E3.1

ES Non-Technical Summary

Authored by Avison Young

November 2025

THE CROWN ESTATE

East Hemel

AVISON YOUNG

Environmental Statement Volume 1:

Non-Technical Summary

East Hemel, Hemel Hempstead

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Contents

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Date: November 2025

For and on behalf of Avison Young

1. Introduction

1.1 The Crown Estate (hereafter referred to as the 'Applicant') is seeking outline planning consent for the delivery of a mixed-use residential-led development (hereafter referred to as the 'Development') on a 356.8-hectare (ha) area of land located to the east of Hemel Hempstead (hereafter referred to as the 'Site').

1.2 The proposals for the Development is for the delivery of up to 4,000 residential units, two local centres, up to 53ha of commercial area, country parks, three primary schools, a secondary school and associated infrastructure.

1.2.1 The majority of the Site is located within the administrative area of St Albans City & District Council (SADC); however, a small area of the proposed highways and infrastructure works along the western extent of the Site are located in Dacorum Borough Council (DBC) (approximately 1.3% of the Site is within DBC). SADC and DBC are therefore the relevant Local Planning Authorities (LPAs). The Applicant is submitting a duplicate Outline Planning Application to SADC and DBC at the same time. SADC and DBC will decide whether to grant planning consent for the development falling within each of their jurisdictions.

1.3 The Site comprises of several irregular shaped agricultural fields, several residential and farm buildings including the Westwick Row Farm equestrian centre, the Nickey Line footpath and cycleway along with several roads including Punchbowl Lane, Hogg End Lane, Cherry Tree Lane, Green Lane and Westwick Row.

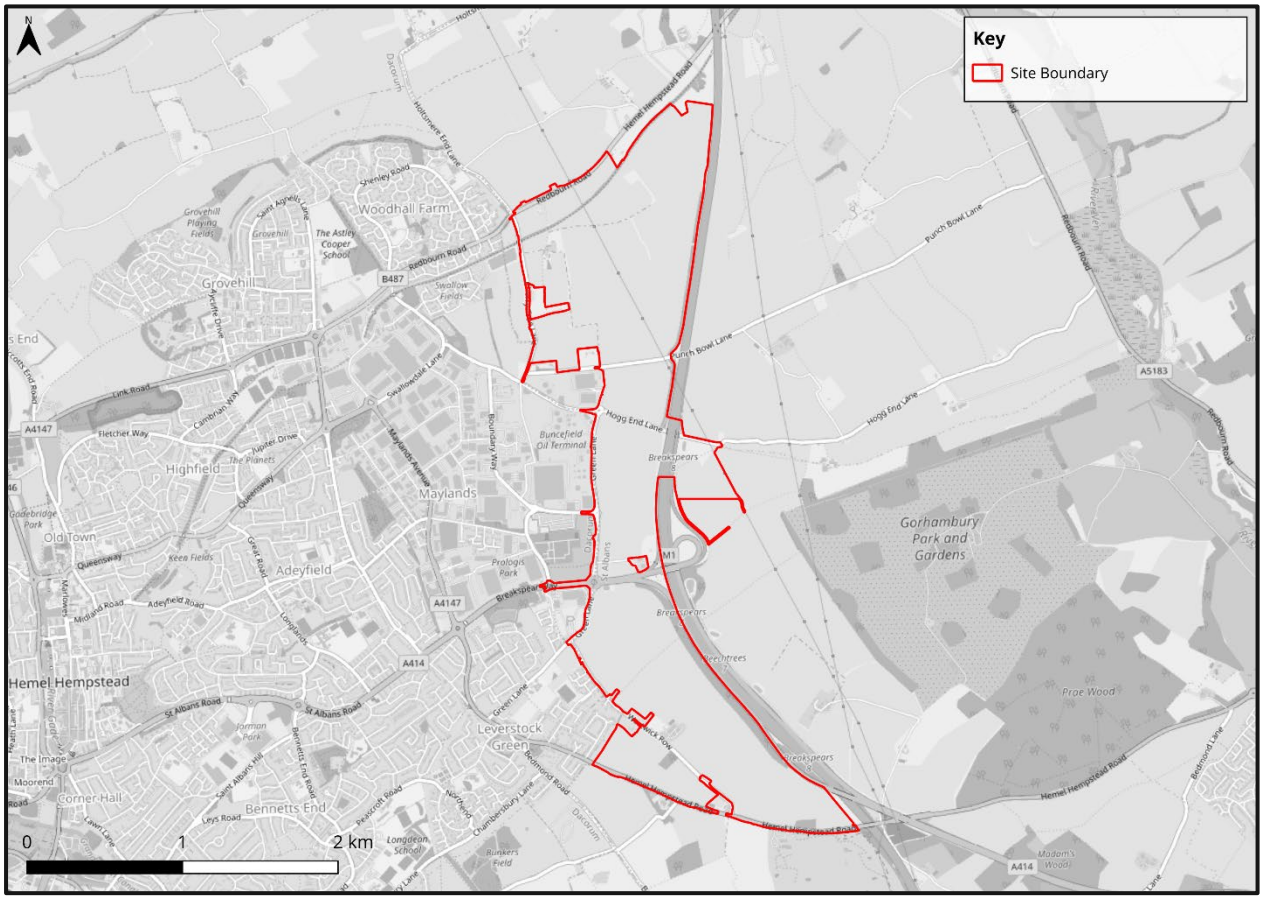
1.4 The Site is broadly bound by:

- The B487 Hemel Hempstead Road (Redbourn Road) to the north, beyond which is agricultural fields.
- The M1 motorway and Junction 8 to the east, beyond which is agricultural fields and the estate of Gorhambury House.
- The A4147 Hemel Hempstead Road to the south, beyond which is agricultural fields and the Centurion Golf Club.
- Hemel Hempstead and Maylands industrial estate to the west, as well as the currently under-construction Spencer's Park residential development and the residential areas of Woodhall Farm and Leverstock Green.

1.5 The Site Boundary Plan used for assessment within the Environmental Impact Assessment (EIA) is shown on **Figure 1**.

1.6 A full description of the Site and its surrounding context is provided in **Section 3** of this Non-Technical Summary.

Figure 1: Site Location and Boundary Plan



Project Background

1.7 East Hemel forms part of the Hemel Garden Communities (HGC) Growth Area. The HGC Programme is an ambitious proposal which will transform and grow Hemel Hempstead and create attractive, sustainable new neighbourhoods to its north and east by 2050. Hemel Hempstead was awarded 'Garden Town' status by the Ministry for Housing, Communities and Local Government in 2019. The Growth Area includes land within DBC and SADC and will provide 11,000 new homes and 10,000 jobs.

1.8 The HGC Concept Framework Plan was prepared to test and inform the emerging policies for the Growth Area within each authority's Local Plan. The Concept Framework Plan is now complete, and is included within the draft SADC Local Plan, which was submitted to the Secretary of State for Housing, Communities and Local Government (HCLG) for Independent Examination on 29 November 2024, and in the draft DBC Local Plan, which was submitted to the Secretary of State for HCLG for Independent Examination on 11 March 2025. The Outline Planning Application has been prepared in accordance with this new policy context.

1.9 As part of the preparation of the Outline Planning Application, an EIA was undertaken. EIA is a formal procedure that must be followed for certain types and scales of development, where the likely significant environmental effects of a development are systematically assessed and reported. The purpose is to ensure that appropriate information regarding the likely significant effects of the Development in question is available for consideration by the relevant Local Planning Authority (LPA), in this case SADC and DBC, consultees and the public, and that the LPA

have this information prior to determining the applications for development. The EIA process can also identify ways in which the Development can be modified, or likely significant adverse effects mitigated, so to reduce or remove likely significant adverse effects and to create and enhance beneficial effects. The legislation relevant to EIA is the Town and Country Planning (Environmental Impact Assessment) Regulations, 2017, as amended (the 'EIA Regulations').

1.10 From an early stage the Applicant recognised that the Outline Planning Application would require an EIA and commissioned Avison Young, to undertake the EIA for the Development. The findings of the EIA are reported in the Environmental Statement (ES), which has been prepared to accompany the Outline Planning Application. The likely significant environmental effects of the Development, during the site preparation, demolition and construction phase (the 'Works'), and once completed and operational (the 'Completed and Operational Development'), have been assessed. The ES comprises three Volumes:

- **ES Volume 1 – Non-Technical Summary** (this document).
- **ES Volume 2 – Main Text and Figures**.
- **ES Volume 3 – Appendices**.

1.11 This document provides a summary of the findings of the EIA in non-technical language.

2. The Project Team

2.1 The Applicant appointed a project team to bring forward the development of the Site and prepare the Outline Planning Application. **Table 1** confirms the core project team and their role in preparing the Outline Planning Application including the ES. The EIA was co-ordinated by Avison Young in conjunction with a team of specialist consultants. Avison Young is registered in the UK by the Institute of Sustainability and Environmental Professionals (formally known as the Institute of Environmental Management and Assessment (ISEP) as a participant in their EIA Quality Mark Scheme. The Scheme recognises that Avison Young produces ESs in accordance with current best practice standards and contributes to improved practice in the industry. The EIA Regulations require an EIA to be undertaken by competent experts. Details of the EIA team's competency are included in **ES Volume 2, Chapter 1: Introduction**.

Table 1: The Core Project Team

Organisation	Role
The Crown Estate	The Applicant
Prior + Partners	Masterplanner
David Lock Associates	Planning Consultant
Avison Young	EIA Consultant
	Socio-economics Consultant
Gillespies	Landscape Architect
	Landscape and Visual Consultant
Ramboll (formerly Temple)	Ecology Consultant
Savills	Air Quality Consultant
	Noise and Vibration Consultant
	Health Consultant
Expedition Engineering (part of Simple Useful Trust)	Climate Change Consultant
	Water Resources and Flood Risk Consultant
SLR	Transport Consultant
Cotswold Archaeology	Heritage and Archaeology Consultant

3. The Existing Site and its Surrounds

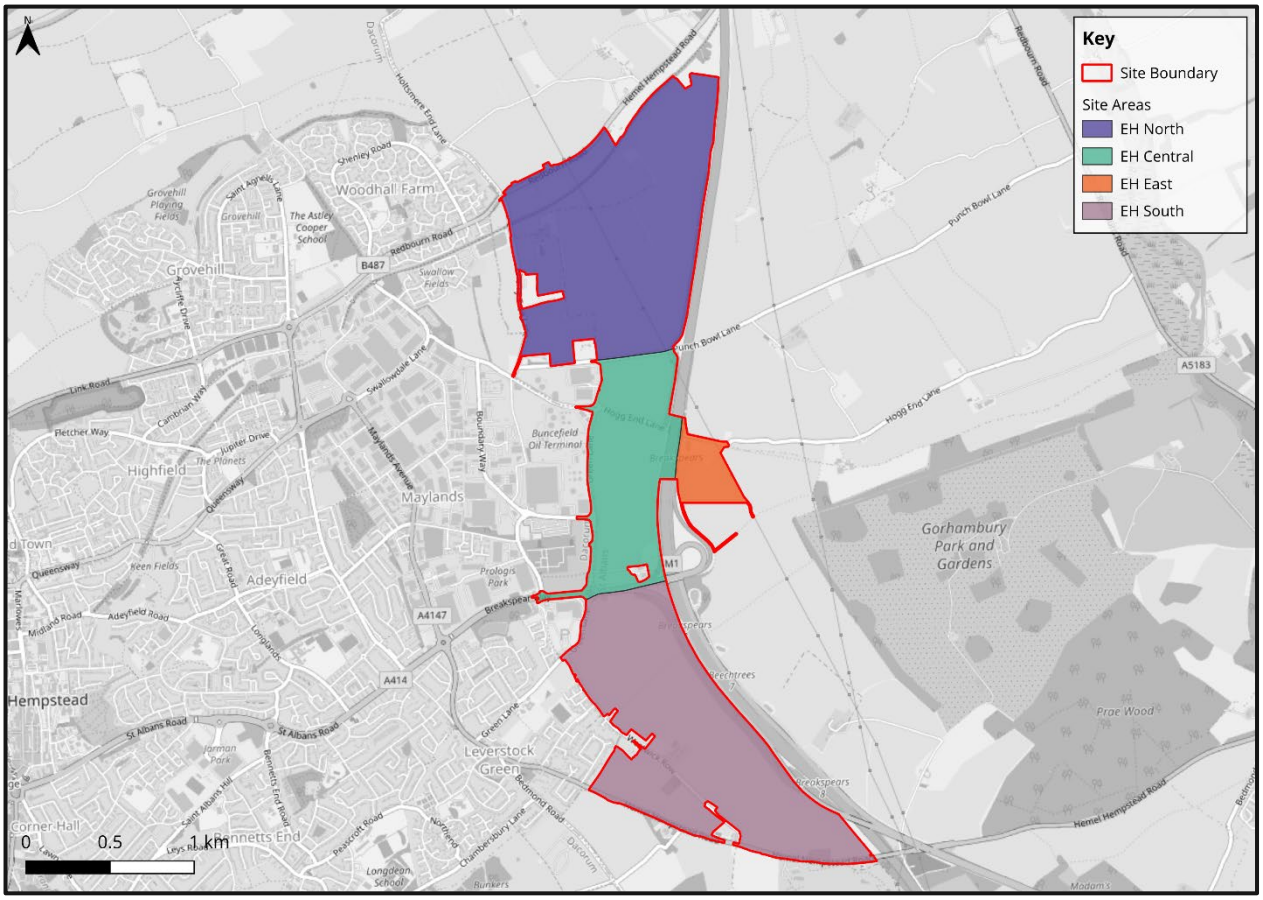
3.1 The Site is located mainly within SADC, with a small area on the western boundary of the Site within DBC. The administrative area of Three Rivers District Council (TRDC) is located approximately 400m south-west of the Site.

3.2 The Site is majority owned by the Applicant.

3.3 For the purposes of describing the different parts if the Site, the Site has been sub-divided into four areas (see **Figure 2**):

- 'East Hemel (EH) North', comprising the area of the Site broadly within draft SADC Local Plan allocation H2 East Hemel Hempstead (North). This comprises the part of the Site to the north of Punchbowl Lane and south of the B487 Hemel Hempstead Road (Redbourn Road);
- 'EH Central', comprising the area of the Site broadly within draft SADC Local Plan allocation H3 East Hemel Hempstead (Central). This comprises the part of the Site to the south of Punchbowl Lane and to the north of the A414 Breakspear Way;
- 'EH South', comprising the area of the Site broadly within draft SADC Local Plan allocation H4 East Hemel Hempstead (South). This comprises the part of the Site to the south of the A414 and north of the A4147 Hemel Hempstead Road; and
- 'EH East', comprising the land to the east of the M1 motorway.

Figure 2: Areas of the Site



3.4 The Site has historically been in agricultural use, comprising fields and associated dwellings. A notable change in the Site came with the construction of the Harpenden and Hemel Hempstead Railway line (now the Nickey Line, a footpath and cycleway) within the north of the Site which is visible on the 1883 OS map. Surrounding the Site has also historically been in agricultural use. Post-WWII, Hemel Hempstead was selected as the site of a New Town and construction began in 1947. By 1956, the M1 motorway (including Junction 8 and the A414) has been constructed in conjunction with the development of the New Town.

Existing Land Uses

3.5 The Site contains a range of existing land uses as can be seen in **Figure 3**. The Site comprises of several irregular shaped fields with some fields used for pasture (including grazing horses). There are a small number of farm buildings and residential properties situated within the Site, including Woodend Farm, Woodend Farm Cottages and Westwick Row Farm. A National Highways Depot (not included within the Site boundary) is located adjacent to Junction 8, to the north of the A414 Breakspear Way.

3.6 The topography of the Site undulates from approximately 100m AOD at the northern most tip in the area of the B487 Hemel Hempstead Road (Redbourn Road) to approximately 135m AOD adjacent to Cherry Tree Lane, approximately 138m AOD adjacent to Junction 8, approximately 115m AOD at Westwick Farm and rising to approximately 140m AOD at the south-western most area of the Site. The highest points are located in the northern and southern parts of the Site.

Surrounding the Site

3.6.1 The land uses surrounding the Site are mixed in character and comprise the following (also shown in **Figure 3**):

- The EH North part of the Site is bound by the area of land allocated within the draft SADC Local Plan as H1 North Hemel Hempstead (allocated for a residential led mixed use development but currently comprising irregular shaped agricultural fields), the M1 motorway to the east beyond which is agricultural land, the under-construction Spencer's Park Phase 2 development to the west, and the residential area of Woodhall Farm to the north-west. A small number of residential properties are located to the south of the B487 Hemel Hempstead Road (Redbourn Road) immediately to the north of the Site. There are also residential properties to the east of Cherry Tree Lane which are excluded from within the Site boundary.

- The EH Central part of the Site is bound to the east by the M1 motorway, beyond which are agricultural fields and the Gorhambury House Estate. Green Lane is located on the western boundary of this part of the Site beyond which is Woodwells Cemetery (approximately 100m west), Jack & Jill's Day Nursery (approximately 350m west), Woodwells Caravan Park (approximately 140m west) and the Maylands Industrial Estate, on which is the Hertfordshire Oil Storage Terminal (also known as Buncefield Oil Depot) and a mix of logistics, office and light industrial buildings. Further west is the Hemel Hempstead Industrial Estate which contains a similar mix of land uses.

- The EH South part of the Site is bound by the A414 and the M1 motorway to the east, beyond which is agricultural land. The A4147 Hemel Hempstead Road and Centurian Club golf club are located to the south and Westwick Row, the residential areas of Leverstock Green and Cupid Green to the west along with the Breakspear Park office complex.

Figure 3: Existing Site Uses and Surrounding Land Uses

Existing Environmental Characteristics

3.7 The Chilterns National Landscape (formerly referred to as an Area of Outstanding Natural Beauty or AONB) is located approximately 2.1km to the north-west of the Site.

3.8 The Site does not contain any statutory National or European / International sites designated for ecological importance. There are three locally designated sites for ecological importance located wholly or partly within the Site boundary. These include:

- 'Westwick Row Wood' Local Wildlife Site (LWS). Located wholly within the Site boundary, in the south-east of the Site;
- 'Nickey Way Dismantled Railway' LWS. Located along the Nickey Line within the northern extent of the Site and extending eastwards from the Site; and
- 'Disused Railway Line, Hemel Hempstead' LWS. Also located along the Nickey Line, within the northern extent of the Site, extending westwards.

3.9 The Site is dominated by arable farmland, with associated farm buildings, horse paddocks, and small residential areas. The arable fields are surrounded by hedgerows.

3.10 A range of surveys have been undertaken to identify the presence of protected species on Site. Breeding bird surveys identified a wide assemblage present on Site including Schedule 1 list species red kite, peregrine and fieldfare. Raptor surveys also identified potential red kite and buzzard nests present on-Site. Bat surveys identified potential for bat roosts present across Site within trees and on-Site buildings. Night-time bat surveys identified a range of bat species across the Site as well as foraging activity across the Site. There were at least seven species of bat recorded during dusk emergence surveys. Badgers were recorded across the Site with a total of 42 active, four partially active and two disused setts recorded within the study area. Eight of these setts recorded as being main setts.

3.11 The Site contains six Listed Buildings all of which are Grade II-listed with the exception of King Charles II Cottage, which is Grade II*-listed. An additional 42 Listed Buildings are located within the vicinity (<1km) of the Site.

3.12 There are three Public Rights of Way within the Site:

- Footpath St Michael Rural 003. Located in the centre of the Site, starting at Green Lane, past the M1 Junction 7 and finishes at Hogg End Lane;
- Footpath Redbourn 013. Located in the north of the Site and starts at Lilly Lane (off Cherry Tree Lane), past Wood End Farm and finishes at the B487 Hemel Hempstead Road; and
- Footpath Redbourn 044. Located in the north of the Site and starts at Cherry Tree Lane, past Cherrytree Farm and joins onto Footpath Redbourn 013.

3.13 The Nickey Line crosses the northern part of the Site and serves as a long-distance footpath and cycleway. A number of bus routes run across the Site, along B487 Hemel Hempstead Road (Redbourn Road) and A4147 Hemel Hempstead Road, going between Hemel Hempstead and Luton and Welwyn Garden City. The nearest train station is Apsley station, located approximately 3km west of the Site. Hemel Hempstead Station is approximately 5km to the west of the Site. Both stations provide regular services between London Euston and Milton Keynes Central and on to stations to the north.

3.14 There are no Air Quality Management Areas (AQMA) within, or in proximity to, the Site. The nearest AQMA is 'AQMA No 1 Hemel Hempstead' which is located approximately 3.3km west of the Site.

3.15 The Site is located entirely within Flood Zone 1. The lower parts of the Site and valleys are subject to surface water flooding associated with overland flows during intense rainfalls. The Site does not contain any Main Rivers, with the nearest Main River, the River Ver, located approximately 3km east of the Site.

3.16 The Buncefield Terminal and the Hemel Hempstead BP Terminal are located immediately to the west of the Site and are both classified as Upper Tier establishments under the Control of Major Accident Hazards (COMAH) Regulations 2015 due to the potential for possible major accident hazards relating to the accidental release of dangerous substances (petroleum products), explosions and fires. The Site is underlain by oil pipelines with one routing from Buncefield Terminal northwards through EH North before exiting the Site at the B487 Hemel Hempstead Road (Redbourn Road). Three additional oil pipelines route from Buncefield Terminal southwards through EH Central and EH South before exiting the Site at A4147 Hemel Hempstead Road.

4. The Development and its Implementation

4.1 The description of development, as provided on the Outline Planning Application form, is as follows:

"Outline application for: urban extension comprising two new neighbourhoods and a new employment zone. The development to include new dwellings (including affordable housing and specialist accommodation for older people); new employment and industrial floorspace and ancillary facilities, a sports hub and Sports Pitches; green infrastructure and landscaping works (to include a country park, formal and informal open space, amenity space, Suitable Alternative Natural Greenspace, managed woodland, ecological areas); early years, nursery, primary and secondary education facilities; local centre uses (to include retail, community and employment uses; health and fitness, gym and other cultural and recreational uses; medical centre; transport mobility hubs; drainage works (including foul and surface water drainage infrastructure); ancillary infrastructure works; vehicular and active travel infrastructure; improvements to the Nickey Line and delivery of a proportion of the Hemel Garden Communities Green Loop; land for Gypsy and Traveller pitches; provision of an active travel bridge over the A414; safeguarded land for M1 Junction 8 improvements; ground remodelling, acoustic bund, engineering and demolition works. All matters reserved save for access from the A414/Green Lane junction and access from the B487/ Hemel Hempstead Road (Redbourn Road)."

4.2 In summary, the Development comprises:

- Up to 4,000 new dwellings (Class C3) including up to 640 elderly care / extra care units (Class C2 residential institutions) and 16 supported living units.
- Up to 190,600 sqm of Employment Use including up to 54,500 sqm Business and Research & Development (Class E(g)); and up to 104,250 sqm Distribution (Class B8); and up to 31,850 sqm Mixed Industrial Uses (Class B2 / Class E(g)(iii)).
- Three Primary Schools (Class F1) incorporating Early Years provision on sites of 2.03ha per 2FE school site, and 2.92ha per 3FE school site (up to 7.87ha in total).
- Secondary School (Class F1) for up to eight forms of entry on a site of not more than 10.78 hectares.
- Up to 2,000 sqm in total of Community Uses (Classes F1 and F2) including community centres and meeting places, library use, places of worship and other community facilities.
- Up to 2,300 sqm of health care services (Class E(e) including medical and dental services.
- Up to 18.8ha for a Sports Hub and Sports Pitches including up to 3,400 sqm in total of sports hub uses in Class E(d). Up to 775 sqm health and fitness, gym and other cultural and recreational uses in Class E(d).
- Up to 525 sqm nursery uses in Class E(f).
- Up to 76.8 ha of Suitable Alternative Natural Greenspace (SANG[1]).

[1] SANG is an area of land designated for recreational purposes that is designed to offset disturbance and pressures on sites that are protected for their habitat value.

- Green infrastructure and landscape works to include a country park, formal and informal open space, including natural / semi-natural open space, parks & gardens, amenity space, managed woodland, ecology areas and links including mitigation works, green corridors, outdoor sports facilities including changing facilities, play areas, allotments and associated lighting and infrastructure.
- Ancillary infrastructure works.
- Transport Mobility hubs.
- An active travel (pedestrian and cycle) bridge over the A414.
- Vehicular and active travel access points and connections to the surrounding highway.
- Vehicular and cycle parking including electric vehicle charging points.
- Pedestrian, cycle, equestrian, vehicle and bus routes, with associated bus stops, crossings, street furniture and lighting.
- Improvements to existing Public Rights of Way.
- Improvements to the Nickey Line through the Site. Delivery of the Hemel Garden Communities (HGC) Green Loop through the Site.
- Land for up to 40 Gypsy and Traveller pitches.
- Safeguarded land for M1 Junction 8 improvements.
- Engineering works including ground remodelling.
- Creation of bunds (incorporating acoustic fencing) adjacent to the M1 motorway.
- Any necessary demolition of existing buildings.
- Retention of and improvements to listed buildings (subject to separate Listed Building Consent).
- Infrastructure works (comprising energy / utilities provision and diversions as necessary).
- Drainage works including foul drainage infrastructure, sustainable drainage systems and multi-function stormwater attenuation features.

Development Parameters

4.3 The Outline Planning Application seeks planning permission for the construction of a mixed-use, residential led development. Full details of access (apart from the access from the A414 / Green Lane junction and access from the B487 / Hemel Hempstead Road (Redbourn Road)), layout, scale, appearance and landscaping would be submitted for approval at future Reserved Matters stages of the project. A series of parameters have therefore been devised which set the context for later detailed design.

4.4 The Application is supported by three Parameter Plans and two plans for EIA Testing which establish the spatial parameters of the Development. The Parameter Plans have been submitted to SADC and DBC for approval and, alongside the EIA Testing Plans, form the basis of the EIA. The Plans consist of:

- Land Use Parameter Plan;
- Green Infrastructure Parameter Plan;
- Access and Movement Parameter Plan;
- Heights Testing Plan; and
- Demolition Testing Plan.

4.5 The Plans are accompanied by a Schedule of Accommodation which details the use and amount of development the Application seeks to secure (and which could be delivered within the spatial parameters defined by the Parameter Plans and Testing Plans). In addition, two sets of drawings detail the proposed access arrangement along the B487 Hemel Hempstead Road (Redbourn Road) and the A414/Green Lane junction.

4.6 The Development Specification accompanies the Outline Planning Application and presents further information about the spatial principles of the Development. The Development Specification will form an approved document to which subsequent future reserved matters applications are expected to adhere to.

4.7 It is intended that the details of the Development, which will be subject to future reserved matters applications, will fall within the parameters laid down by the Outline Planning Application and upon which the EIA has been based.

Land Use and Quantum of Development

4.8 The proposed land uses and their location within the Site are shown on the Land Use Parameter Plan (see **Figure 4**) and the maximum amount of development by land use class is shown on the Schedule of Accommodation below (see **Table 2**).

Figure 4: Land Use Parameter Plan

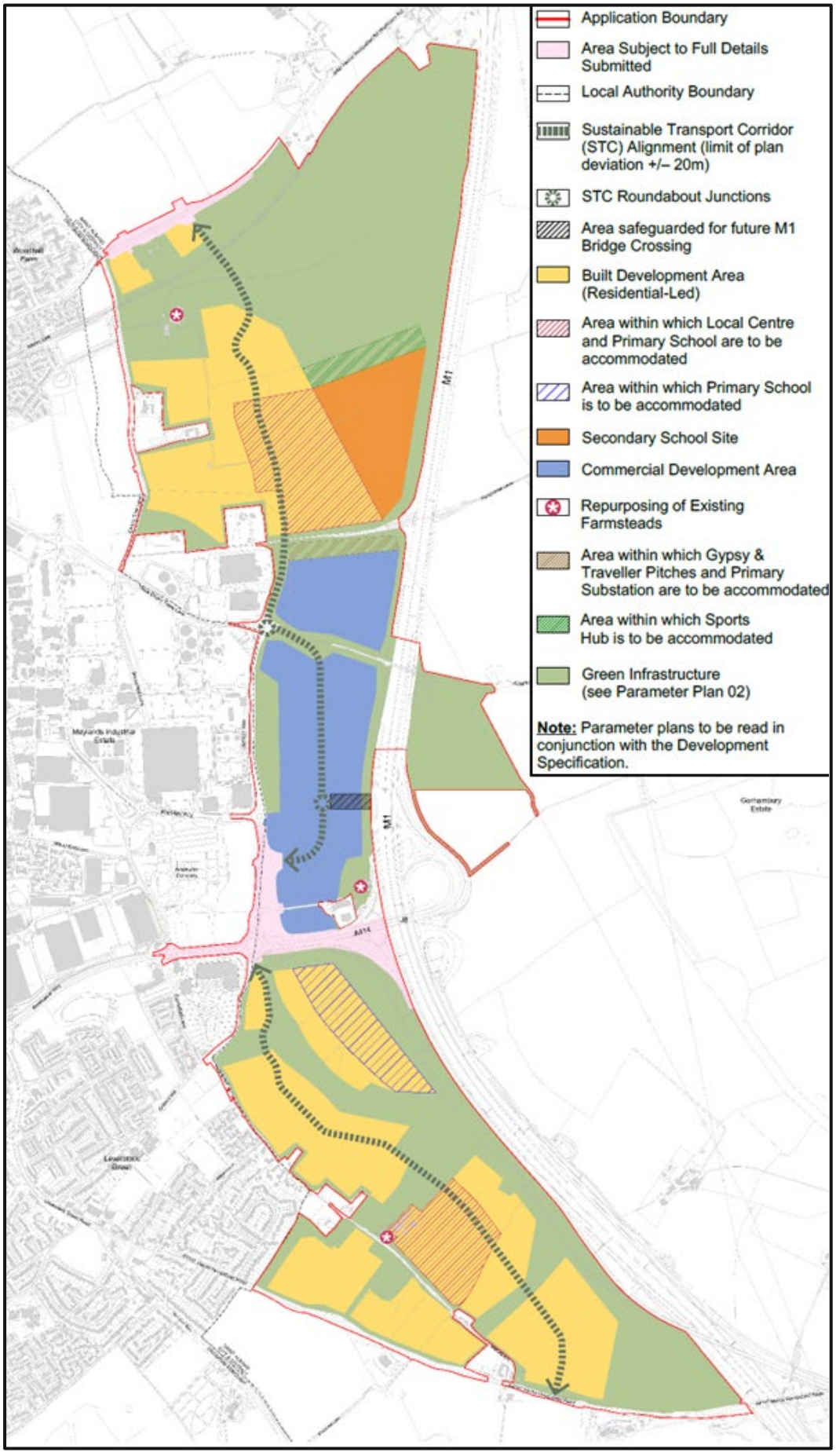


Table 2: Schedule of Accommodation

Use		Use Class	Quantum of Development (maximum unless stated otherwise)
Residential	Dwellings	C3	Minimum 3,360 dwellings Maximum 4,000 dwellings
	Residential Institution (extra care)	C2	640 dwellings
Retail and Services	Retail, services, food and drink	E	4,500 sqm
Community and Leisure	Medical services	E	2,300 sqm
	Community centres and meeting places, library, places of worship and community facilities	F1 and F2	2,000 sqm
	Sports Hub	E(d)	3,400 sqm
	Health and fitness, gym and other cultural and recreational	E(d)	775 sqm
	Nursery	E(f)	525 sqm
	Primary schools	F1	7.87 ha
	Secondary schools	F1	10.78 ha
Employment	Storage and distribution	B8	104,250 sqm (GEA)
	General industrial	B2 / E(g)(iii)	31,850 sqm (GEA)
	Business use, offices and research and development	E(g)(i) and (ii)	54,500 sqm (GEA)
Formal Open Space	Outdoor sports including changing facilities	F2	Up to 18.8 ha

Residential Dwellings

4.9 The Development comprises up to 4,000 residential units across the northern and southern neighbourhoods. The exact housing mix would depend upon market conditions at the time of building, it is assumed there would be a mixture of flats and houses of between 1 to 4 beds and a range of tenure types as presented in **Table 3** below. Within the 4,000 residential units, there would be up to 640 elderly care/extra care units and 16 supported living units.

Table 3: Indicative Housing Mix used for the EIA

Dwelling Type	No. of Bedrooms	Total	Social Rent	Affordable	Market
Flats	1-Bed	106	46	31	29
	2-Bed	246	69	61	115
	3-Bed	386	81	46	259
	4-Bed	223	35	15	173
Houses	1-Bed	334	146	97	91
	2-Bed	778	219	195	365
	3-Bed	1,222	255	146	821
	4-Bed	705	109	49	547
Total	N/A	**4,000**	**960**	**640**	**2,400**

Local Centre

4.10 There would be two mixed-use Local Centres across the Development, located centrally within the northern and southern neighbourhood areas. Both would be situated close to the Sustainable Travel Corridor and with links to the surrounding neighbourhoods.

Education

4.11 Three primary schools are proposed within the Site. The locations of these are identified within the Land Use Parameter Plan (**Figure 4**). One three form entry primary school plus early years would be provided within the northern neighbourhood. Within the southern neighbourhood, one three form entry and one two form entry primary schools plus early years would be provided.

4.12 An eight-form entry secondary school would be provided within the northern neighbourhood.

Commercial

4.13 As can be seen in **Figure 4**, the main employment uses would be located in the Commercial Area within the central area of the Development. There would be a range of uses including storage and distribution, general industrial, business use, offices and research and development.

Gypsy and Traveller

4.14 The Development would facilitate up to 15-20 Gypsy and Traveller pitches within the northern part of the Commercial Area as shown on **Figure 4**. Up to 15-20 Gypsy and Traveller pitches would be provided within the southern residential area. Precise locations of these would be established at Reserved Matters Applications stage.

Repurposing of Existing Farmsteads

4.15 As shown on the Land Use Plan (**Figure 4**), the existing farmsteads at Wood End Farm and Westwick Farm will be repurposed. The Listed Buildings at Wood End Farm will be retained and restored and will be utilised as community, retail, food and beverage, visitor or office space related to the Country Park and the development and stewardship operations. Non-Listed Buildings at Wood End Farm may be retained and repurposed or may be demolished and replaced with buildings of a similar scale and agricultural character in order to retain the qualities of the farmstead.

4.16 Listed Buildings at Westwick Farm will be retained and restored and will be utilised as community, retail, food and beverage and office space. Non-Listed Buildings may be retained and repurposed or may be demolished and replaced with buildings of a similar scale and character. The Westwick Farm farmstead will form part of the southern local centre.

Scale and Massing

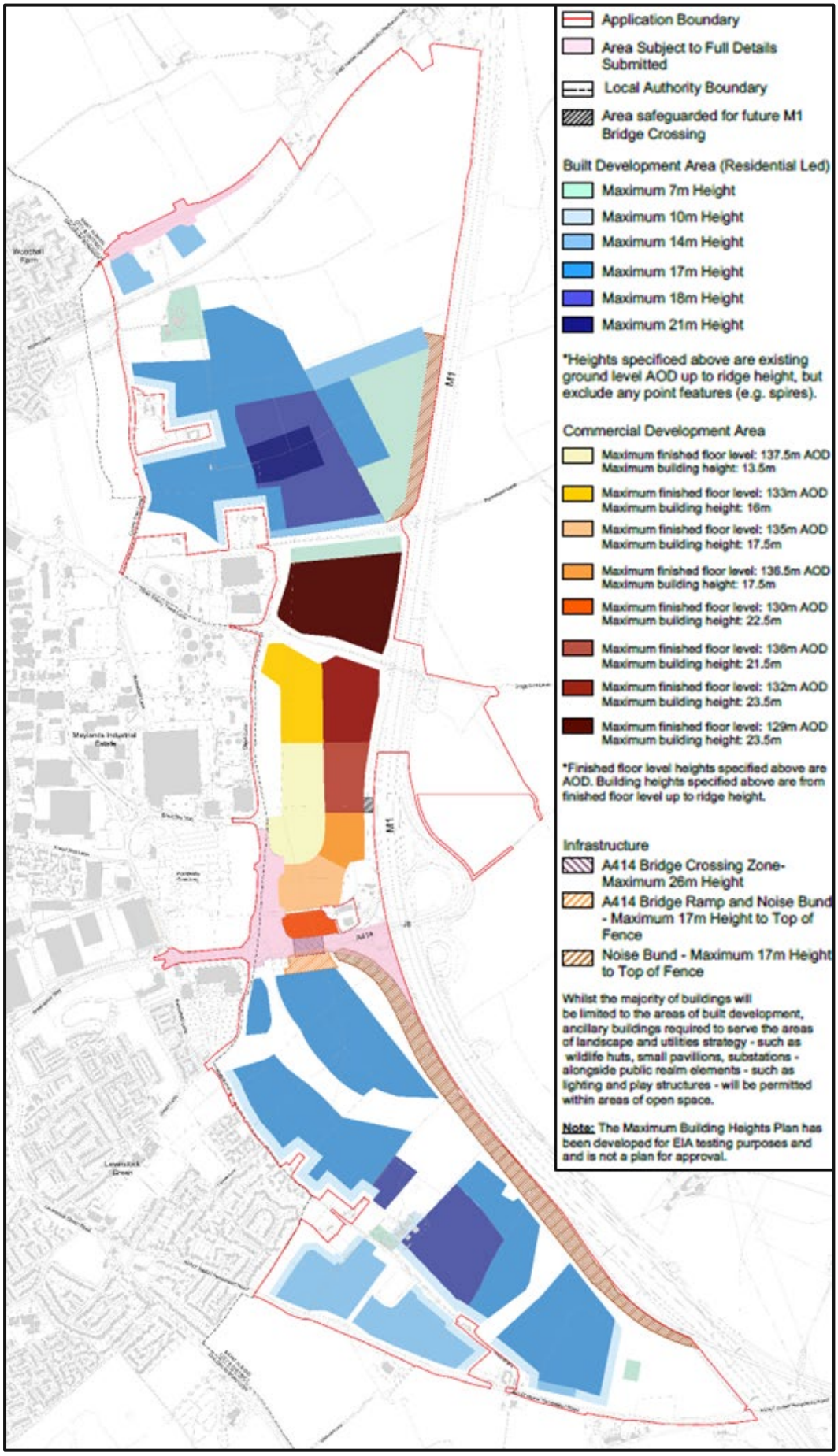
4.17 The maximum building heights for the Development are shown on **Figure 5.** The heights testing plan (**Figure 5**) sets the maximum building heights across the Site and has been used to inform the Landscape and Visual Impact and Built Heritage assessment to understand the potential visual impact of the Development on its surrounds. Within the residential areas, heights are shown in metres from existing site levels, Above Ordnance Datum (AOD), measured to the ridge height of any buildings. Within the Commercial Area, due to the larger footprint buildings proposed, heights are shown in meters above proposed Finished Floor Levels (FFL) which themselves have set maximum heights AOD.

4.18 Within the northern neighbourhood (e.g. EH North) part of the Site, the maximum heights of the buildings would be between 7m and 21m from existing site levels. The tallest buildings would be associated with the Local Centre. Within the southern neighbourhood (e.g. EH South), the maximum heights of the building would be between 7m and 18m above existing site levels and again the tallest buildings would be associated with the Local Centre.

4.19 Within the Commercial Area (e.g. EH Central), finished floor levels would be set between 129m and 137.5m AOD. Building heights would range from 13m - 23.5m with the tallest buildings located in the eastern part of this area of the Site.

4.20 The Heights Testing Plan (**Figure 5**) also shows the maximum heights for infrastructure within the Development. The A414 pedestrian bridge would have a maximum height of 26m from existing site levels AOD, with the bridge ramps being a maximum height of 17m from existing site levels AOD. The noise bund which runs alongside the eastern edges of both residential development areas would have a maximum height of 17m from existing site levels.

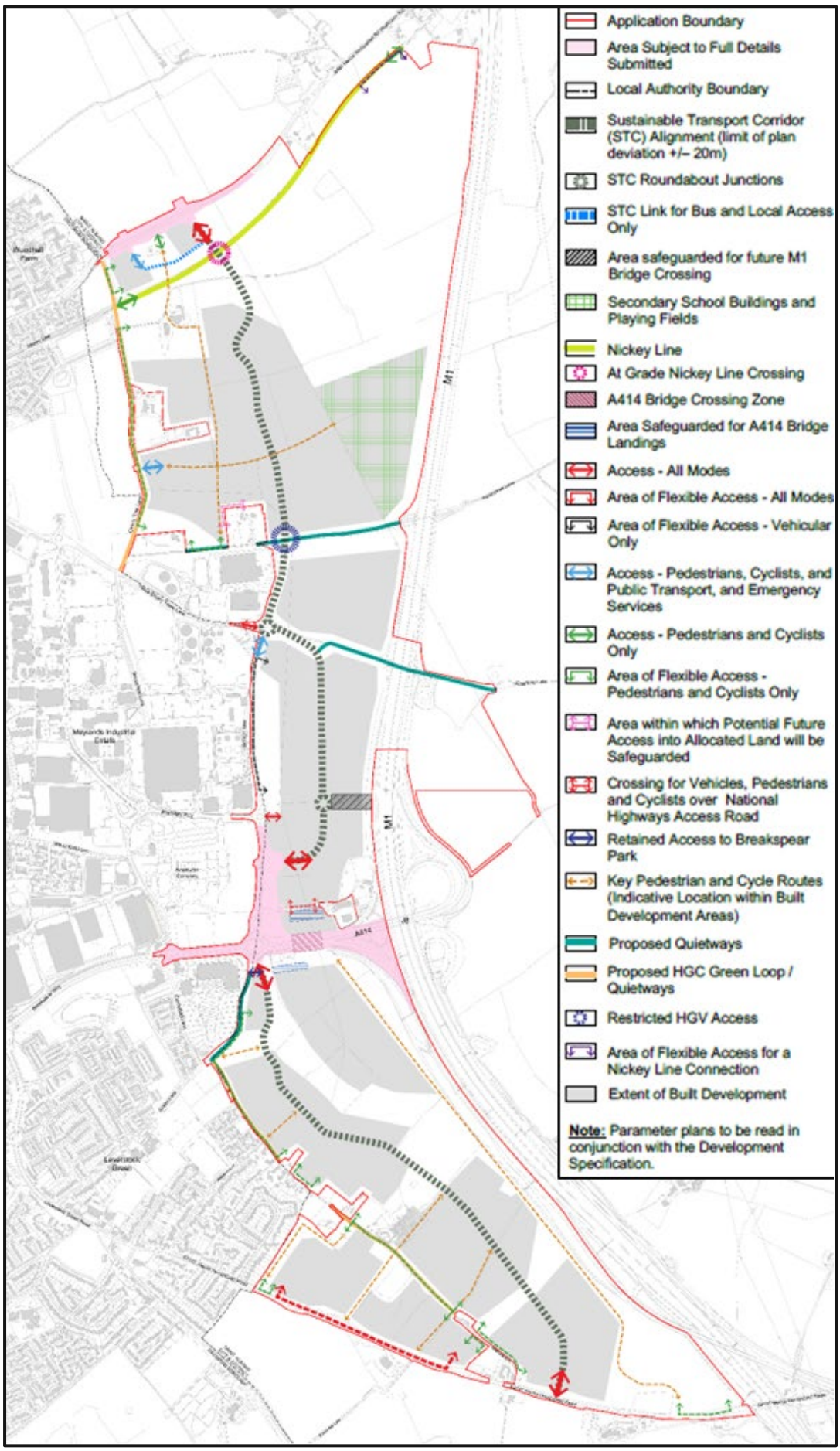
Figure 5: Heights Testing Plan



Movement, Circulation and Access

4.21 The proposed access points and circulation routes associated with the Development are shown on **Figure 6** below.

Figure 6: Access and Movement Parameter Plan



4.22 The main access points for vehicles will be provided through three junctions located on the B487 Hemel Hempstead Road (Redbourn Road), the A4147 St Albans Road and the A414 Breakspear Way. The access point from B487 Hemel Hempstead Road (Redbourn Road) would also provide access to the North Hemel Development located north of the Development. Details of the layout of the B487 Hemel Hempstead Road (Redbourn Road) junction and A414 Breakspear Way/Green Lane junction are being submitted in detail as part of the outline application (e.g. not reserved).

4.23 A Sustainable Transport Corridor would be the primary north-south route through the Site between the B487 Hemel Hempstead Road (Redbourn Road) in the north, the A414 Breakspear Way and the A4147 (Hemel Hempstead Road), providing connections to the development parcels. The Sustainable Transport Corridor would prioritise active travel movement along its length and bus priority at junctions.

4.24 The Nickey Line would be improved through the Site for use by pedestrians and cyclists. A controlled crossing point across the Sustainable Transport Corridor would be provided for pedestrians and cyclists using the Nickey Line.

4.25 A new pedestrian and cycle bridge would be provided over the A414 to connect the southern neighbourhood with the Commercial Area and the northern neighbourhood beyond.

4.26 Mobility Hubs would be provided throughout the Development. A primary Mobility Hub would be provided within the Commercial Area, close to the A414. A Secondary Mobility Hub would be provided within each of the two local centres. Tertiary Mobility Hubs would be located at intervals within the Development.

4.27 Car parking would be accommodated in line with the provisions of the Local Plan.

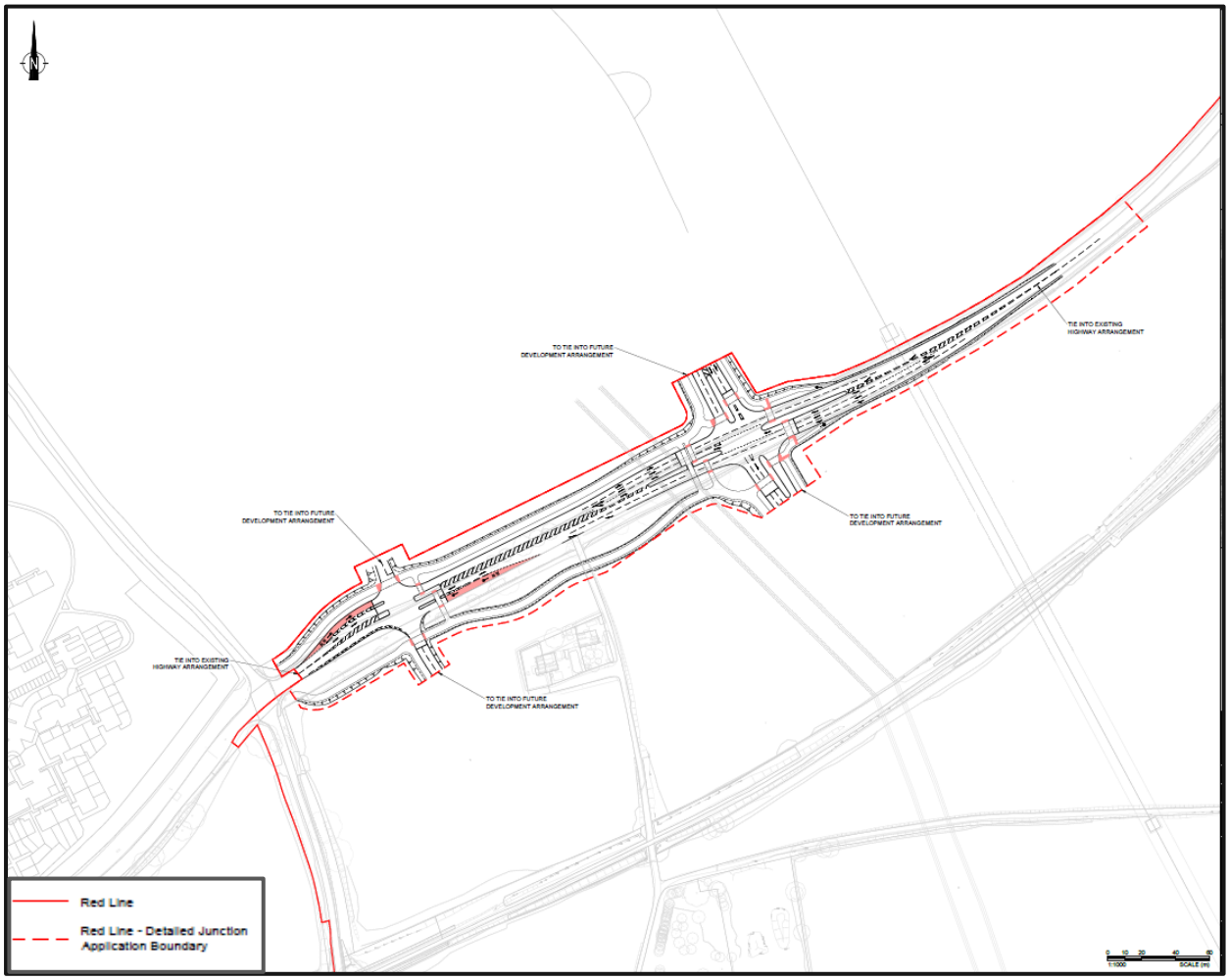
4.28 All proposed land uses would include suitable provision of cycle parking / storage to encourage sustainable travel.

B487 Hemel Hempstead Road (Redbourn Road)

4.29 The proposed layout for the B487 Hemel Hempstead (Redbourn Road) junction is shown in **Figure 7**. The main element of the junction comprises a three-lane entry on the east, west and southern approaches with a two-lane entry on the northern approach.

4.30 A separate bus-only access/exit point is provided to the west of the main junction. This will have a bus gate and only allow buses travelling to and from the west on Redbourn Road and those travelling north-south between East Hemel and North Hemel.

Figure 7: B487 Hemel Hempstead Road (Redbourn Road) Layout

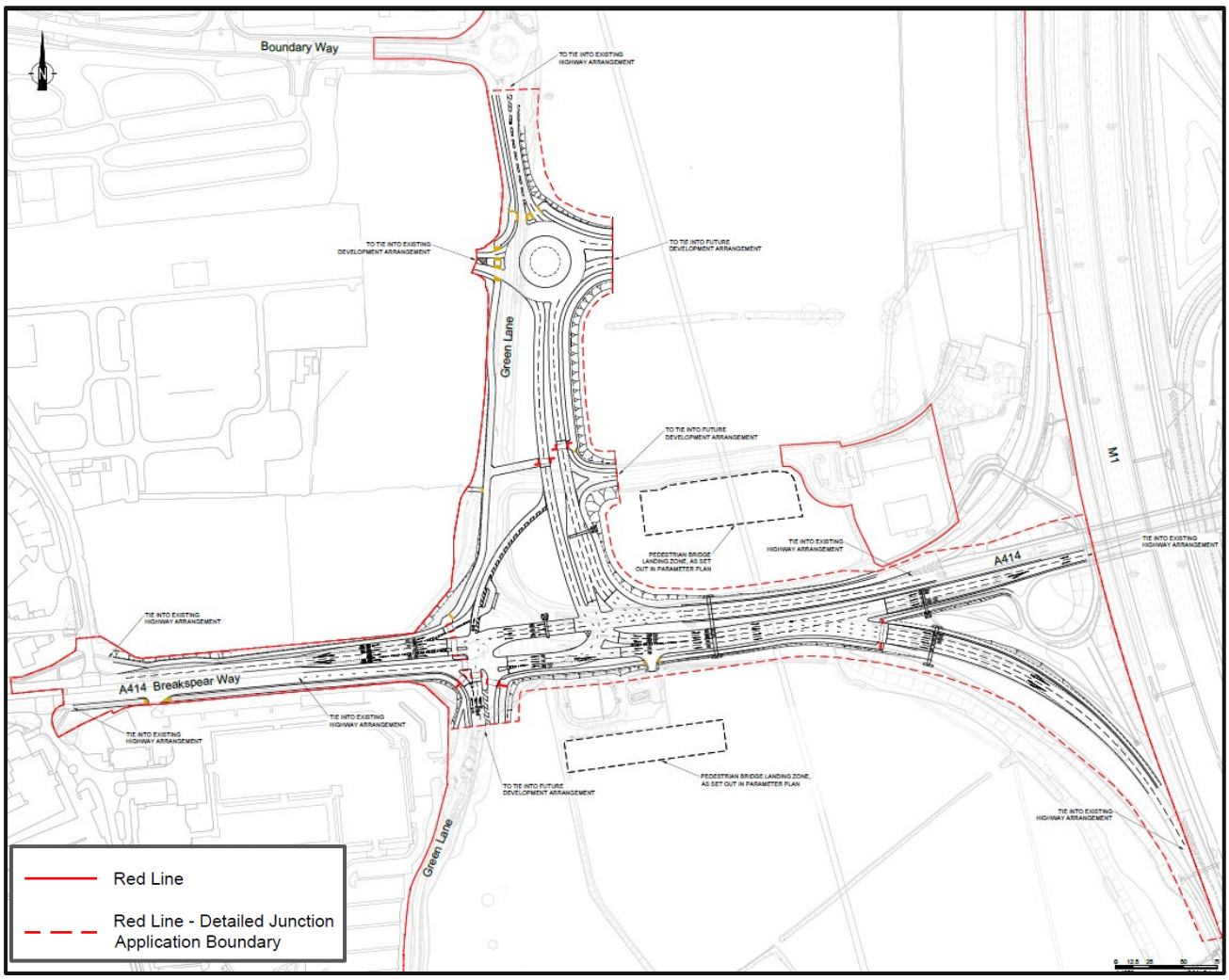


A411 Breakspear Way / Green Lane

4.30.1 The proposed layout for the A414 Breakspear Way junction is shown in **Figure 8**. The existing roundabout at A414 / Breakspear Way / Green Lane would be replaced with a large staggered signalised junction. Key changes include:

- Dualling of Green Lane (north);
- Widening of A414; and
- Dedicated lanes for turning movements to the East Hemel site and existing Maylands area.

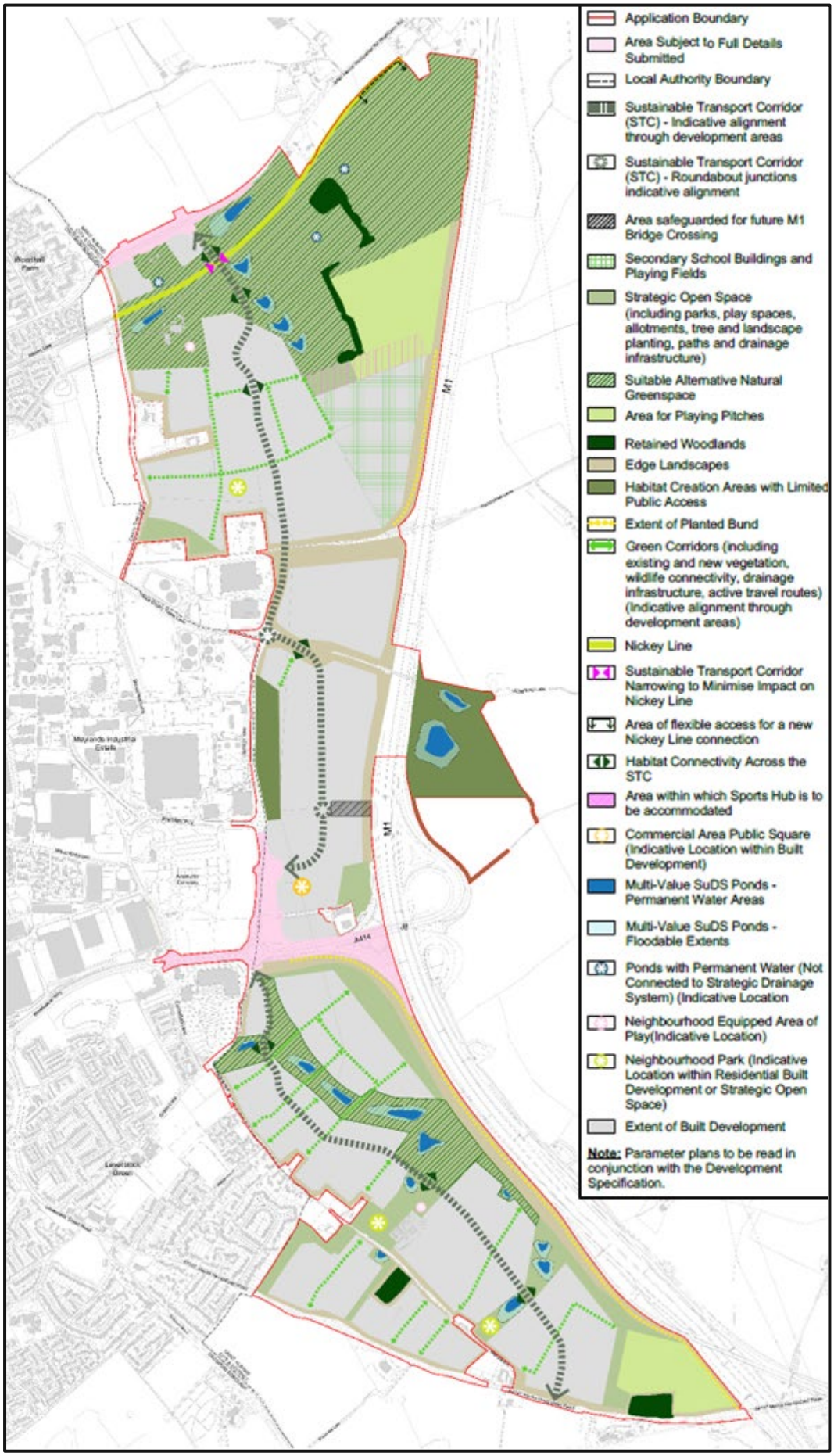
Figure 8: A411 Breakspear Way / Green Lane Junction Layout



Green and Blue Infrastructure

4.31 The proposed green infrastructure and open space within the Development is shown on the Green Infrastructure Parameter Plan below (**Figure 9**).

Figure 9: Green Infrastructure Parameter Plan



4.32 Strategic and local open spaces would be provided throughout the Development to provide multi-functional and informal recreation, sustainable drainage, new planting, biodiversity areas, play, allotments and community food growing.

4.33 As shown in **Figure 9**, SANG would be delivered through a Country Park in EH North and a Valley Park within EH South. SANG areas will include natural and semi-natural green space, play areas, walking routes including loop paths, a mosaic of habitats and local food production.

4.34 The Development would also provide:

- Incidental open spaces as part of the public realm;
- Formal parks in both the northern and southern neighbourhoods;
- Local play, including informal, formal and strategic play opportunities including equipped play;
- Trees and woodland areas which make use of existing and retained woodlands, trees and hedgerows outside of development zones;
- Green corridors to connect open spaces, safeguard existing vegetation, to provide active travel routes and to provide wildlife corridors;
- An earth bund with woodland planting adjacent to the M1 motorway to provide noise mitigation within the northern and southern neighbourhoods; and
- Sports pitches, including one pitch at the southern neighbourhood and a sports hub within the northern neighbourhood.

4.35 The detailed edge treatment between the building areas and open space would be defined at later design stages but would not extrude into the open space beyond the parameters shown on the Parameter Plan.

Sport and Play Provision

4.36 The Development would provide at least 0.6sqm of children's playspace per person. There would also be the provision of a sports pitch in the southern neighbourhood and a sports hub within the northern neighbourhood.

4.37 Play space would be provided within the Development and all built development would be within 1000m of a Neighbourhood Equipped Area for Play (NEAP). Also, all built development would be within 400m of a Locally Equipped Area for Play (LEAP) or have access to natural play space offering informal play opportunities such as a Local Area for Play (LAP) within 100m of dwellings.

Surface Water Drainage Strategy

4.38 Sustainable Urban Drainage Systems (SuDS) would be utilised throughout the Development to manage surface water drainage. The detailed design of specific SuDS components would be developed at Reserved Matters Stage.

4.38.1 There would be a number of SuDS attenuation ponds located throughout the Development as can be seen on **Figure 9: Green Infrastructure Parameter Plan**. There are six ponds located within EH North, two ponds located in the land to the east of the M1, within EH Central, and eleven ponds located in EH South.

4.39 All attenuated water would be discharged to the River Ver through the existing Thames Water sewers within the Site.

Lighting

4.40 A detailed Lighting Design would be developed at Reserved Matters Stage. However, for the purpose of the Outline Planning Application an External Lighting Strategy has been prepared which identifies the existing baseline lighting conditions at the Site and sets design principles for the external lighting design which will help mitigate impacts of lighting on ecological receptors. The Lighting Strategy would enhance the after dark character of the Development and would be designed to provide sufficient light for safe access onto and around the Development. The lighting scheme would be designed to minimise obtrusive light such as sky glow, glare, excessive visual brightness, light spill and light intrusion that may adversely impact sensitive ecology and residential receptors.

Utilities

4.41 There is a range of utilities running across the Site. High Voltage (HV) and Low Voltage (LV) electrical infrastructure crosses the Site. Within the Development, the UKPN electricity lines would be undergrounded, and there would be no changes to the National Grid lines.

4.42 There are three existing gas mains within the proximity of the Site. There is one gas main within the Site in the southwestern part of the Site which runs parallel to Hemel Hempstead Road (A4147). There would be no new gas connections within the Development as the Development is proposed to be electric only.

4.43 The Site is directly adjacent to the Buncefield Oil Terminal and is bisected by multiple oil pipelines which come to and from the Terminal. There are three BPA pipeline groups which distribute petrochemical products across the UK. These pipelines are not proposed to be diverted or modified as part of the Development.

4.44 Affinity Water provides potable water to the Site. There are no existing potable water supplies within the Site aside from small connections to existing buildings. There are existing water mains adjacent to the Site along the western boundary. Affinity Water do not expect to require a significant upgrade to their network based on the Development, however further discussions would be undertaken following outline planning consent.

4.45 Thames Water is responsible for managing the foul drainage for the Site. There are no foul sewers within the Site, however there are existing foul sewer networks to the west of the Site. To support the Development, six new pumping stations would be required with one in EH North, two in EH Central and three in EH South. Further discussions would be undertaken following outline planning consent.

Energy Strategy and Climate Change Resilience

4.46 The Development would be fossil fuel free to deliver low carbon heating, hot water and cooling. There would also be solar photovoltaics delivered across the Site to provide electricity. The Development provides an opportunity for a smart micro-grid by producing storing and using renewable energy on-Site.

4.47 The Development has various design measures to ensure resilience to climate change in the future. These include:

- Reduction of heat risk and secure overheating resilience through the landscape approach and development parcel layouts. Inclusion of tree canopies and soft verges create a cooling and shading effect within the Development.
- The Development has been designed to retain high value ecological assets and enhance low value ecological assets with 45% of the Development being open space.
- Water efficiency has been embedded into the landscape design.

Construction

Construction Programme

4.48 Subject to planning permission, construction works are anticipated to be delivered in the northern and southern neighbourhoods and the central commercial area over a 17-year period between 2028 to 2044. The anticipated construction phases which have been used for the purpose of the EIA are shown in **Table 4** below:

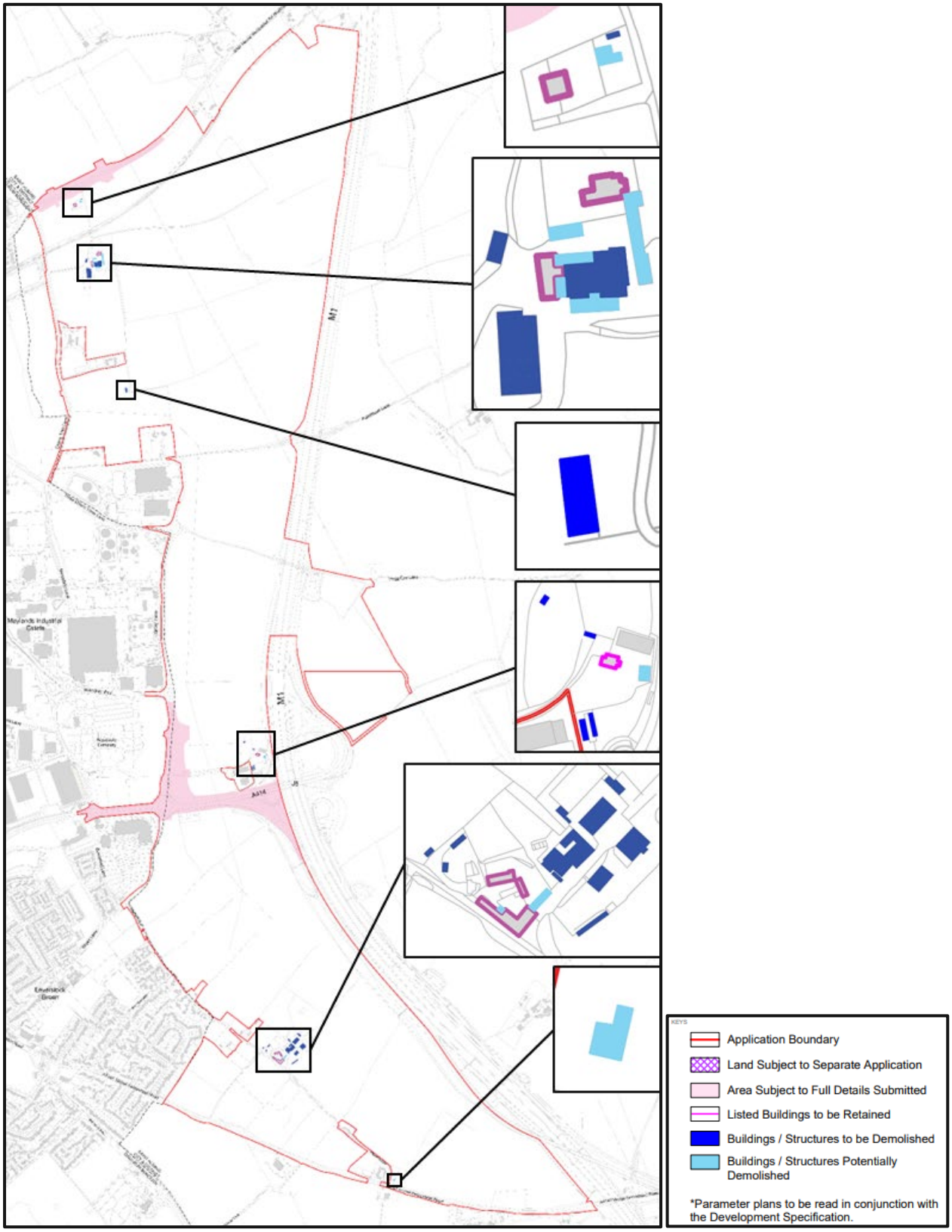
Table 4: Construction Phases

Area	Duration (Months)	Start Date	End Date
Sitewide Infrastructure	59	Q2 '28	Q1 '33
Northern Neighbourhood	140	Q2 '29	Q1 '41
Central Commercial Area	94	Q1 '30	Q4 '37
Southern Neighbourhood	206	Q2 '29	Q4 '44

Overview of the Proposed Works

4.49 **Figure 10** shows the structures that would, or potentially would, be demolished during the Works.

Figure 10: Existing Buildings to be Demolished



4.50 As shown on **Figure 10**, there are three main areas where buildings have the potential to be demolished, and they are located in the southern central extent of the Site, the northern extent of the Site and in the centre of the Site by Junction 8 of the M1.

Site Preparation and Groundworks

4.51 An earthworks exercise would be undertaken to create formation levels for the Development. It is assumed that all land within the development parcels would be subject to earthworks and material movements. There would be areas where levels would reduce (areas of cut), and areas where levels would increase (areas of fill). It is anticipated that an additional 33,000m^3 of material would need to be added to the Site mainly for the construction of the noise bund.

Traffic Management and Construction Site Access

4.52 Access and egress to the Site would be provided at three locations: Redbourn Road for EH North, Breakspear Junction for EH Central / EH East, and the A4147 for EH South. While the routing of construction traffic would not be determined until a contractor is appointed, is has been assumed for the purposes of the EIA that construction traffic would primarily access site from the A414 and M1.

4.53 A suitable level of parking would be provided on-Site during the Works. No off-Site parking along the roads around the Site would be permitted unless otherwise agreed.

4.54 Appropriate traffic management controls will be implemented during the Works in line with Health and Safety Executive (HSE) standards to ensure the safety of road users and to protect the environment. A Construction Traffic Management Plan (CTMP) would be implemented to mitigate the movements of construction traffic on the local road network as far as possible.

4.55 It is anticipated that the maximum number of trips generated by the Works would occur during the peak of construction activity in 2030. The maximum number of daily trips expected to be travelling to and from the Site is 81 (one-way) during year 2030 of the construction period. Of these vehicles it is estimated that 53 per day would be heavy goods vehicles and 28 would be light goods vehicles and general construction traffic.

Site Working Hours and Days

4.56 Working hours will be subject to agreement with SADC and DBC. However, it has been assumed that standard working hours would be followed. These are presented below:

- Monday – Friday: 7:30am - 6:00pm;
- Saturday: 8:00am – 1:00pm; and
- No noisy works allowed on Sundays or Public / Bank Holidays.

4.57 Where works unavoidably need to take place outside the core working hours, occupiers of nearby residential properties shall be informed by the contractor in advance of the Works and their likely duration.

Environmental Management and Mitigation

4.58 Each phase of the works would be managed by a Construction Environmental Management Plan (CEMP). An outline CEMP has been prepared by the Applicant's construction advisors based on the mitigation measures identified in the EIA and is appended to the ES at Appendix 6.1. This would be used to prepare the CEMPs for each phase of work. The CEMPs would be conditioned as part of the planning permission and could be agreed with SADC, DBC and other relevant bodies prior to the start of the Works. The CEMP will detail the environmental controls, protection measures and safety procedures that would be adopted during the Works, providing a tool to ensure the successful management of the likely environmental effects as a result of construction activities.

4.59 The Applicant / appointed contractor would continue to undertake liaison with the local community, SADC, DBC and other stakeholders, as appropriate, during the construction works.

4.60 A Site Waste Management Plan (SWMP) will be prepared by the contractor to ensure that waste generated from the Works is kept to a minimum.

4.61 As part of the CEMP, procedures and management measures to ensure the protection of ecological resources, including habitats (where retained) and protected species will be included.

5. Alternatives and Design Evolution

No Development Scenario

5.1 In considering various alternatives to the Development, the EIA Regulations require Applicants to consider the consequences of not undertaking the development of a site. In the 'Do-Nothing' scenario, the Site would remain largely as described in **Chapter 3** of this document. This would greatly limit the potential of the Site, resulting in a number of lost, social, economic and environmental opportunities for the Site and the wider area, including:

- Not providing up to 4,000 new homes, and so not contributing to SADC's housing targets.
- Not improving the local road network, especially the A414 Breakspear Way and B487 Hemel Hempstead (Redbourn Road) and not improving the Nickey Line for pedestrians and cyclists.
- Not providing the SANG and country parks for existing residents.
- Not contributing to local economic performance through on- and off-Site jobs and associated gross value added (GVA).
- Not providing three primary schools and a secondary school that would reduce the pressure on existing schools in Hemel Hempstead.

Alternative Sites

5.2 East Hemel forms part of the Hemel Garden Community Growth Area. The Hemel Garden Communities (HGC) Programme is a proposal to grow Hemel Hempstead and create attractive, sustainable new neighbourhoods to its north and east by 2050. The HGC Framework Plan is used to test and inform the policies and allocations in the draft SADC Local Plan. The SADC Local Plan is currently undergoing examination having been sent to the Secretary of State for Independent Examination on the 29th of November 2024. The St Albans Local Plan 2041 is expected to be adopted in March 2026. The Site is within allocations H2 East Hemel Hempstead (North), H3 East Hemel Hempstead (Central) and H4 East Hemel Hempstead (South) under Strategic Policy SP3.

5.3 The Development has been designed in accordance with current and emerging policy for the Site and so alternative sites have not been considered by the Applicant.

Design Drivers

5.4 The Site has been identified within local planning policy for many years as being strategically important for increasing housing provision within St Albans District and supporting existing communities in Dacorum Borough. The opportunities and constraints within the Site and its vicinity have informed consultation and have influenced the overall design and vision for the Site Masterplan, which is reflected by the Development. The following design drivers were followed:

- **Nurturing the Natural World**: Working with topography, hedgerows and lanes to create a characterful and resilient place with the inclusion of large parks and green spaces throughout the Development.
- **An integrated part of Hemel**: Safe and sustainable travel would be provided throughout the Development through a Sustainable Transport Corridor and strategic active travel routes and multi-modal transport interchanges.
- **Intergenerational Communities**: Each residential neighbourhood has been designed as 5-minute communities, with each cluster featuring a central space that offers local flexible community spaces.
- **A Place Shaped by Nature**: With a SANG and extensive open space across the two neighbourhoods, almost half the area of East Hemel is shaped by open space and the Development would focus on equitable access to nature and building sustainably.
- **Active and Economically Thriving**: East Hemel will be a truly mixed-use development where facilities, jobs and destinations complement residential communities and create an active place to live and work.

Design Evolution

5.5 The Applicant and their Design Team have had regular conversations with both SADC and DBC, statutory consultees, key stakeholders and members of the public across a series of consultation events and pre-application meetings. This has led to the evolution of the Development. A summary of the design evolution of the Development includes:

- **Changes to the Red Line Boundary** – There has been a reduction in the Red Line Boundary to account for different land ownerships. The boundary to the east of the M1 motorway was amended to remove safeguarded land that may need to be used in the future for an additional vehicle crossing of the M1 motorway, but which was not needed to deliver the Development. This reduced the size of the Site without reducing the size of the development parcels. Other changes to the Red Line Boundary include the changes to the north to account for a new access junction from the B487 Hemel Hempstead Road (Redbourn Road). The boundary was extended northerly to include access to the adjacent North Hemel development.
- **Nickey Line Crossing** – Following extensive surveys, it has been identified that there are a number of sensitive species and habitats located in proximity to the Nickey Line where the access road from the north of the Site would cross the Nickey Line. As a result, a number of design options were investigated including a route passing under or above the Nickey Line. However, the environmental implications of both options were greater than the at ground level route crossing the Nickey Line. Further details are provided in the DAS.
- **A414 Bridge Alignment** – A number of studies have informed the alignment of the safeguarded land for the bridge crossing the A414. The undulating topography meant it was most appropriate to be built where the ground is higher. Located towards to eastern side of the A414 is a BPA pipeline. There cannot be any structures built within the pipeline easement; therefore the bridge must be towards the west. There is also an existing hedgerow and attenuation pond to the western extent of the A414 and the proposed noise bund to the

southern side of the A414. These factors constrain the alignment of the bridge to give its current proposed alignment.

- **Landscape and Open Space** – Following further ecology surveys, the green infrastructure strategy was reassessed and led to the widening of bat corridors, badger sett relocation and proposals for planning and wildlife interventions across the Sustainable Transport Corridor.
- **Slope and Topography** – The undulating topography of the Site led to further refinement of the movement networks to ensure the Sustainable Transport Corridor and strategic roads were accessible to all and located cognisant of the contours of the Site. The primary education use within the Site was considered in several locations with the final proposal providing both a flat area and optimising overlooking of open spaces.

6. Approach and Environmental Impact Assessment Methodology

6.1 The EIA was undertaken in accordance with the EIA Regulations and best practice guidance using established methods such as site surveys, reviews of available reports and data, computer modelling, consultation with relevant organisations and specialist assessments.

6.2 The EIA Scoping Report was submitted to SADC and DBC in January 2025 to provide SADC, DBC and the statutory consultees the opportunity to comment on the methodology proposed to be used for the EIA and the scope and content of the ES. The purpose of the 'Scoping Exercise' was to identify the likely significant environmental effects that could arise from the Development and therefore provide the focus of the EIA.

6.3 The scope of the EIA was agreed with SADC and DBC via their EIA Scoping Opinion, and the EIA was undertaken in accordance with the agreed scope. The Scoping Exercise confirmed that the Development would likely give rise to a number of effects which need to be considered in the EIA. These effects can be grouped under the following key environmental topics:

- Landscape and Visual;
- Ecology and Nature Conservation;
- Heritage and Archaeology;
- Traffic and Movement;
- Air Quality;
- Noise and Vibration;
- Agricultural Land Use;
- Water Resources and Flood Risk;
- Climate Change;
- Socio-economics; and
- Health.

6.4 All the key environmental topics have been assessed in the ES, with a 'Chapter' dedicated to each of these issues in **ES Volume 2**.

6.5 In each Chapter of the ES, a description of the assessment methodology and relevant national and local planning policies has been provided together with a description of the relevant environmental aspects of the Site and surrounding area. This is followed by an assessment of the likely significant effects of the Development (both beneficial and adverse) and any additional measures that should be adopted to reduce or offset any significant adverse effects identified during the assessment. Such additional measures would be related to elements of the

Development's design that were not already incorporated into the Development or additional environmental management controls that would automatically be required via legislation or standard means, irrespective of the need for EIA.

6.6 The ES also provides an assessment of the likely 'residual' effects that would remain after the application of any additional mitigation measures, as well as the cumulative effects of the Development together with other relevant Cumulative Schemes. Typically, Cumulative Schemes that are considered within an ES are located within a 2km radius from the Site. However, it is recognised that the assessment of long-distance views may necessitate the consideration of relevant Cumulative Schemes which may be located up to approximately 5km from the Site boundary for the Landscape and Visual Impact Assessment (LVIA). Also, it is considered that there is the potential for cumulative effects only if Cumulative Schemes either:

- Are likely to generate their own significant residual effects; or,
- Introduce sensitive receptors in proximity to the Development.

6.7 In total, 23 Cumulative Schemes, were identified and considered within the EIA. They are listed in **Table 5** and their locations are shown in **Figure 10**.

Table 5: List of Cumulative Schemes

Cumulative Scheme No.	Planning Application Reference	Address	Description of Development	Approximate Distance & Direction from the Site	Known Status
Approved Developments					
1	DBC: 21/03793/MOA	Land At Green Lane, Hemel Hempstead, Hertfordshire	Hybrid application for redevelopment of the site in 4 plots to provide up to 26,640 sqm of new commercial floorspace.	10m west	Under construction Application approved: 28th June 2023
2a	DBC: 4/02539/16/MOA SADC: 5/2016/2845	Land Between Three Cherry Trees Lane And Cherry Tree Lane, Hemel Hempstead	Spencer's Park Phase 2 (East) Outline planning application to include up to 600 dwellings (c3), land for primary school (d1), land for local centre uses (a1,a3,a4,a5,d1,d2), land for up to 7,500 square metres of employment uses (b1,b2,b8), landscaping, open space and play areas, associated infrastructure, drainage and ancillary works, new roundabout access off Three Cherry Trees Lane, new priority junction off Three Cherry Trees Lane, new vehicular access to spencer's park phase 1 and an emergency access to the employment land off Cherry Tree Lane. Detailed approval is sought for access arrangement only, with all other matters reserved.	Adjacent to the Site's western boundary	Under construction with first occupants present Application approved: 29th April 2019 (SADC) and 30th April 2019 (DBC)
3	DBC: 22/03812/MFA	Land At Eastman Way, Atlas Copco, Hemel Hempstead Industrial Estate, Swallowdale Lane, Hemel Hempstead, Hertfordshire, HP2 7DU	Demolition of existing building and redevelopment of the site to provide a commercial building (Flexible uses within Class E (g)(iii), B2 and/or B8 of the Use Class Order (including ancillary office provision)), with associated enabling works, access, parking, landscaping, and infrastructure.	1.4km west	Construction not yet started Application approved: 6th June 2024

Cumulative Scheme No.	Planning Application Reference	Address	Description of Development	Approximate Distance & Direction from the Site	Known Status
4	SADC: 5/2021/3194	St Stephens Green Farm, Chiswell Green Lane, St Albans, Hertfordshire	Outline application (access sought) for demolition of existing buildings, and the building of up to 330 discounted affordable homes for Key Workers, including military personnel, the creation of open space and the construction of new accesses and highway	2.5km south-east	Construction not yet started Application approved: 22nd March 2024
5	SADC: 5/2022/0927	Land South Of Chiswell Green Lane, St Albans, Hertfordshire	Outline application (access sought) - Demolition of existing structures and construction of up to 391 dwellings (Use Class C3), provision of land for a new 2FE primary school, open space provision and associated landscaping. Internal roads, parking, footpaths, cycleways, drainage, utilities and service infrastructure and new access arrangements.	3km south	Construction not yet started Application approved by appeal: 22nd March 2024
6	SADC: 5/2020/3022	Land To Rear Of Burston Garden Centre North Orbital Road Chiswell Green, St Albans, Hertfordshire	Demolition of all existing buildings, structures and hardstanding and redevelopment of the site to provide a new retirement community comprising 80 assisted living apartments with community facilities and 44 bungalows together with associated access, bridleway extension, landscaping, amenity space, car parking and associated and ancillary works – approved 28/07/23 Note there is another s73 which is pending a decision ref 5/24/0142.	3.5km south-east	S73 application (ref. 5/24/0142) submitted Application approved by appeal: 31st January 2022
7	SADC: 5/2009/0708	Land in and around former aerodrome, north orbital road, Upper Colne Valley, Hertfordshire	Outline planning application (approval of means of access, siting and landscaping only) for the development of Strategic Rail Freight Interchange comprising intermodal area, distribution buildings (Class B8 use) and other related floorspace (Class B1/B2).	4.6km south-east	RMAs (ref. 5/2017/1995, ref. 5/2017/1938 and ref. 5/2016/3006) approved Under construction S106 agreement finalised: January 2023 Application approved by appeal: 13th July 2014

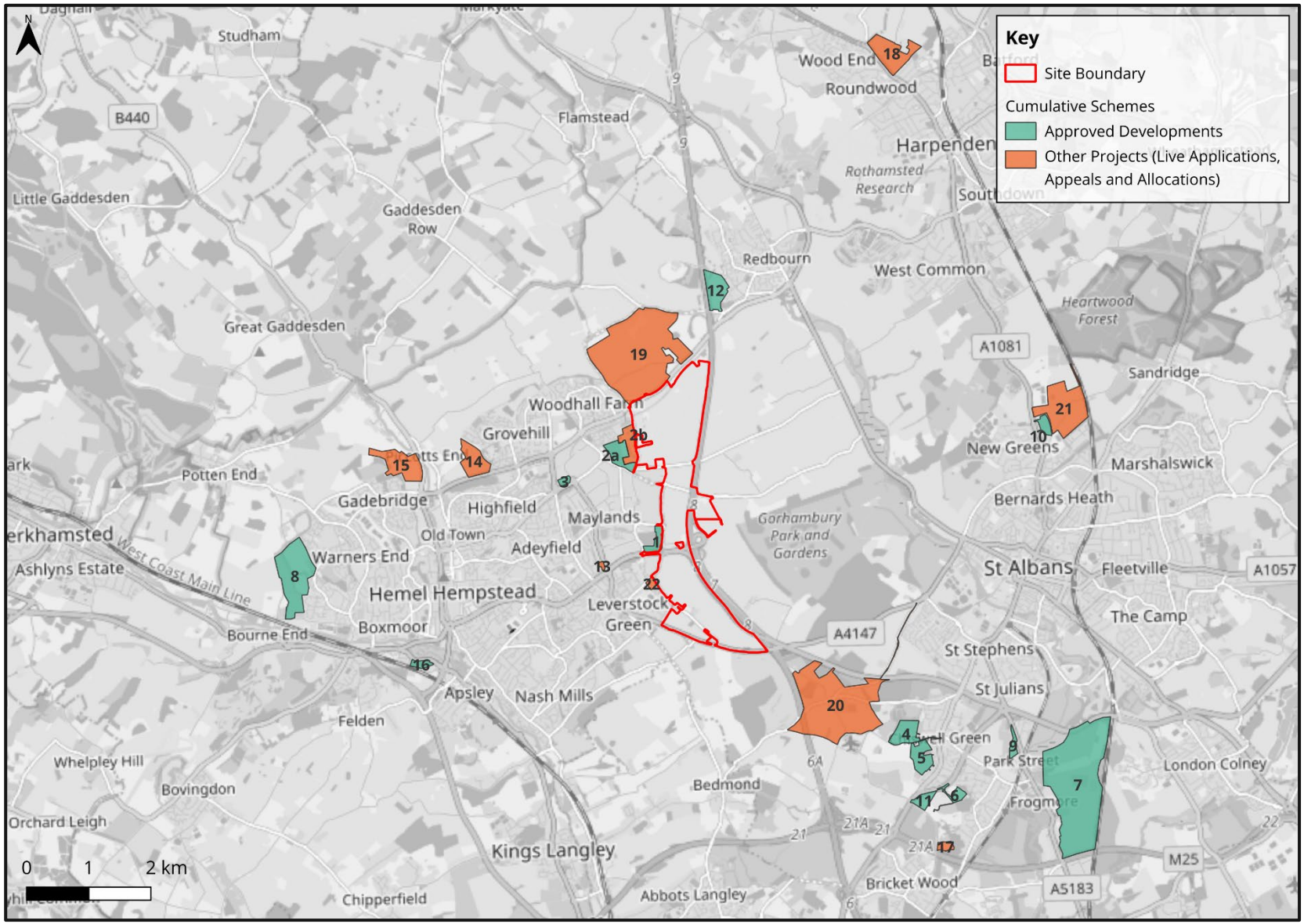
Cumulative Scheme No.	Planning Application Reference	Address	Description of Development	Approximate Distance & Direction from the Site	Known Status
					Application validated: 8th April 2009
8	DBC: 4/03266/18/MFA	LA3, Land At West Hemel Hempstead	Hybrid planning application for mixed use proposed development at west Hemel Hempstead, pursuant to policy la3 of the adopted site allocations development plan document (2017) to provide for up to 1100 dwellings (with up to 40% affordable housing)	5.8 km west	Discharging conditions Application approved: 3rd December 2021
9	SADC: 5/2022/0267	Land Between Caravan Site And Watling Street Park Street, St Albans, Hertfordshire	Outline application (access) - Erection of up to 95 dwellings, including 40% affordable dwellings and 5% self-build and custom build dwellings, public open space, landscaping and associated infrastructure	830m north	Application approved by appeal: 7th November 2024 Application validated: 11th February 2021
10	SADC: 5/2021/0423	Land To Rear Of 112-156B Harpenden Road, St Albans, Hertfordshire	Outline application (access sought) - Residential development of up to 150 dwellings together with all associated works (resubmission following invalid application 5/2020/3096)	5.1km east	RMA (ref. 5/2024/1915) submitted 19th December 2024 and currently under consultation Application approved: 24th October 2021
11	SADC: 5/2023/0983	Copsewood, Lye Lane, Bricket Wood, Hertfordshire	Outline planning application (with access sought) for the residential redevelopment of the site for up to 190 dwellings and associated works	5km south-east	Construction not yet started Application approved: 29th November 2024
16	DBC: 25/00549/MFA	Former British Gas Site London Road Hemel Hempstead Hertfordshire	Redevelopment of the former Hemel Hempstead Gasworks site, proposing full planning permission for the construction of 11 residential buildings (three to eight storeys) (485 proposed residential units) with amenity spaces, ancillary facilities; car and	3.8km west	Application approved: 29th June 2025

Cumulative Scheme No.	Planning Application Reference	Address	Description of Development	Approximate Distance & Direction from the Site	Known Status
			cycle parking; public realm improvements, landscaping including SUDS features; access to Stratford Way, improved access from London Road; and associated works.		
Other Projects (Live Applications, Appeals and Allocations)					
2b	SADC: 5/2024/0927	Land Between Three Cherry Trees Lane And Cherry Tree Lane, Hemel Hempstead	Spencer's Park Phase 2 (West) Application for approval of reserved matters (appearance, landscaping, layout, scale) of outline planning permission 5/2016/2845 dated 30/04/2019 for Up to 600 dwellings (c3), land for primary school (d1), land for local centre uses (a1,a3,a4,a5,d1,d2), land for up to 7,500 square metres of employment uses (b1,b2,b8), landscaping, open space and play areas, associated infrastructure, drainage and ancillary works, new roundabout access off Three Cherry Trees Lane, new priority junction off Three Cherry Trees Lane, new vehicular access to spencer's park phase 1 and an emergency access to the employment land off Cherry Tree Lane. Detailed approval is sought for access arrangement only, with all other matters reserved.	Adjacent to the Site's western boundary	Decision pending Application validated: 10th June 2024
12	SADC: 5/2021/3631	Land At Gaddesden Lane, Redbourn, Hertfordshire, AL3 7DP	Outline application (access only) - Construction of up to 300 new homes including 35% affordable new homes, new landscaping, public open space and associated infrastructure works	830m north	Decision pending. Under consultation until: 13th December 2025 Application validated: 31st January 2022
13	DBC: 21/04556/MFA	Plots 1 & 2, Maylands Avenue, Hemel Hempstead, HP2 4FQ	Construction of 234 apartments and 1,486 sqm of commercial floor space, provided in three main buildings ranging from 5 to 9	605m west	Application withdrawn: 1st October 2025

Cumulative Scheme No.	Planning Application Reference	Address	Description of Development	Approximate Distance & Direction from the Site	Known Status
			storeys on two podiums, with associated car parking, landscaping, amenity space and service areas		Application validated: 7th December 2021
14	DBC: 19/02749/MOA	Land At Marchmont Farm Piccotts End Lane, Hemel Hempstead, Hertfordshire, HP2 6JH	Outline planning for up to 350 dwellings, land for 5 gypsy & traveller pitches. Vehicular access from A4147, public open space including extension to Margaret Lloyd Park and associated landscaping, infrastructure and drainage. Detailed approval for access arrangements	2.5km west	With Planning Officer Application validated: 28th October 2019
15	DBC: 21/04508/MOA	Land West Of Leighton Buzzard Road And North Of Galley Hill, Leighton Buzzard Road, Hemel Hempstead Hertfordshire, HP2	Construction of up to 390 dwellings (C3 Use), including up to 40% affordable housing and 5% self build, a residential care home for up to 70-beds (C2 use), along with associated landscaping and open space with access from Leighton Buzzard Road.	3.6km west	Appeal lodged: 31st May 2024 (24/00036/REFU) Application validated: 10th December 2021
17	SADC: 5/2022/2443	Bricket Wood Sports And Country Club, Paintball Site & Bricket Lodge, Lye Lane Bricket Wood, Hertfordshire, AL2 3TF	Outline application (access sought) - Demolition of existing buildings and construction of up to 115 dwellings and creation of new access	5km south-east	Appeal dismissed: 3rd June 2025 Appeal lodged: 9th February 2024 Application validated: 12th October 2022
18	SADC: 5/2023/0327	Land at Cooters End Lane and Ambrose Lane, Harpenden	Outline application (access sought) - Construction of up to 550 dwellings including circa. 130 Class C2 integrated retirement homes, 40% affordable housing, early years setting, public open space, allotments and publicly accessible recreation space including junior sport pitches	5.5km north-east	Decision pending Application validated: 1st March 2023
19	SADC: 5/2025/0645	North Hemel Hempstead Development Site Hemel	Draft Allocation 'H1' within the new SADC Local Plan (to 2041). Outline application for residential-led mixed use development	0m north	An outline planning application is currently being prepared

Cumulative Scheme No.	Planning Application Reference	Address	Description of Development	Approximate Distance & Direction from the Site	Known Status
		Hempstead Road Redbourn Hertfordshire	comprising up to 1,500 new dwellings, a 3 form entry primary school, a local centre, mobility hub, open space, amenity space. All matters reserved except for access junctions to B487 and Holtsmere End Lane		and is expected to be submitted at a similar time to the Development (i.e. East Hemel) EIA Scoping Opinion received: 23rd May 2025
20	SADC: 5/2025/0733	Proposed Solar Farm Potters Crouch Hertfordshire	The Development would comprise a ground mounted solar PV farm with associated infrastructure and equipment, including fencing, security cameras, cabling, access tracks and landscaping. The Development would have an export capacity of up to 49.9 megawatts.	650m south-east	EIA Screening Opinion received: 8th May 2025, confirming an ES is not required
21	SADC: 5/2024/2271	Land Off Sandridgebury Lane And Between The Railway And Harpenden Road St Albans Hertfordshire	Hybrid application for relocation and replacement of playing fields and pavilion (detailed) and the construction of 1000 homes, a local centre, primary school and green infrastructure.	5.5km west	Decision pending. Under consultation until: 13th December 2025 Application validated: 26th February 2025
22	N/A	Westwick Row, Land to the South of Green Lane	Draft Allocation 'HM16' within the new Dacorum Local Plan (to 2041). Currently in the pre-application stage with a planning application anticipated to be submitted in Autumn 2025. Expected to start on-site in late 2026 and completion by 2028. Allocated for up to 80 housing units.	Adjacent to the Site's south-west boundary	Pre-application stage

Figure 10: Map of Cumulative Schemes



7. What are the Likely Environmental Effects and How Would They be Minimised?

Landscape and Visual Amenity

7.1 An assessment was undertaken of the effects of the Development on landscape character and visual amenity. In particular, it assessed the anticipated effects of change resulting from the Development on the character and features of the landscape, and on people's views and visual amenity. This is presented in-full within **ES Volume 2, Chapter 7: Landscape and Visual**.

The Works

7.2 During the Works, there would be **significant adverse** effects on landscape character within the Site. In many cases, these effects would be temporary, although there would be some longer terms effects from construction activities such as vegetation removal. Due to the retention of many of the existing trees and hedgerows which has been a key element of the Scheme, the effects on individual landscape elements within the Site would not be significant.

7.3 There would be **significant adverse** effects on the views experienced by receptors both within and close to the Site. This includes people living along Cherry Tree Lane, Westwick Row and Leverstock Green, which would be surrounded by activity over a long period of time, and which currently have open views across the Site, whether directly or obliquely. Similarly for the more distant cluster of residential receptors on the highway near Old Jeromes.

7.4 There would also be **significant adverse** effects for users of the PRoWs or permissive paths in the local vicinity, to the Site directly north and east, and where the Nickey Line crosses the Site. Similarly, these recreational users within the Green Belt would gain clear uninterrupted views of the construction activity over a long period of time, and currently have open views across the Site, whether directly or obliquely.

7.5 **Significant adverse** effects were also assessed for users of the highway network where it dissects the Site, through Punchbowl Lane and Breakspear Way (A414), and where it is adjacent to the Site boundary along Redbourn Road (B487) and Hemel Hempstead Road (A4147), where receptors would be surrounded by activity over a long period of time as well as increased traffic and noise on the highway network itself. As the Works progresses, the implementation of the 'Quietway' on Punchbowl Lane would notably change the value for those that use this area and change the tranquillity experienced.

7.6 The effect on views from The Chilterns National Landscape, the Registered Park and Garden at Gorhambury House, or the Aubrey Fort site, nor from private residences to the north and northeast would be **not significant**. Users of the PRoW network in proximity to the Site to the south and northeast also would experience **insignificant adverse**

effects, and similarly for PRoW users at a greater distance from the Site to the northeast or east. The vegetation being retained within the Site and along its boundaries will heavily filter views, with the majority of those receptors affected by construction being in close proximity.

7.7 Overall, it is considered that demolition and preparation of the existing Site and construction of the Development would result in some significant effects on the landscape and identified receptors, and as such would give rise to significant effects on landscape and views, however, the significant effects are relatively contained to the Site and immediate surroundings, and receptors in close proximity due to the relative level of containment provided by the landform and existing mature vegetation.

The Completed and Operational Development

7.8 During the operational Development, there would be significant adverse effects on the landscape character within the Site, although due to the retention of many of the existing trees and hedgerows and the embedded landscape mitigation measures such as edge landscape enhancements and the creation of green corridors etc, the overall effects on landscape elements within the Site is considered to be **not significant** as they are enhanced and strengthened. The wider character area beyond the Site would not experience significant effects. This is due to the high level of trees and hedgerows and barriers such as industrial estate and infrastructure that would shield the Development and result in limited indirect effects on landscape character.

7.9 During the operational Development, there would be some **significant adverse** effects on views for users of local Public Rights of Way (PRoW) directly north and east where they would have views of the commercial area. There would also be **significant adverse** effects on views from the east of the M1 motorway due as a result of the commercial part of the Development. This could be softened by using façade with graduation of colour and use of non-reflective materials. There would not be significant effects on users of the highways, views from The Chilterns NL, the Registered Park and Garden at Gorhambury House, or the Aubrey Fort site, nor from the private residences to the north and northeast, or those of Leverstock Green due to the mature vegetation within and surrounding the Site.

7.10 It is considered that the completed and operational Development would result in some significant effects on the landscape and identified receptors, and as such would give rise to significant effects for landscape and views. However, these effects are constrained to receptors within and immediately adjacent the Site and for a development of this scale are limited.

Cumulative Effects

7.11 There are cumulative visual effects anticipated from the Development with three of the Cumulative Schemes identified.

7.12 Maylands Avenue would experience **significant adverse** effects during the operational phases for both the users of Breakspear Way and the LCA of the combined sites. This is notably due to the effects already being **significant**

adverse for the Development in isolation. Sensitive management of the highway works associated with the latter would potentially manage to reduce or eliminate the cumulative effects during this phase.

7.13 The North Hemel and Cherry Tree Lane developments are a part of the HGC Concept Framework and are designed to support the planned growth of Hemel Hempstead. Cumulative and inter-related effects are both intentional and inevitable for these Cumulative Schemes and the Development. During the Works, the construction phases would be sensitively managed to reduce or eliminate the cumulative effects on landscape and visual. At Operation (Year 15) there is only one receptor, Users of Redbourn Road, that would experience a **moderate adverse (significant)** cumulative effect on the view from that receptor.

Ecology and Nature Conservation

7.14 An assessment was undertaken of the effects of the Development upon ecology. In particular, it assessed the anticipated effects upon 'important ecological features' which includes sites designated for their ecological value and rare and / or protected habitats and species. This is presented in-full within **ES Volume 2, Chapter 8: Ecology and Nature Conservation**.

7.15 A series of ecological assessments have been undertaken, including species-specific surveys for bat roosts and activity, great crested newts, dormouse, badgers, barn owls, breeding birds, raptors, wintering birds and reptiles, along with a Preliminary Ecological Appraisal, a hedgerow survey, a Habitats Regulations Assessment and a Lighting Impact Assessment. Surveys have identified that the presence of bats, badgers, barn owls, raptors, and breeding and wintering birds on the Site.

The Works

7.16 Best practice measures would be adopted during the Works to avoid harm and disturbance to nesting birds (including Schedule 1 species). This would include sensitive timing, methods and ecological supervision. A licence would be obtained from Natural England to allow for removal of badger setts and removal / disturbance bat roosts without risk of harm to these species.

7.17 Best practice measures would also be adopted to safeguard retained woodland, trees, hedgerows and waterbodies on and off-site and to ensure against potential damage or degradation of habitats (including local designated sites for ecological value) as a result of construction activities, including from artificial lighting. These measures would be implemented under a CEMP.

7.18 The risk of disturbance to and displacement of badgers, nesting birds and bats during the Works would be limited as far as possible by the phasing of the Works to minimise disturbance at any one time and by ensuring that alternative nest, roost or refuge provision (e.g., replacement setts, and bat and bird boxes) are provided ahead of works in each phase. Habitat creation, to include areas integral to ensuring connectivity to retained habitats on and off-site for species such as badgers and bats will also be timed to align with the phased losses of habitat to the Works.

7.19 Mitigation has been included in the design to retain the majority of existing trees and hedgerows as well as selecting landscape planting that would be of benefit to wildlife. Bird nest boxes, and bat roost features, as well as other enhancements for invertebrates, would be incorporated into the Development. Overall, the new landscape planting would provide a biodiversity net gain.

7.20 Air pollution caused by construction vehicles would not have any significant effect on habitats at on or off-site ecologically designated sites.

7.21 With the above-mentioned mitigation, **no significant** effects on ecological receptors are predicted during the Works.

The Completed and Operational Development

7.22 In the long-term it is anticipated that the Development would result in the continued provision of habitats for the local populations of badger, bats, barn owl, raptors and the majority of breeding birds. Bird species that will not be readily accommodated on the Development (e.g., skylark) will be provided for via off-site compensation measures. On and off-site habitat linkage, including badger underpasses, hop-overs, planting and buffers, would enable species to continue to move between the Site and the surrounding area. Important to this will be an appropriate sensitively designed lighting scheme that avoids direct illumination of wildlife features and provides dark corridors and refuges for foraging, commuting and roosting bats. The long-term ecological value of habitats would be assured via a commitment to management in perpetuity.

7.23 The Development accords with relevant national and local planning policy by virtue of providing publicly accessible greenspace and SANG, green infrastructure to link or connect wildlife habitats, net gain in biodiversity and the retention and safeguarding of as many of the existing trees, woodland, hedgerows and other features as possible. Any potential significant effects to the Chiltern Beechwoods Special Area of Conservation from increased visits from future residents of the Development has been mitigated through the provision of SANG. Air pollution caused by traffic from the completed and operational Development would not have any significant effect on habitats at on or off-site ecologically designated sites.

7.24 With the above-mentioned mitigation, **no significant** effects on ecological receptors are predicted during the completed and operational Development phase.

7.25 On the basis of information to date, there are no other nearby developments that would result in a cumulative effect on ecology during the Works or in the long-term.

Cumulative Effects

7.26 Based on the information currently available, the Development, in combination with all other identified developments, is not expected to result in any significant cumulative effects on ecological receptors during the Works or in the long term.

Heritage and Archaeology

7.27 An assessment was undertaken of the likely significant effects of the Development upon the Site's known and unknown archaeological remains, historic landscape features within the Site and designated and non-designated heritage assets within and near to the Site. This is presented in-full within **ES Volume 2, Chapter 9: Heritage and Archaeology**.

The Works

7.28 A series of desk-based studies and site surveys (including geophysical surveys and trial trench evaluation in accessible areas) was undertaken to understand the potential for known and unknown archaeological remains at the Site. The Site is considered to be of medium heritage importance for Early Prehistoric remains (Palaeolithic to Mesolithic), Bronze Age to Late Iron Age remains, and Late Iron Age and Roman Period remains. Remains from other periods are considered to be of negligible heritage importance.

7.29 The Works could result in the disturbance to or loss of, any buried archaeological remains that may be present within their footprint, resulting the total or partial loss of their value. As such, the Applicant will prepare and submit a Written Scheme of Investigation (WSI) to be agreed with SADC's Archaeological Advisor. The WSI would set out a programme of further targeted archaeological excavations and recording to be completed in advance of the Works along with targeted archaeological monitoring and recording (watching briefs) to be completed during the Works. The results of which are to be published and made available to the public.

7.30 Following this mitigation, the residual effect of the Works upon archaeological remains present within the Site is considered to be **neutral** (**not significant**).

7.31 The Works would result in the partial removal of the Site's historic landscape features which includes post-1950 fields, pre-18th enclosure and extant historic hedgerow boundaries, the residual effect of which is considered to be **negligible** (**not significant**).

7.32 The Works would result in indirect, temporary, short-term effects upon designated and non-designated heritage assets within and near to the Site (e.g. Listed Buildings) as a result of the presence of plant and other machinery, construction noise and traffic, demolition works and the presence of temporary structures such as compounds and fencing. However, with the implementation of the CEMP the residual effect is considered to be **negligible** (**not significant**).

The Completed and Operational Development

7.33 During the Completed and Operational Development, no activities are anticipated which would result in a direct physical impact on remaining known or potential buried archaeological remains and historic landscape features, as such there would be **no effect**.

7.34 The Listed Buildings on the Site are to be retained as part of the Development. However the completed and operational Development would result in a **moderate adverse** (**significant**) residual effect upon the setting of the Wood End Farm Cottages (a Grade II Listed Building) due to the introduction of residential development and road infrastructure within the existing adjacent fields. The residual effects upon the remaining designated and non-designated heritage assets considered within **ES Volume 2, Chapter 9: Heritage and Archaeology** would be **minor adverse** to **negligible** (**Not Significant**) largely due to the embedded mitigation in the form of landscape buffers, appropriate building heights, new green corridors and the siting of strategic open spaces.

Cumulative Effects

7.35 The Development has potential to create cumulative effects with Cumulative Schemes 1, 2a and 2b, 12 and 19 due to their proximity to the Site and the assessed heritage receptors.

7.36 During the Works, there would be no significant effects identified between the Development and the Cumulative Schemes. During the Completed and Operational Development, the Cumulative Schemes in combination with the Development would only result in one significant effect. This would be a **moderate adverse (significant)** cumulative effect experienced on the Grade II Listed Wood End Farm in the north of the Site as a result of the Development and Cumulative Scheme 19 (North Hemel Hempstead). However, this is the same level of effect as would be experienced in the non-cumulative scenario.

Transport and Access

7.37 An assessment was undertaken of the likely significant effects of the Development upon traffic and transport, specifically the effects upon severance of communities, road vehicle driver and passenger delay, pedestrian and cycle delay, pedestrian and cycle amenity, fear and intimidation and accidents and safety across ten different scenarios. This is presented in-full within **ES Volume 2, Chapter 10: Transport and Access**.

The Works

7.38 The Transport and Access ES Chapter has assessed the impact of construction vehicle traffic, including heavy duty vehicles (HDVs), at seven links (i.e. junctions) where total construction vehicle traffic or HDV traffic is predicted to cause a >30% increase over a 24-hour period or a 10 to 30% increase over a 24-hour period if the link is near a receptor of medium or high sensitivity such as a school or hospital. The assessed links include: Link 25 - Jupiter Drive (West); Link 55 - High Street; Link 74 – B4505 Box Lane; Link 26 - Jupiter Drive (East); Link 88 – Belswains Lane (South); Link 95 – Bennetts End Road; and Link 102 – Westwick Row.

7.39 The effects upon severance, driver delay, non-motorised user delay and amenity, fear and intimidation and accidents and safety were found to be minor adverse (**not significant**).

7.40 A Construction Environmental Management Plan (CEMP) and Construction Travel Plan (CTP) have been recommended as part of the Development's mitigation. With these implemented, receptors at Link 55 – High Street

would experience a **negligible** residual effect in respect of severance of communities, road vehicle driver and passenger delay, pedestrian and cycle delay, pedestrian and cycle amenity, fear and intimidation and accidents and safety, which is considered **not significant**. At the remaining six links, receptors would experience a **minor adverse** residual effect, which is also considered **not significant**.

The Completed and Operational Development

7.41 The Transport and Access ES Chapter has also assessed the impact of operational vehicle traffic, including HDVs across six different scenarios.

7.42 A Travel Plan has been recommended as part of the Development's mitigation. With this implemented, all assessed links in all scenarios would experience **negligible** to **minor adverse** residual effects in respect of severance of communities, road vehicle driver and passenger delay, pedestrian and cycle delay, pedestrian and cycle amenity, fear and intimidation and accidents and safety, both of which are considered **not significant**.

Cumulative Effects

7.43 The assessment of the Works and the Completed and Operational Development presented above has included the predicted traffic growth from the Cumulative Schemes or Committed Developments, and as such the cumulative effect would be no greater than **negligible** to **minor adverse** at the assessed links, which is considered **not significant**.

Air Quality

7.44 An assessment was undertaken of the likely significant effects of the Development in regard to air quality. The assessment considered the effects of construction dust and road traffic emissions during the Works and road traffic emissions during the completed and operational Development on sensitive human and ecological receptors. This is presented in-full within **ES Volume 2, Chapter 11: Air Quality**.

The Works

7.45 The Air Quality ES Chapter has assessed the impact of dust generated by the Works through processes such as earthworks, construction and vehicle trackout upon human health, ecological receptors and dust soiling. The CEMP would include a series of standard measures to minimise or prevent dust, recommended by the Institute of Air Quality Management (IAQM). With these measures in place, the effect upon human health, ecological receptors and dust soiling is considered to be **negligible** (**not significant**).

7.46 The Air Quality ES Chapter has assessed the impact of vehicle emissions road traffic movements associated with the Works. The impact of the Works upon human health as a result of changes to NO_2, $PM_{2.5}$ and PM_{10} concentrations and upon ecological receptors as a result of changes to NO_2 concentrations is considered to be **not significant**.

The Completed and Operational Development

7.47 An assessment of the road traffic emissions from the completed and operational Development was undertaken. The design of the Development seeks to mitigate impacts on air quality as far as possible through its design with the inclusion of active travel routes, provision of cycle parking facilities and mobility hubs. The results of the air quality assessment showed that the effect of the Development on air quality is considered to be **not significant.**

Cumulative Effects

7.48 During the Works there is the potential for cumulative effects where there are other sources of dust located within 500m of the area subject to the Works. Cumulative Scheme 19 is located directly north of the Site and, should the construction work overlap, there is potential for significant effects due to combined dust emissions. However, it is expected that the other Cumulative Schemes would abide to the same mitigation and good practice measures as set out for the Development and therefore the cumulative effects would be **not significant**.

7.49 The impact of construction and operational road traffic is expected to remain **not significant**. This is because the cumulative effect of the Cumulative Schemes (or Committed Developments) is already included within traffic data used to model the effects of the Works and the completed and operational Development, and so the air quality impacts already account for cumulative effects.

Noise and Vibration

7.50 An assessment has been undertaken of the likely significant effects of the Development upon noise-sensitive receptors within and near to the Site as a result of plant and road traffic noise during the Works and for the Completed and Operational Development. This is presented in-full within **ES Volume 2, Chapter 12: Noise and Vibration**. In addition, a separate assessment was undertaken (included at **ES Volume 3, Appendix 12.1**) to assess whether the noise levels at the Site would be suitable for the intended residential and school uses.

7.51 A noise monitoring survey was undertaken by Savills in June 2025 at eleven monitoring locations within and near to the Site to understand the current noise conditions at existing and future noise-sensitive receptors.

The Works

7.52 The Works would result in noise associated with construction road traffic movements and construction plant / machinery, the residual effect of which is considered to be between **insignificant** to **minor adverse** (**not significant**) dependent on the noise-sensitive receptor.

The Completed and Operational Development

7.53 Operational road traffic would result in negligible increases in road traffic noise levels at nearby sensitive receptors.

7.54 The Completed and Operational Development would result in noise associated with operational road traffic movements and operational fixed plant / commercial uses, the residual effect of which is considered to be between **insignificant** to **minor adverse** (**not significant**) dependent on the noise-sensitive receptor.

7.55 The assessment included at **ES Volume 3, Appendix 12.1** concluded that with the addition of the proposed noise bunds adjacent to the M1, along with the appropriate design and specification of buildings and their mechanical plant, noise levels at the proposed residential dwellings and schools would be suitable for the intended use.

Cumulative Effects

7.56 No significant cumulative effects were identified as a result of noise and vibration.

Agricultural Land Use

7.57 An assessment of the likely significant effects of the Development upon soils and agricultural land quality has been undertaken. This is presented in-full within **ES Volume 2, Chapter 13: Agricultural Land Use**.

The Works

7.58 During the Works, there would be the loss of all topsoil within the construction areas. There is also the risk that the subsoils of the greenspace surrounding the built development could become compacted through the handling of the soils and vehicles driving over them. This could subsequently impact surface water drainage and thus increase surface water flood risk. Through the adherence to soil management measures set out within a Soil Resource Management Plan, the effect of the construction of the Development on soil function and resource would be **minor adverse** (**not significant**).

7.59 The development of the Site will lose up to approximately 357 hectares of agricultural land, 30% of which is considered to be 'best and most versatile' (BMV) land. This is considered to be a **major adverse** effect which is **significant** in terms of the EIA Regulations. However, this effect is unavoidable if the Site is to be developed for housing to meet the apportioned housing need for this area identified in the Local Plan.

The Completed and Operational Development

7.60 The impacts to agricultural land use would occur during the Works phase and there are not expected to be any significant effects during operation.

Cumulative Effects

7.61 There are a number of cumulative schemes that will form new clusters of primarily residential developments within the local area. The new cumulative schemes are likely to contain at least some best and most versatile land (typically in this area BMV is at least 30% of agricultural land and in some cases slightly more). However, as the effect of the Development alone in relation to agricultural land is **major adverse** and therefore **significant** in

terms of the EIA Regulations, the effects of the other cumulative schemes would not alter this assessment. It is anticipated that the Cumulative Schemes would also follow best practice in regard to soil handling and re-use and therefore the effect of the Cumulative Schemes and the Development on soils would remain as a **minor adverse** effect**.**

Water Resources and Flood Risk

7.62 An assessment was undertaken of the likely significant effects of the Development upon water resources (this includes the groundwater quality of the Chalk aquifer beneath the Site, the surface water quality of the River Ver, and demand upon local water resources and infrastructure) and flood risk within and near to the Site. This is presented in-full within **ES Volume 2, Chapter 14: Water Resources and Flood Risk**.

The Works

7.63 With the implementation of a CEMP, which would include best practice pollution and surface water control measures, the residual effects of the Works are considered to be **not significant**. This would include effects in relation to:

- Increased risk of groundwater pollution of the Chalk aquifer beneath the Site as a result of piled foundations during the Works;
- Increased risk of surface water pollution of the River Ver as a result of potential accidental runoff or spillage events during the Works;
- Increased risk of local flooding events as a result of potential surface runoff during the Works;
- Increased water demand as a result of the Works; and
- Increased demand upon the local water supply and infrastructure as a result of the Works.

7.64 In respect of the risk of groundwater pollution of the Chalk aquifer, a Piling Method Statement and Risk Assessment would be prepared by the Applicant for approval which would seek to minimise the risk of pollution events. This would be secured by way of a planning condition.

The Completed and Operational Development

7.65 A surface water drainage strategy is proposed, including various SuDS components (ponds and wetlands, bioretention raingardens, swales, tree pits). This will attenuate and treat surface water runoff, limiting any discharge into the River Ver to greenfield runoff rates and volumes. The surface water drainage strategy will ensure there is no flood risk on or off the Site.

7.66 The potential impact of mobilisation of existing contaminants in the soil will be mitigated by the fact that no concentrated infiltration is proposed anywhere across the Development.

7.67 Additional mitigations include water demand reduction through water efficient fittings, metering, leak detection, drought resistant plants and efficient irrigation practices.

7.68 Overall, **no significant** effects on water resources and flood risk are anticipated from the Completed and Operational Development, apart from a **minor beneficial** (**significant**) effect is anticipated on local residents as a result of the Development's Surface Water Drainage Strategy maintaining existing overland flow routes with no increase in flood risk.

Cumulative Effects

7.69 No significant cumulative effects upon water resources and flood risk have been identified.

Climate Change

7.70 An assessment of the greenhouse gas emissions generated by the Works and the completed and operational Development and its impact upon the global climate (known as a Greenhouse Gas Impact Assessment) was undertaken along with an assessment of the Development's resilience to future climate hazards (known as a Climate Change Resilience Assessment). This is presented in-full within **ES Volume 2, Chapter 15: Climate Change**.

The Works

7.71 The Works would result in the net generation of approximately 217,348 tonnes of carbon dioxide equivalent ([tCO2e) of greenhouse gases against the baseline. This would result in a long-term, indirect **moderate adverse** effect (**significant**) upon the global climate.

7.72 The effect of various climate hazards has been considered on receptors during the Works, including community and people (such as construction workers), the built environment, infrastructure systems and services and the natural environment. The climate hazards considered include surface water flooding (as a result of wetter winters and increased and prolonged humidity), extreme wind and storms, subsidence or ground movement and drought and heat waves (as a result of warmer summers and increased solar radiation). Overall, this is considered to be a short-term **minor adverse** effect (**not significant**) upon the above receptors. As part of the Development's mitigation, it is recommended that the CEMP(s) include a risk assessment of potential climate hazards upon the above receptors.

The Completed and Operational Development

7.73 The completed and operational Development would result in the net generation of approximately 1,915,129 tonnes of carbon dioxide equivalent (tCO2e) of greenhouse gases against the baseline over the assumed 60-year lifespan of the Development. This would result in a long-term, indirect **major adverse** effect (**significant**) upon the global climate. For context, this would amount to 0.9% of the estimated carbon budget for St Albans between the years of 2028 and 2105. As part of the Development's mitigation, it is recommended that a Whole Life Carbon

Assessment is completed for each phase of the Development to evaluate the carbon emissions of the detailed design of the Development.

7.74 The effect of the same climate hazards considered for the Works has also been assessed for receptors within the completed and operational Development, including community and people (such as residents, visitors and workers), the built environment, infrastructure systems and services and the natural environment. A **major** to **moderate adverse** effect (**significant**) has been identified to the natural environment, while a **moderate adverse** effect (**not significant**) has been identified to the community and people and the built environment and infrastructure systems and services. As part of the Development's mitigation, it is recommended that an Emergency Preparedness Plan covering climate-related events is prepared along with a long-term HMMP (including a Landscape and Ecological Management Plan (LEMP)) incorporating strategies to mitigate against extreme weather events.

Cumulative Effects

7.75 The cumulative greenhouse gas emissions of the Development with other Cumulative Schemes have not been considered due to all greenhouse gas emissions being inherently cumulative to the global climate and there therefore being no basis for their selection. This is in-line with industry guidance.

Socio-economics

7.76 An assessment was undertaken of the likely significant effects of the Development upon socio-economics. In particular, it considered effects that may arise as a result of the Development on housing and employment levels, as well as effects on social infrastructure including education, healthcare, open space and play space. This is presented in full in **ES Volume 2, Chapter 16: Socio-economics**.

The Works

7.77 There are only beneficial effects from the Works phase of the Development. The demolition and construction works will create employment and generate revenue for local businesses and the construction supply chain. It is anticipated that during the 17 year construction period, there would be an average of 1,650 full time equivalent (FTE) temporary construction jobs per annum. Overall, the demolition and construction phase of the project is expected to result in temporary **minor beneficial** (**not significant**) effect at both the local level and at the East of England scale.

The Completed and Operational Development

7.78 The Completed and Operational Development would generate **major beneficial** (**significant)** effects in relation to the jobs created across the local centres and employment areas within the Development and the gross value added to the local and district economy as a result of these jobs. There would also be **major beneficial (significant)**

effects in relation to housing need across the local and district areas. The expenditure of the occupants of these new homes would also result in **minor beneficial (not significant)** effects at both the district and local levels.

7.79 There would be at least one health centre provided within the Development, this would result in a **moderate, beneficial (significant)** effect on healthcare provision at the local level. There would be a **moderate adverse (significant)** effect in relation to provision of dental care provision in the local area, however as dental care reacts to the demand from local people in the area, it is only a temporary effect and the increased demand would result in an increase in the supply of dental care. Also, mitigation can be agreed through the Development Management process through the provision of S106 contributions or Community Infrastructure Levy's (CILs) which would reduce the adverse effect to **insignificant**.

7.80 The Development proposes three new primary schools. This would result in a **moderate beneficial (significant)** effect for primary schools at the local level and a **minor beneficial (not significant)** effect at the district level. The Development proposes the construction of a secondary school. This would result in a **moderate beneficial (significant)** effect for secondary schools at the local level and a **minor beneficial (not significant)** effect at the district level.

7.81 The Development would also provide a large number of open spaces along with a number of play spaces throughout the Site. This would result in a **moderate beneficial (significant)** effect on provision of open space at the local level and a **minor beneficial (not significant)** effect on play space at the local level. Through the provision of community facilities throughout the Development, there would be a **moderate beneficial (significant)** effect at the local level. There would also be a **major significant beneficial effect** at the local level and a **moderate beneficial (significant)** effect at the district level as a result of the provision of leisure facilities. An assessment was undertaken on the impact of the new local centres provided in the Development on existing town centres and it was concluded that the Development would have a **minor beneficial (not significant)** effect for existing district centres at both the local level and district level.

Cumulative Effects

7.82 At the local level, the effects of the Development and the Cumulative Schemes are likely to be the same for housing supply, provision of employment space, open space, play space, and community facilities. The increased population would give rise to adverse effects on primary healthcare and dental practices. At the district level, there would be **adverse significant** effects identified on primary healthcare, dental practices, primary education, secondary education in the absence of mitigation for the Cumulative Schemes.

Health

7.83 An assessment was undertaken of the likely significant effects of the Development on health during the construction and operation with respect to the existing and future community. Previous sections of the ES have informed the health assessment, including Air Quality, Noise, Socio-economics and Transport and Access. This assessment is presented in full in **ES Volume 2, Chapter 17: Health**.

The Works

7.84 The construction phase would generate on-Site and off-Site employment opportunities and associated income over a 17-year period. This would have beneficial impacts to individuals' health and quality of life but is unlikely to materially affect health to the extent that there would be a measurable impact at the population level.

7.85 Environmental determinants of health that are considered include changes in air quality and noise exposure and transport nature/flow rate. While there is the potential for increased levels of dust from the construction activities, the implementation of a range of standard measures in the CEMP would prevent significant dust emissions to neighbouring uses. The predicted noise levels are able to be mitigated through a range of measures set out in the CEMP to be below 65 dB during working hours which is set to be protective of the environment and human health. Construction vehicles on the local highway would contribute a small increase to noise levels that would not be noticeable. Any traffic and transport impacts would be temporary and are not considered to be of a level that would have any material impacts on human health or wellbeing.

The Completed and Operational Development

7.86 Once operational, the main impact on environmental determinants (air quality and noise) is associated with traffic generated by future occupants and visitors to the Site, along with the impacts of the traffic itself on factors such as severance, non-motorised user delay and amenity, fear and intimidation, and risk of accidents and injury.

7.87 For all scenarios analysed, which includes predicted traffic generation from other developments currently seeking planning permission, there would be **no significant** effects from traffic generation on severance, non-motorised user delay and amenity, fear and intimidation, and risk of accidents and injury. The associated impacts on air quality and noise are also expected to be minimal and would not be at a level that would result in measurable health or wellbeing impacts at the population level.

7.88 Site suitability has also been considered in the context of air quality and noise, whereby the main sources of external environmental impacts are those from the M1 motorway. Mitigation measures are applied to ensure the internal and external noise environment is protective of human health. Furthermore, it is considered that as long as residential units are located at least 50m from the M1 motorway, the air quality environment would also be below the objective thresholds which are set to be protective of the environment and human health.

7.89 Due to the presence of two local centres, there would be long-term and permanent employment and associated income generated by the Development. Furthermore, there would be benefits to the local economy from resident spending. This would result in small and measurable beneficial impacts to health and wellbeing at the population level.

7.90 The local centres would also include the delivery of at least one health centre, incorporating GP services. Allowance has been made for at least 1,640 sqm GIA of 'medical service' floorspace which would improve existing primary healthcare capacity locally.

7.91 In addition, the operational phase would see the delivery of a walkable and cyclable neighbourhood which facilitates the uptake of physical activity through using modes of active transport. This would have a **beneficial effect** on population health.

Cumulative Effects

7.92 There is potential for cumulative changes in emissions to air and noise, and consequential cumulative human health effects, where construction works are ongoing concurrently in close proximity to one another (within 500m). While this is the case, it is expected that other construction sites within close proximity to the Development would adhere to the same level of mitigation and good practice, which are typically required through the planning and, where applicable, EIA process for major developments, limiting the potential for cumulative impacts. On this basis, cumulative effects on human health are expected to be **not significant**.

7.93 The cumulative effect of changes in transport nature and flow rate during construction and operation (including consequential impacts on air quality and noise) have been considered within the main assessment by including cumulative development flows in all modelling undertaken. Therefore, the human health effects reported in relation to changes in transport, noise emissions and air quality emissions during operation remain as **not significant**.

Effect Interactions

7.94 The ES included an assessment of the likely significant effect interactions of the Development; that is, the likely combination of significant environmental effects generated by the Development upon a particular receptor or group of receptors.

The Works

7.95 During the Works, **no significant** residual effect interactions are anticipated. Therefore, it is reasonable to assume that no additional mitigation over and above that stated within the individual topics is considered necessary.

The Completed and Operational Development

7.96 Once the Development is Completed and Operational, there would be **significant** effects interaction on the local population and users / residents in respect of landscape character and visual amenity (adverse in nature) and housing, primary healthcare and education, open space, community and leisure (beneficial in nature). However, no additional mitigation other than that stated within the individual chapters is considered necessary.

8. What Happens Next?

8.1 Following the submission of the planning application, there will be an opportunity for any interested parties to comment on the proposals. The ES and a set of documents supporting the Outline Planning Application can be viewed on SADC and DBC's website at the addresses below:

- SADC – https://planningapplications.stalbans.gov.uk/planning
- DBC – https://planning.dacorum.gov.uk/publicaccess/

8.2 Comments on the planning applications and ES may be made online via SADC's and DBC's planning applications websites as noted above or should be addressed to the Planning Officers as detailed below. Contact details are as follows:

Avison Young	**St Albans City and District Council**	**Dacorum Borough Council**
Environmental Planning	Development Management	Development Management
11 York Street	Civic Centre	The Forum
Manchester	St Peter's Street	Marlowes
Greater Manchester	St Albans	Hemel Hempstead
M2 2AW	Hertfordshire	Hertfordshire
	AL1 3JE	HP1 1DN
Contact: Charles Anderton	Contact: Ruth Ambrose	Contact: Martin Stickley
Email: charles.anderton@avisonyoung.com	Email: planning@stalbans.gov.uk	Email: martin.stickley@dacorum.gov.uk

8.3 A CD version of the ES can be purchased from Avison Young on request at a cost of £25. Contact details are provided above.

Contact Details

Enquiries

charles.anderton@avisonyoung.com

Visit us online
avisonyoung.com

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