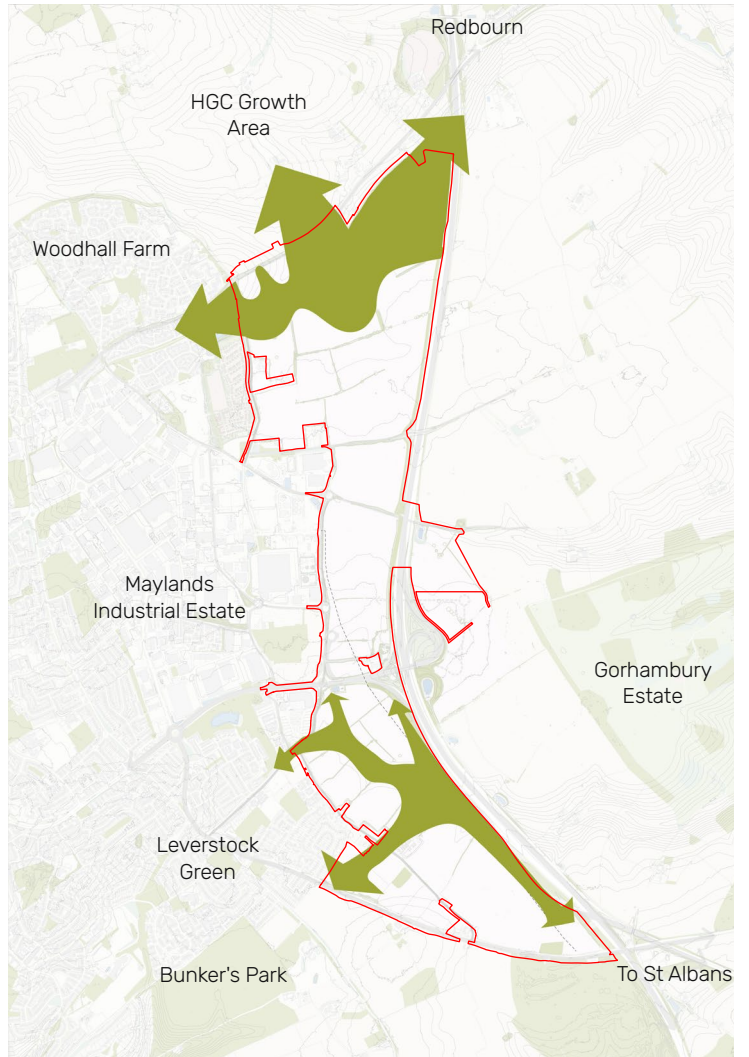


Fig 06.3 Natural and semi-natural open spaces

Shaped by the Site's distinctive dry valley landforms, both parks offer an opportunity to create generous green spaces that support recreation, biodiversity enhancement, heritage conservation, and nature-focused community use. Located at the community's doorstep, they will provide circular walking routes, naturalistic planting, and a welcoming character that encourages everyday use.

Country Park

The Country Park, at 64 hectares (150 acres) will be a landmark green space for East Hemel. Located in the Upper Ver Valley, it responds to topography, conserves the naturalistic character of the valley, and contributes to maintaining a strategic gap between Hemel Hempstead and Redbourn through the creation of a green gateway.

The Country Park will connect the existing neighbourhoods of Woodhall Farm, Swallow Fields, Spencer's Park and the new community, and link via the Nickey Line to Redbourn Village and Hemel Hempstead town centre. It will provide a multifunctional green space with the scale and capacity to support both active community use and a layered experience of nature.

Key features aligned to the defining the Country Park will include:

- Restoration of Wood End Farm as an active visitor destination, with opportunities for leisure, community, retail or educational uses
- A network of leisure walking, cycling, and equestrian paths, including a dedicated 2.5 km circular loop, which does not cross the STC
- A formal level crossing of the STC connecting the east and west of the park
- New and enhanced cycle and pedestrian connections to the Nickey Line as well as links to the new secondary school and Sports Hub
- Protection of existing trees, hedgerows and woodland

- Creation of new habitat areas, such as open meadows, chalk grassland, woodland and wet meadows
- A chain of connected ponds and seasonally floodable wet meadows which provide habitat, sustainable drainage and landscape character value
- A wild swimming pond and wildlife pond

Valley Park

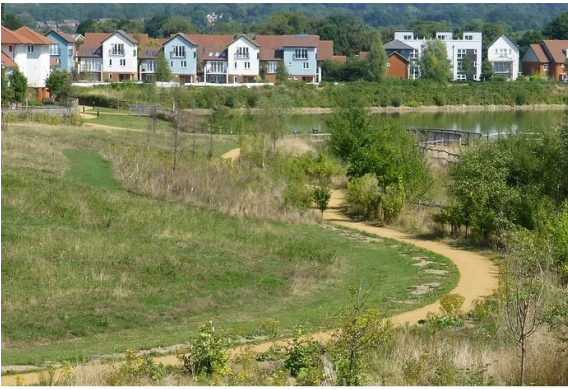
The Valley Park is a 13 hectare (30 acre) greenspace at the heart of the southern neighbourhood, shaped by the natural contours of the Westwick dry valley. As part of the site-wide SANG provision, the park will offer an accessible, nature-rich landscape which supports informal recreation, everyday walking, and meaningful connection with the natural environment.

Key features defining the Valley Park will include:

- A network of walking and cycling routes, including a continuous 2.3 km circular dry walking route aligned with Natural England guidance for SANG, which does not cross the STC
- Protection of existing trees and hedgerows
- A chain of connected ponds and seasonally floodable wet meadows; the will be designed to store water and in high rainfall events the floor of the valley will be temporarily flooded
- Creation of new habitat areas, such as open grass and meadows and wet meadows
- Layered planting and natural boundary treatment to adjacent development to create filtered views



Naturalistic Park and SuDS Pond, | Barton Park, Oxford



Naturalistic park | Watercolour, Redhill



Park on sloping topography | The Croppings, Lightmoor, Telford



Activated farmstead as visitor destination | Dollman Farm, Houlton, Rugby

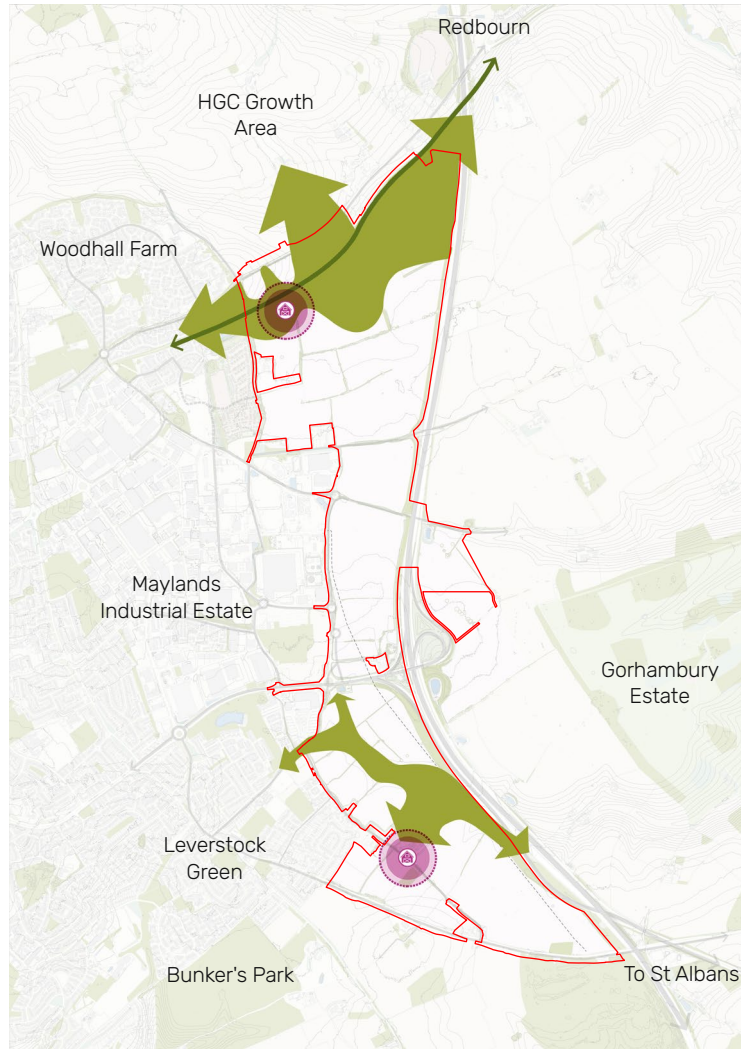


Fig 06.4 Natural and semi-natural open spaces

Parks & Gardens

Parks and gardens will be focal spaces within neighbourhoods, providing accessible, high-quality green areas for informal recreation, play, social interaction, and opportunities to organise community events.

In the northern neighbourhood, the neighbourhood park will occupy a key location at the intersection of active movement corridors, connecting to the local centre and proposed schools to the east, the Country Park via green links to the north, and into the Spencer's Park development to the west. This space will provide both formal play opportunities and flexible areas for community activities, acting as a social and recreational hub for the neighbourhood and a key node in the wider green infrastructure network.

In the southern neighbourhood, two neighbourhood parks will integrate more intensively managed amenity areas as well as sustainable urban drainage systems (SuDS) ponds with permanent water carefully designed to be part of the accessible open space. One is located at the interface with the southern local centre and forms a green connection into surrounding communities, with the other located within a second, smaller dry valley forming a green space between communities.

Amenity Greenspaces

Amenity greenspaces will include pocket parks, local greenspaces and green corridors and will be woven throughout the neighbourhoods. They will provide spaces for informal recreation, doorstep play, and social interaction close to home or work, while enhancing the appearance and character of residential areas.

Each space will be individually designed to create a distinctive focal point within its local neighbourhood, often with a more managed garden character, combining lawned areas with biodiverse planting to support amenity, identity, and ecological value.

Local Squares

Co-located with the proposed local centres, local squares are amenity greenspaces which will be designed as vibrant meeting points for community life, providing dynamic and inclusive spaces for civic activities, local events, and social interaction.

Local squares will create a strong sense of place and a lively atmosphere that supports everyday activities and local economy. They will offer opportunities to host local events and community gatherings, reinforcing a sense of place and belonging.

As a key factor in creating well-used, active and walkable local centres, the squares in both neighbourhoods will connect community spaces within the open space network.

The aim for the public realm treatment of these local squares will be to provide a simple and robust central flexible space suitable for hosting events, framed with trees, seating and biodiverse planted areas which can incorporate raingardens.



Outdoor yoga, Elephant Park, London



The Crown Estate's proposed scheme at Wootton, Bedford (CGI)



Barton Park example of amenity space



Green amenity space, Wolvercote Mill



Urban square, Utrecht Leidsche Rijn

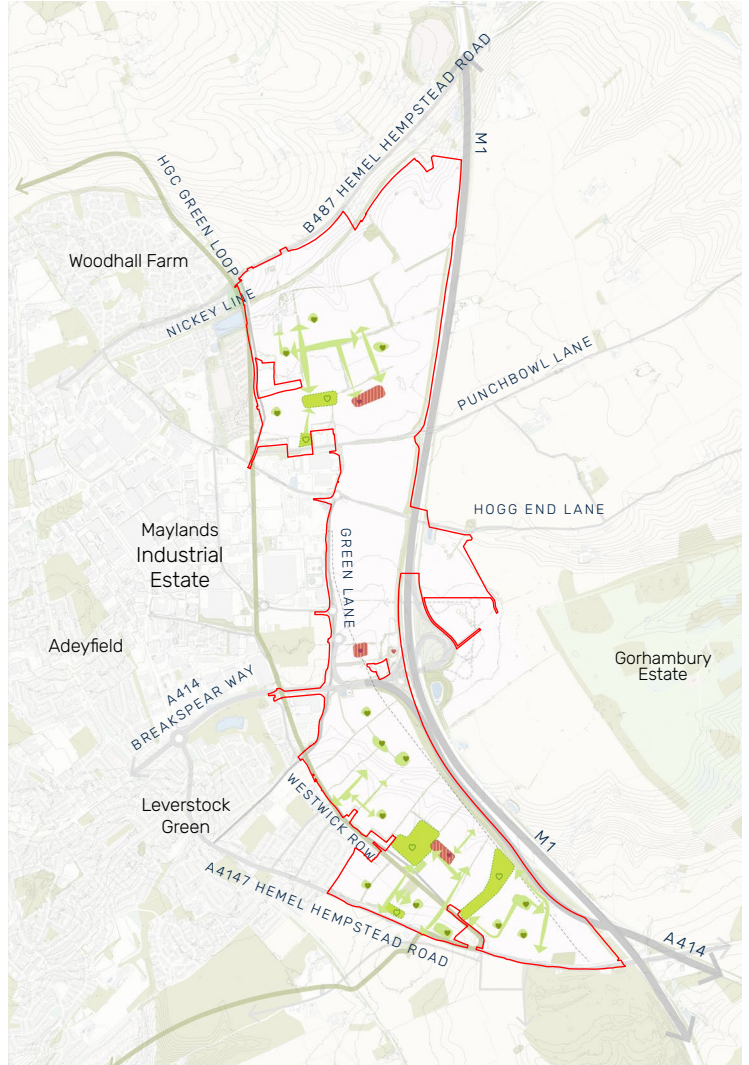
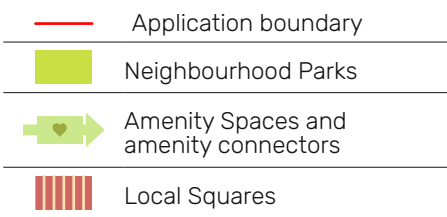


Fig 06.5 Parks & gardens and amenity spaces



Green Corridors

Green corridors are amenity greenspaces which will provide fine-grain connections for both people and wildlife throughout the Site. They aim to strengthen connectivity between on-site and wider off-site desire lines, contributing to a cohesive green network. They will be linear spaces providing public access, amenity, and sustainable drainage, while safeguarding existing vegetation, and providing connectivity between habitats.

The corridors will assist with the retention and protection of existing vegetation on Site. Some will be integrated within public open spaces, others will run adjacent to lanes and along sensitive edges, and some will be retained within development parcels; they will therefore vary in character and width, as described below. Detail of their alignment, width, and design will be developed in future stages.

New green corridors are identified on the Green Infrastructure Parameter Plan and vary in character and width as described below:

- **Wood End Farm corridor** will run over the UKOP gas pipeline easement, linking the Country Park to Punchbowl Lane. It will contain retained trees and hedgerows that can support movement for wildlife, linking the Country Park to Punchbowl Lane. This corridor will have a minimum width of 15m, and will also provide leisure routes, doorstep play and amenity greenspace.
- **Spencers Park corridor** will link three important and distinct spaces in the north: the local square with retained and newly planted trees; the neighbourhood park with integrated retained hedgerows; and a tree lined, bus-only connection to Cherry Tree Lane and Spencer's Park development.
- **Retained hedgerow corridors** will be corridors intended to safeguard vegetation within development parcels. These will have a minimum width of 8m, which includes a 2m offset from the hedgerow on both side for hedge retention, and an additional 4m for new habitat or pedestrian paths. In addition to their landscape character and access roles, these corridors will form part of the site-wide habitat network, supporting wildlife movement and ecological connectivity, further described in Section 06.2.5.
- **Green amenity corridors** will include linear amenity spaces which function as habitat and public connecting spaces, offering amenity such as doorstep play.



Retained hedgerow and trees with maintenance buffers



Green corridor with play-on-the-way



Amenity green includes existing mature trees

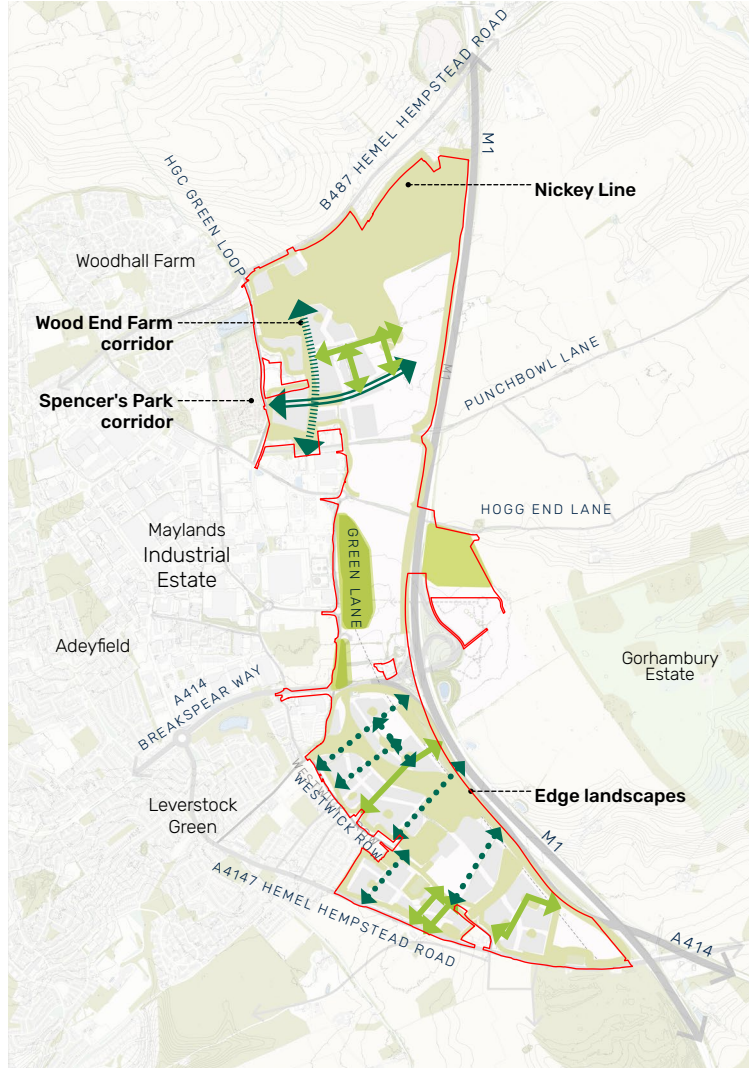
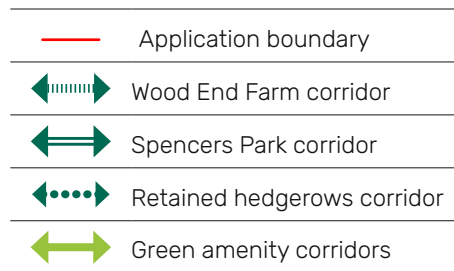


Fig 06.6 Green corridors





Allotments

Productive landscapes including allotments, community orchards and community gardens will provide residents with the opportunity for food growing, supporting healthy and low carbon living and promoting community ownership. Orchards also provide opportunities for seasonal community gatherings (i.e. picnics) while contributing to the Site's biodiversity.

Productive landscapes promote self-sufficiency, environmental benefits, and lifelong learning—serving as social hubs where residents can connect, share knowledge, and foster a sense of community.

Productive landscapes will be located within easy walking and cycling distance of homes.



Multi-generation community engagement



Educational opportunities



Community orchard



Community food growing

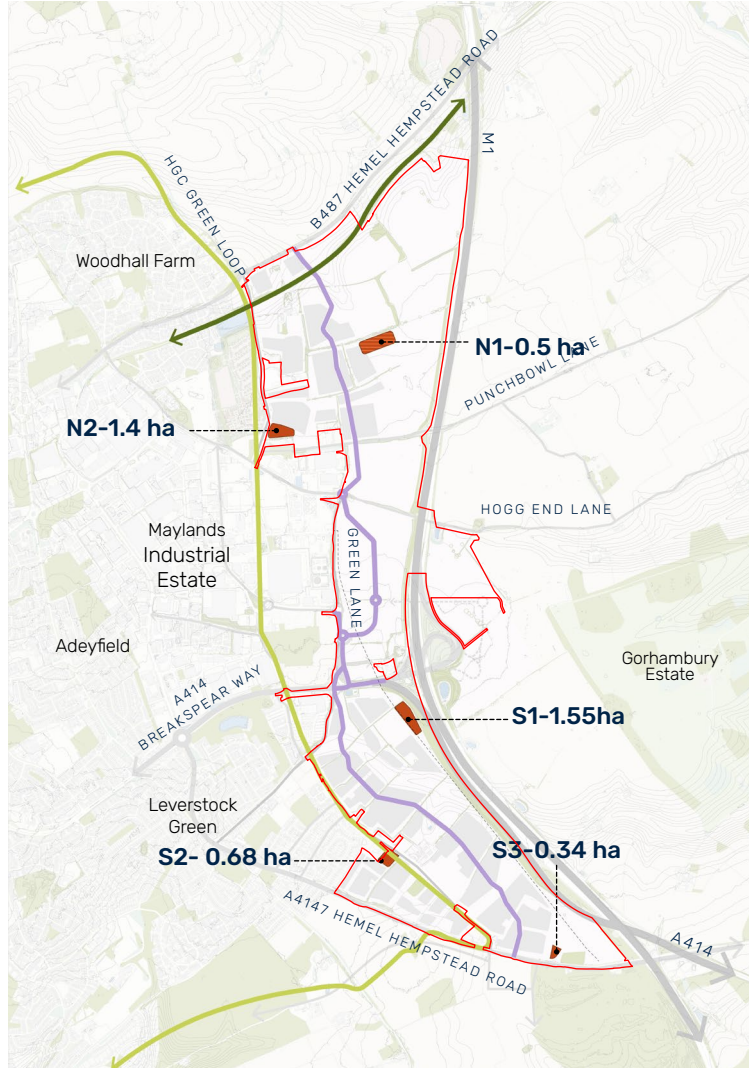


Fig 06.7 Allotments

Sports

Policy Context

The SADC Draft Local Plan policy stipulates that for site allocations H2 and H4, on-site outdoor sports provision should be provided to meet the needs generated by the development. It has been clarified that this provision can be within areas of the Site remaining in the Green Belt.

The East Hemel green infrastructure framework responds to these policy requirements by providing two sports hubs which concentrate sports pitch provision: one within each neighbourhood. These areas are situated on the limited flatter land available.

Demand Assessment and Illustrative Layout

SADC policy requires the Sport England (SE) Playing Pitch Calculator to be utilised to determine the required number and types of sports pitches. SADC provided their SE Calculator results prepared to inform the emerging Hemel Garden Communities (HGC) Infrastructure Delivery Plan (IDP), based on the expected population associated with the 4,000 new homes allocated for East Hemel (comprising H2 and H4) as part of the HGC growth area within the SADC boundary.

The table below shows the types, sizes and quantities of formal sports pitch requirements identified in the SE Pitch Calculator for East Hemel. The exact pitch provision will be determined during detailed design stages and will respond to demands on sports provision in the local area.

Proposals

Each sports hub will include vehicle access, a suitable amount of parking depending on the sports provision which will be determined in later detailed stages, and changing facilities as a minimum.

The northern hub will include provision of indoor sports in the form of a sports hall, with its scale, scope and requirements to be determined prior to its detailed design in response to the emerging HGC Infrastructure Delivery Plan, to ensure a coordinated, cohesive sport offer is delivered that aligns with local needs.

The spatial testing plans opposite have been prepared to test how SE's Pitch calculator can be brought forward within the space identified for playing fields in the Green Infrastructure Framework and Parameter Plan, with flexibility built in so it can adapt to future local requirements.

Outdoor sports pitch sizes & Breakdown based on SADC schedule:

Sport	Illustrative Masterplan provision	Requirement for 4000 homes (for East Hemel H2+H4)
Adult football U17/U18 (106x70m)	2	2.5
Youth football (97x61m)	6	7.1
Mini soccer (43x33m)	7	5.7
Rugby union (130x80m)	2	1.8
Rugby league (122x74m)	0	0.1
Cricket (8-pitch square and 2 winter sports pitches 125.6x164.4m)	2	1.4
Artificial grass pitches		
Sand based (hockey 101.4x63m)	0	0.2
3G (Adult football 106x70m)	1	0.8
Totals	20	19.78



Fig 06.10 Northern sports hub layout test



Fig 06.9 Southern sports hub layout test

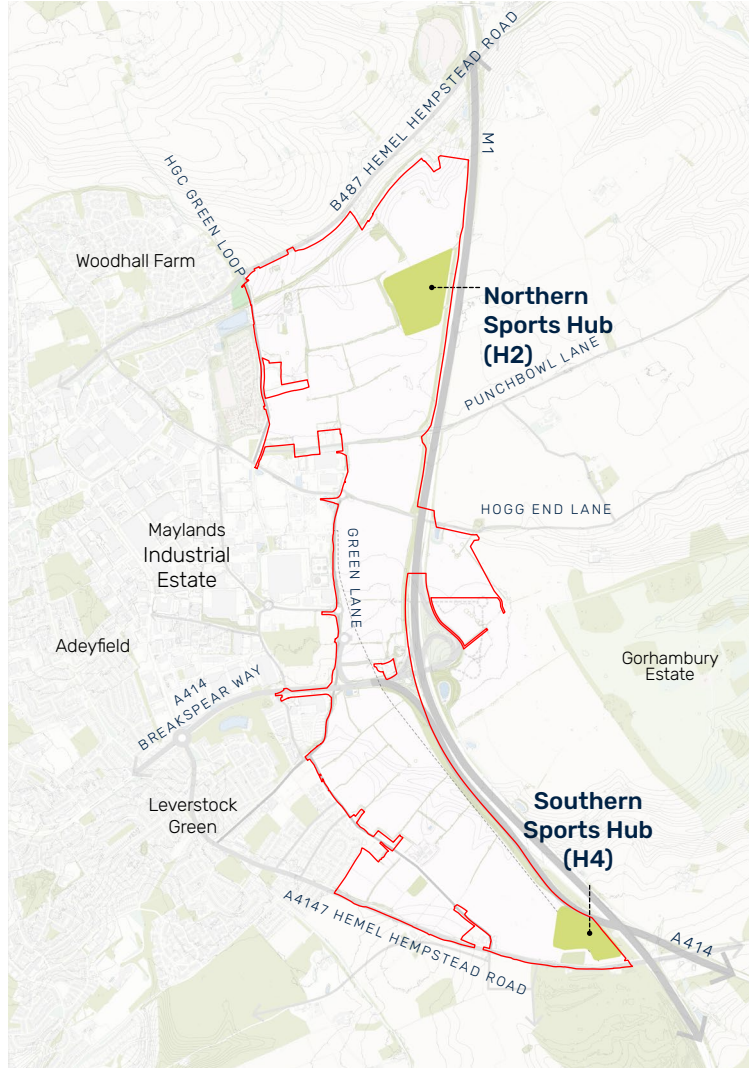


Fig 06.8 Playing fields

Northern sports hub layout test includes:

- ① Carpark
- ② Sport hall with changing rooms
- ③ 2x Adult grass football pitches
- ④ 3x Youth grass football pitches
- ⑤ 4x Mini soccer grass pitches
- ⑥ 2x Rugby union senior grass pitches
- ⑦ 1x Cricket pitch (with 2 winter grass football pitches)
- ⑧ 1x 3G Artificial adult football pitch
- ⑨ 2x tennis courts

Southern sports hub layout test includes:

- ① Small carpark
- ② Changing rooms
- ③ 3x Youth grass football pitches
- ④ 3x Mini soccer grass football pitches
- ⑤ 1x Cricket pitch (with 2 winter grass football pitches) or 1x Adult grass football pitch and 1x Youth grass football pitches

The testing plans above demonstrate an illustrative layout for sports pitches in the north and south. They are one way in which the required provision could come forward. Detailed layouts will be developed at further design stages.

06.2.3

Play

Inclusive and accessible play for all ages is an integral part of the proposals for East Hemel. A range of play types, from informal features to larger equipped play areas and neighbourhood scale play which provides for older children and teenagers, will be created in-line with SADC emerging Local Plan requirements.

Play provision will be distributed across the Site to ensure all residents are within suitable walking distance of neighbourhood and local equipped play spaces. The largest spaces, co-located with farmsteads, are envisaged as destinations which may attract visitors from the surrounding areas.

Play areas will be positioned to benefit from natural surveillance by surrounding homes, and will be connected into the green space network. They will be carefully integrated into parks, making use of natural features and materials and supporting opportunities for 'play on the way.' Youth play and socialising spaces will be integrated in each neighbourhood.

Additional Opportunities for Sports and Play

Alternative opportunities for sports, play and recreation have been explored in addition to emerging Local Plan requirements. This aims to avoid duplication of existing and emerging provision, and to provide inclusive alternatives for active lifestyles.

Based on information from Sport England Active Lives participation data, community asset mapping and public feedback received during engagement events, the following opportunities have been identified for further consideration at future detailed stages:

- Padel / pickleball (low barrier, more inclusive alternative to formal sports)
- Outdoor community gym (a social and equitable alternative to indoor gyms)

- Netball / tennis (inclusive and most popular among women and girls)
- Active track (appeals to a broad range of people including runners, walkers, dog walkers, cyclist, can be considered within Country / Valley Park).



Play providing range for all abilities



Play at the door-step



Naturalistic adventure play