

Habitats Regulations Assessment

Regulation 19 Local Plan

St Albans City & District Council

September 2024

Quality information

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1. Introduction

1.1 Background

- 1.1.1 St Albans City & District Council has commissioned AECOM to undertake a Habitats Regulations Assessment (HRA) of the emerging St Albans City and District Local Plan (LP), which will cover the period October 2024 to 2041. The objective of an HRA is to identify any aspects of a Plan that may result in Likely Significant Effects (LSEs) and, where relevant, adverse effects on the integrity of the National Site Network (NSN), either in isolation or in combination with other plans and projects. The NSN is comprised of Habitats Sites (Special Areas of Conservation (SACs), Special Protection Areas (SPAs), and as a matter of Government policy, Ramsar sites). Furthermore, the HRA is also to advise on appropriate policy mechanisms for delivering mitigation where adverse effects on integrity are identified. Under the Conservation of Habitats and Species Regulations 2017 (as amended), an Appropriate Assessment of impact pathways is required, where a plan or project is likely to result in Likely Significant Effects (LSEs) upon a Habitats Site, either individually or in combination.
- 1.1.2 St Albans City & District lies in the southwestern half of Hertfordshire and covers an area of 161 square kilometres and has a population of c. 147,300. Adjoining Authorities are Central Bedfordshire, North Hertfordshire District, Welwyn Hatfield Borough, Hertsmere Borough, Watford Borough, Three Rivers District, and Dacorum Borough. The south of the District is more heavily populated while the central and northern areas are more rural, with over 81% of the District being covered by the Metropolitan Green Belt. The District is 20 miles north of London. The largest settlements are St Albans City and Harpenden, followed in size by London Colney, then the two large, historic villages of Redbourn and Wheathampstead, and numerous smaller villages and hamlets. The District is very well connected by key national road routes, with the M25 running east west through the south of the District, paralleled by the A414 dual carriageway, while the M1 runs down the west and the A1M is just outside the district to the east. Luton Airport is approximately five miles north of the District, while Heathrow and Stansted are both within 25 miles.
- 1.1.3 St Albans Council is working with other Councils in South West Hertfordshire (Dacorum Borough Council, Hertsmere Borough Council, Three Rivers District Council and Watford Borough Council) to deliver a Joint Strategic Plan (JSP) for South West Hertfordshire¹. The JSP will provide a long-term blueprint for the area to 2050. It will be able to consider and address issues that cross council boundaries and set out a strategic vision for the area. It will also help guide future plans and strategies by setting out high level policies on topics such as climate change, infrastructure, environmental protection, employment and housing.
- 1.1.4 St Albans is also working jointly with Dacorum on proposed cross-boundary development at Hemel Garden Communities. The Hemel Garden Communities (HGC) Programme is an ambitious cross-boundary proposal to

¹ Available at [South West Hertfordshire Joint Strategic Plan | St Albans City and District Council](#) [accessed 11-06-2024]

transform Hemel Hempstead through the regeneration of the existing town and delivery of new housing and infrastructure in St Albans City & District Council and Dacorum Borough Council areas.

- 1.1.5 An initial appraisal of the National Site Network (NSN) within and surrounding the District in relation to potential impact pathways linked to the proposed growth stemming from the Local Plan was undertaken. This appraisal indicates that a single site requires consideration: the Chilterns Beechwoods SAC, which, at its closest is located c. 7.3km from the District boundary.

1.2 Legislation

- 1.2.1 The UK left the European Union (EU) on 31 January 2020 under the terms set out in the European Union (Withdrawal Agreement) Act 2020 (“the Withdrawal Act”). While the UK is no longer a member of the EU, a requirement for Habitats Regulations Assessment will continue as set out in the Conservation of Habitats and Species Regulations 2017 (Amended) (incorporating The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019).
- 1.2.2 The HRA process applies the ‘Precautionary Principle’² to Habitats Sites. Plans and projects can only be permitted having ascertained that there will be no adverse effect on the integrity of the Habitats Site(s) in question. To ascertain whether or not site integrity will be affected, an Appropriate Assessment should be undertaken of the Plan or project in question. Figure 1 below sets out the legislative basis for Appropriate Assessment.
- 1.2.3 Plans and projects that are associated with potential adverse impacts on Habitats Sites may still be permitted if there are no reasonable alternatives and there are Imperative Reasons of Overriding Public Interest (IROPI) as to why they should go ahead. In such cases, compensation would be necessary to ensure the overall integrity of the site network.

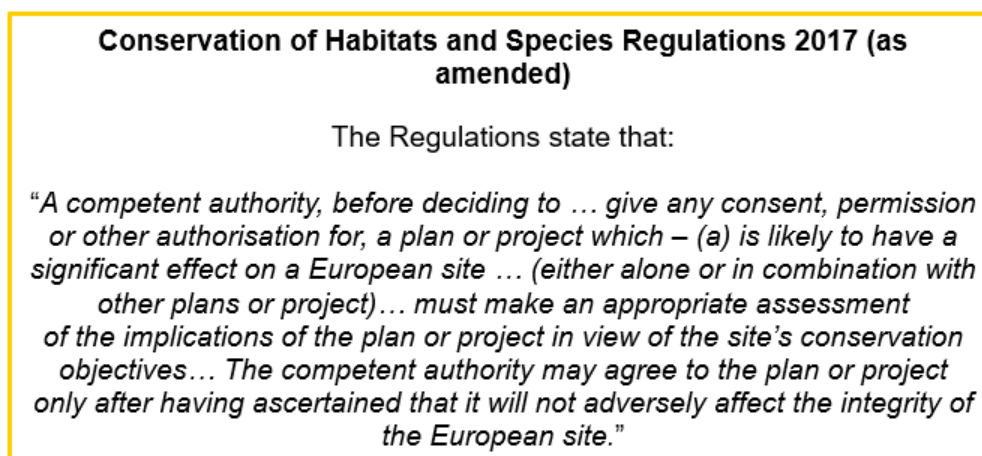


Figure 1: The legislative basis for Appropriate Assessment³

² The Precautionary Principle, which is referenced in Article 191 of the Treaty on the Functioning of the European Union, has been defined by the United Nations Educational, Scientific and Cultural Organisation (UNESCO, 2005) as: “When human activities may lead to morally unacceptable harm [to the environment] that is scientifically plausible but uncertain, actions shall be taken to avoid or diminish that harm. The judgement of plausibility should be grounded in scientific analysis”.

³ Available at <https://www.legislation.gov.uk/uksi/2017/1012/contents/made> [accessed 11-06/2024]

- 1.2.4 Over time the phrase ‘Habitats Regulations Assessment’ (HRA) has come into wide currency to describe the overall process set out in the Regulations from screening through to IROPI. This has arisen in order to distinguish the process from the individual stage described in the law as an ‘Appropriate Assessment’.
- 1.2.5 In spring 2018 the ‘Sweetman’ European Court of Justice ruling⁴ clarified that ‘mitigation’ (i.e., measures that are specifically introduced to avoid or reduce a harmful effect on a Habitats Site that would otherwise arise) should not be taken into account when forming a view on Likely Significant Effects. Mitigation should instead only be considered at the Appropriate Assessment stage. This HRA is cognisant of that ruling.

1.3 Scope of the Project

- 1.3.1 There is no pre-defined guidance that dictates the physical scope of an HRA of a Plan document. Current guidance suggests that the following Habitats Sites should be included in the scope of an HRA assessment:
- All Habitats Sites within the boundary of the District; and,
 - Other Habitats Sites shown to be linked to development set out in the LP through a known ‘pathway’ (discussed below).
- 1.3.2 Generally, it is uncommon for development plans to be deemed to have significant impacts on Habitats Sites situated more than 10km from areas of growth. For example, most core recreational catchments (except for some coastal sites) are under 10km in size and the average vehicle commuting distance of a UK resident is approx. 10km⁵. It should be noted that the presence of a conceivable impact pathway linking an element of a Local Plan to a Habitats Site does not mean that Likely Significant Effects (LSEs) will occur.
- 1.3.3 In some cases, development impacts can extend beyond 10km, particularly where hydrological pathways are involved, which is why the source-pathway-receptor concept is also used to help determine whether there are potential pathways connecting development to Habitats Sites. This takes site-specific sensitivities into account, including issues such as nutrient neutrality or water levels, quantity and flow.
- 1.3.4 Briefly defined, impact pathways are routes by which the implementation of a policy within a Local Plan document can lead to an effect upon a Habitats Site. An example of this would be new residential development resulting in an increased population and thus increased recreational pressure, which could affect Habitats Sites through, for example, disturbance of ground-nesting birds. Guidance from the Ministry of Housing, Communities and Local Government (MHCLG) states that the HRA should be ‘*proportionate to the geographical scope of the [plan policy]*’ and that ‘*an AA need not be done in any more detail, or using more resources, than is useful for its purpose*’ (MHCLG, 2006, p.6).

⁴ People Over Wind and Sweetman v Coillte Teoranta (C-323/17)

⁵ HM Government. Average number of trips made and distance travelled Available at <https://www.gov.uk/government/statistical-data-sets/nts01-average-number-of-trips-made-and-distance-travelled> [Accessed 28 Aug 2024]

1.3.5 This basic principle has also been reflected in court rulings. The Court of Appeal⁶ has ruled that providing the Council (competent authority) was duly satisfied that proposed mitigation could be ‘achieved in practice’ to satisfy that the proposed development would have no adverse effect, then this would suffice. This ruling has since been applied to planning permissions (rather than a Plan level document)⁷. In this case the High Court ruled that for ‘*a multistage process, so long as there is sufficient information at any particular stage to enable the authority to be satisfied that the proposed mitigation can be achieved in practice it is not necessary for all matters concerning mitigation to be fully resolved before a decision maker is able to conclude that a development will satisfy the requirements of Reg 61 of the Habitats Regulations*’.

1.3.6 Given an initial assessment of the relevant Habitats Sites and the impact pathways present, this HRA will discuss a single Habitats Site:

- Chilterns Beechwoods SAC

1.3.7 The location and distribution of Chilterns Beechwoods SAC in relation to the District is shown in Appendix A (Figure A1). An introduction to, the qualifying features (species and habitats), Conservation Objectives, and threats and pressures to the integrity of these Habitats Sites are set out in Chapter 3. The screening assessment of policies in the St Albans LP is provided in Appendix B and discussed in Chapter 5.

1.3.8 In order to fully inform the HRA, several studies and online information databases have been consulted. These include:

- Future development proposed (and, where available, HRAs) for the adjoining authorities of Central Bedfordshire, North Hertfordshire District, Welwyn Hatfield Borough, Hertsmere Borough, Watford Borough, Three Rivers District, and Dacorum Borough;
- Evidence gathered on behalf of Dacorum Borough Council in relation to recreational impacts on Chilterns Beechwoods SAC. Including Topic Paper for the Chiltern Beechwoods SAC⁸ and a visitor survey undertaken by Footprint Ecology⁹
- Site Improvement Plans and Supplementary Conservation Advice Notes for relevant Habitats Sites published by Natural England;
- The UK Air Pollution Information System (www.apis.ac.uk); and
- Multi Agency Geographic Information for the Countryside (MAGIC) and its links to SSSI citations and the JNCC website (www.magic.gov.uk).

1.4 Quality Assurance

1.4.1 This report was undertaken in line with AECOM’s Integrated Management System (IMS). Our IMS places great emphasis on professionalism, technical excellence, quality, environmental and Health and Safety management. All staff members are committed to establishing and maintaining our certification

⁶No Adastral New Town Ltd (NANT) v Suffolk Coastal District Council Court of Appeal, 17th February 2015

⁷High Court case of R (Devon Wildlife Trust) v Teignbridge District Council, 28 July 2015

⁸ Available at [Chilterns Beechwoods Special Area of Conservation \(SAC\) - Background information \(dacorum.gov.uk\)](http://Chilterns Beechwoods Special Area of Conservation (SAC) - Background information (dacorum.gov.uk)) [accessed 12/06/2024]

⁹ Available at [Chilterns Beechwoods Special Area of Conservation \(dacorum.gov.uk\)](http://Chilterns Beechwoods Special Area of Conservation (dacorum.gov.uk)) [accessed 12/06/2024]

to the international standards BS EN ISO 9001:2008 and 14001:2004 and BS OHSAS 18001:2007. In addition, our IMS requires careful selection and monitoring of the performance of all sub-consultants and contractors.

- 1.4.2 All AECOM Ecologists working on this project are members (at the appropriate level) of the Chartered Institute of Ecology and Environmental Management (CIEEM) and follow their code of professional conduct¹⁰.

¹⁰ Available at [Code-of-Professional-Conduct-January-2023-Update.pdf \(cieem.net\)](#) [accessed 11-06-2024]

2. Methodology

2.1 Introduction

- 2.1.1 The HRA has been carried out with reference to the general European Commission guidance on HRA¹¹ and general guidance on HRA published by government in July 2019¹². AECOM has also been mindful of the implications of European case law in 2018, notably the Holohan ruling and the People over Wind ruling, both discussed below.
- 2.1.2 Figure 2 below outlines the stages of HRA according to most recent European Commission guidance. The stages are essentially iterative, being revisited as necessary in response to more detailed information, recommendations and any relevant changes to the Plan.

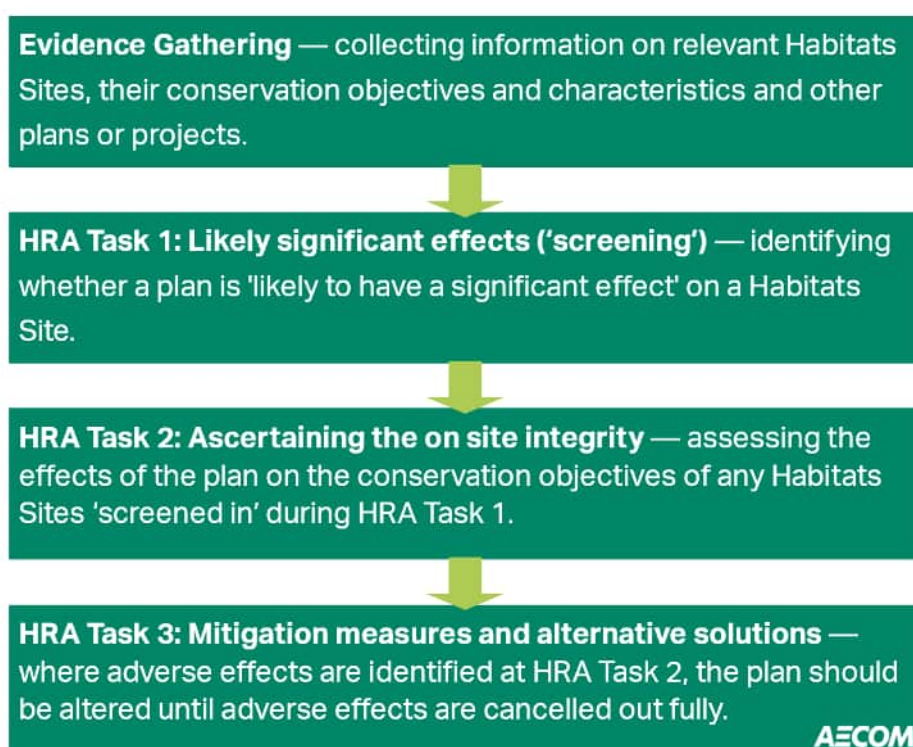


Figure 2: Four Stage Approach to Habitats Regulations Assessment. Source EC, 2001⁶.

2.2 Description of HRA Tasks

HRA Task 1 – Screening for Likely Significant Effects (LSEs)

- 2.2.1 Following evidence gathering, the first stage of any Habitats Regulations Assessment is the screening for Likely Significant Effects (LSEs), essentially a high-level assessment to decide whether the full subsequent stage known as Appropriate Assessment is required. The essential question is:

¹¹ European Commission (2001): Assessment of plans and projects significantly affecting Natura 2000 Sites: Methodological Guidance on the Provisions of Article 6(3) and 6(4) of the Habitats Directive.

¹² <https://www.gov.uk/guidance/appropriate-assessment>

“Is the project, either alone or in combination with other relevant projects and plans, likely to result in a significant effect upon Habitats Sites?”

2.2.2 The objective is to filter out those Plans and projects that can, without any detailed appraisal, be concluded to be unlikely to result in any impacts upon Habitats Sites, usually because there is no mechanism for a negative interaction. This stage is undertaken in Appendix B of this report and discussed in Chapter 5.

HRA Task 2 – Appropriate Assessment (AA)

2.2.3 Where it is determined that a conclusion of ‘no Likely Significant Effects (LSEs)’ cannot be drawn, the analysis proceeds to the next stage of HRA known as Appropriate Assessment. Case law has clarified that ‘Appropriate Assessment’ is not a technical term. In other words, there are no particular technical analyses, or level of technical analysis, that are classified by law as belonging to Appropriate Assessment compared to the screening stage.

2.2.4 By virtue of the fact that it follows screening for LSEs, there is a clear implication that the analysis will be more detailed than undertaken at the previous stage. One of the key considerations during Appropriate Assessment is whether there is available mitigation that would entirely address the potential effect. In practice, the Appropriate Assessment would take any policies or allocations that could not be dismissed following the high-level screening and assess the potential for an effect in more detail, with a view to concluding whether there would be a potential for an adverse effect on site integrity (in other words, disruption of the coherent structure and function of the Habitats Site(s)). A decision by the European Court of Justice¹³ concluded that measures intended to avoid or reduce the harmful effects of a proposed Plan or project on a Habitats Site may no longer be considered by competent authorities at the screening for LSEs stage of HRA. That ruling has been taken into account in producing this HRA.

2.2.5 In 2018 the Holohan ruling¹⁴ was handed down by the European Court of Justice. Among other provisions paragraph 39 of the ruling states that *‘As regards other habitat types or species, which are present on the site, but for which that site has not been listed, and with respect to habitat types and species located outside that site, ... typical habitats or species must be included in the appropriate assessment, if they are necessary to the conservation of the habitat types and species listed for the protected area’* [emphasis added]. Due account of this decision has been given in this HRA in relation to the Thames Basin Heaths SPA, which is designated for mobile ground-nesting birds (although it is to be noted that the qualifying species are not considered to be critically dependent on functionally linked habitats).

HRA Task 3 – Avoidance and Mitigation

2.2.6 Where necessary, measures are recommended for incorporation into the Plan in order to mitigate and / or avoid adverse effects on Habitats Site. There is considerable precedent concerning the level of detail that a Local Plan document needs to contain regarding mitigation for impact pathways on Habitats Sites (e.g. regarding recreational pressure). The implication of this

¹³ People Over Wind and Sweetman v Coillte Teoranta (C-323/17)

¹⁴ Case C-461/17

precedent is that it is not necessary for all measures to be fully developed prior to adoption of the Plan, but the Plan must provide an adequate policy framework within which these measures can be delivered.

2.2.7 When discussing mitigation for a Local Plan, one is concerned primarily with the policy framework to enable the delivery of such mitigation rather than the details of the mitigation measures themselves since a Local Plan document is a high-level policy document.

2.2.8 In any Local Plan, there are numerous policies for which there is a limit to the degree of assessment that is possible at the Plan level. This is because either:

- *The policy in question does not contain any specifics as to what will be delivered or where, and so cannot be assessed in detail at the Plan level. In these cases, the Appropriate Assessment focusses on precautionary mitigation that can be included in the plan to ensure that whatever proposals come forward will not result in adverse effects on integrity; or*
- *The nature of potential impacts (e.g. visual and noise disturbance arising from construction or loss of functionally linked habitat) are related to how the development will be designed and constructed, and therefore cannot be assessed in detail at the plan level. In these instances, the Appropriate Assessment focusses on available mitigation measures, the extent to which such measures would be achievable and effective, and whether an adequate protective framework exists to ensure that the policy would not lead to an adverse effect on the integrity of any internationally designated sites.*

2.2.9 In these instances, the advice of Advocate-General Kokott¹⁵ is also worth considering. She commented that: *'It would ...hardly be proper to require a greater level of detail in preceding plans [rather than planning applications] or the abolition of multi-stage planning and approval procedures so that the assessment of implications can be concentrated on one point in the procedure. Rather, adverse effects on areas of conservation must be assessed at every relevant stage of the procedure to the extent possible on the basis of the precision of the plan.*

2.3 Other Plans and Projects

2.3.1 Other plans and projects that will be considered when undertaking the Habitats Regulations Assessment include:

- *Central Bedfordshire Local Plan 2015 to 2035*
- *North Hertfordshire Local Plan 2011 to 2031*
- *Welwyn Hatfield District Local Plan (2016 to 2036)*
- *Hertsmere Local Plan 2012 to 2027*
- *Watford Local Plan 2021 to 2038*
- *Luton Local Plan (2011 to 2031)*
- *Vale of Aylesbury Local Plan (2013 to 2033)*

¹⁵ Opinion of Advocate General Kokott, 9th June 2005, Case C-6/04. Commission of the European Communities v United Kingdom of Great Britain and Northern Ireland, paragraph 49
<http://curia.europa.eu/juris/document/document.jsf?docid=58359&doclang=EN>

- *Chiltern District Local Plan (Adopted 1997)*
- *Chiltern District Core Strategy (Adopted 2011)*
- *South Bucks District Local Plan (Adopted 2011)*
- *South Bucks Core Strategy (Adopted 2011)*
- *Wycombe Local Plan (Adopted 2019)*
- *Three Rivers District Council Local Plan to 2041 (new plan in preparation)*
- *Emerging Dacorum Local Plan (2024 to 2040)*
- *Hertfordshire Transport Strategy (LTP4 2018 to 2031)*
- *Central Bedfordshire Local Transport Plan (LTP3)*
- *Bedford Borough, Central Bedfordshire and Luton Borough Councils: Minerals and Waste Local Plan 2005*
- *Hertfordshire Minerals and Waste Local Plan 2024 (to 2041)*
- *Affinity Water – revised draft Water Resource Management Plan 2024*
- *Thames Water – revised draft Water Resource Management Plan 2024.*

2.3.2 It should be noted that rather than undertaking HRA of the individual projects and plans listed above, the HRA for the St Albans Local Plan will draw upon those HRAs of the projects and plans listed above in drawing its conclusions.

3. Habitats Site

3.1 Chilterns Beechwoods SAC

Introduction

- 3.1.1 The Chilterns Beechwoods SAC covers a vast area (c1,300ha). It is made up on multiple land parcels spread across four local authority boundaries (Dacorum, Buckinghamshire, South Oxfordshire, and Windsor and Maidenhead). At its closest, the SAC is located 7.3km from the St Albans District boundary (Ashridge Commons and Woods SSSI).
- 3.1.2 The Chilterns Beechwoods represent a very extensive tract of ancient semi-natural beech (*Fagus sylvatica*) forests in the centre of the habitat's UK range. The woodland is an important part of a mosaic with species-rich chalk grassland and scrub.
- 3.1.3 The large population of trees on the site, in combination with the historical continuity of the woodland cover, is the reason for this SAC being listed as the most important site in the UK for fauna associated with decaying timber. A distinctive feature in the woodland flora is the occurrence of the rare coralroot bittercress *Cardamine bulbifera*. Standing and fallen dead timber provide habitat for dead-wood (saproxylic) invertebrates, including stag beetle *Lucanus cervus*.

Qualifying Features¹⁶

- 3.1.4 Annex I habitats that are a primary reason for selection of this site
- *Asperulo-Fagetum* beech forests. (Beech forests on neutral to rich soils)
- 3.1.5 Annex I habitats present as a qualifying feature, but not a primary reason for selection of this site:
- Semi-natural dry grasslands and scrubland facies: on calcareous substrates (*Festuco-Brometalia*). (Dry grasslands and scrublands on chalk or limestone)
- 3.1.6 Annex II species that are a qualifying feature, but not a primary reason for selection of this site:
- Stag beetle (*Lucanus cervus*)

Conservation Objectives¹⁷

- 3.1.7 *'With regard to the SAC and the natural habitats and/or species for which the site has been designated (the 'Qualifying Features' listed below), and subject to natural change;*
- 3.1.8 *Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring;*

¹⁶ Available at: [Chilterns Beechwoods - Special Areas of Conservation \(jncc.gov.uk\)](https://jncc.gov.uk) Available at: [European Site Conservation Objectives for Chilterns Beechwoods SAC - UK0012724 \(naturalengland.org.uk\)](https://naturalengland.org.uk) [Accessed on the 11/06/2024]

¹⁷ Available at: [European Site Conservation Objectives for Chilterns Beechwoods SAC - UK0012724 \(naturalengland.org.uk\)](https://naturalengland.org.uk) [Accessed on the 11/06/2024]

- *The extent and distribution of qualifying natural habitats and habitats of qualifying species*
- *The structure and function (including typical species) of qualifying natural habitats*
- *The structure and function of the habitats of qualifying species*
- *The supporting processes on which qualifying natural habitats and the habitats of qualifying species rely*
- *The populations of qualifying species, and,*
- *The distribution of qualifying species within the site.'*

Threats / Pressures to Site Integrity¹⁸

3.1.9 The following threats and pressures to the site integrity of the Chilterns Beechwoods SAC have been identified in Natural England's Site Improvement Plan¹⁹ and the Supplementary Advice on the Conservation Objectives²⁰:

- Forestry and woodland management
- Deer
- Changes in species distributions
- Invasive species
- Disease
- Public access/disturbance; and,
- Air pollution: Impact of atmospheric nitrogen deposition.

¹⁸ Available at: [SIP150304FINALv1.0 Chilterns Beechwoods \(1\).pdf](#) [Accessed on the 11/06/2024]

¹⁹ Available at <https://publications.naturalengland.org.uk/file/5908864568393728> [Accessed 11/06/2024]

²⁰ Available at <https://designatedsites.naturalengland.org.uk/TerrestrialAdvicePDFs/UK0012724.pdf> [Accessed 11/06/2024]

4. Impact Pathways for Consideration

4.1.1 This chapter discusses potential impact pathways that could potentially link the LP to the Chilterns Beechwoods SAC (as identified in Chapter 3). These are briefly identified below. Where existing evidence exists in relation to a specific impact pathway or a Habitats Site, further discussion is undertaken in the subsequent chapter.

4.1.2 Potential impact pathways that could link the LP to the Chilterns Beechwoods SAC are:

- Public access (recreation) / disturbance including adventure sports, soil compaction/loss, digging and creating mountain bike jumps, increased fire risk, dog fouling/eutrophication, gathering mushrooms, dead wood removal, introduction of invasive species such as holly etc.
- Any impact on stag beetle functionally linked habitat
- Air quality: impact of ammonia, NOx and the resulting atmospheric nitrogen deposition

4.1.3 Where present, current and relevant, existing evidence and stakeholder knowledge will be drawn upon to inform the Habitats Regulations Assessment of the Local Plan. The following discussion identifies existing evidence and includes a summary of its relevance to the District HRA.

4.1.4 Since leaving the EU (and thus the EUs network of internationally important wildlife sites, Natura 2000) the government has focussed greater attention on the fact that the UKs internationally important wildlife sites are also part of the Bern Convention Emerald Network. All English Emerald Network Sites (SPA and SAC sites), have Site Improvement Plans produced for them by Natural England. These documents identify existing pressures and threats to a designated site and have been used as a basis for this scoping report. At the same time, some of the Site Improvement Plans are several years old and therefore more recent Supplementary Advice for conservation objectives has also been used where available.

4.2 Recreational Pressure

4.2.1 There is concern over the cumulative impacts of recreation on key nature conservation sites in the UK, as most sites must fulfil conservation objectives while also providing recreational opportunity. Various research reports have provided compelling links between changes in housing and access levels²¹, and impacts on Habitats Sites^{22 23}. This applies to any habitat, but recreational pressure from housing growth is of particular significance for Habitats Sites. Different Habitats Sites are subject to different types of recreational pressures and have different vulnerabilities. Studies across a range of species have shown that the effects from recreation can be complex. HRAs of planning documents tend to focus on recreational sources of disturbance due to new

²¹ Weitowitz D.C., Panter C., Hoskin R. & Liley D. (2019). The effect of urban development on visitor numbers to nearby protected nature conservation sites. *Journal of Urban Ecology* 5. <https://doi.org/10.1093/jue/iuz019>

²² Liley D, Clarke R.T., Mallord J.W., Bullock J.M. (2006a). The effect of urban development and human disturbance on the distribution and abundance of nightjars on the Thames Basin and Dorset Heaths. Natural England / Footprint Ecology.

²³ Liley D., Clarke R.T., Underhill-Day J., Tyldesley D.T. (2006b). Evidence to support the appropriate Assessment of development plans and projects in south-east Dorset. Footprint Ecology / Dorset County Council.

residents²⁴. Housing developments within the LP will need to strongly consider their impact on Emerald Network sites. Mitigation already in consideration for Chilterns Beechwoods SAC is discussed further in Chapters 5 and 6.

Trampling Damage, Nutrient Enrichment and Wildfires

4.2.2 Most terrestrial habitats (especially heathland, woodland and dune systems) can be affected by trampling and other mechanical damage. This dislodges individual plants, leads to soil compaction and erosion. The following studies have assessed the impact of trampling associated with different recreational activities in different habitats:

- Wilson & Seney²⁵ examined the degree of track erosion caused by hikers, motorcyclists, horse riders and cyclists in 108 plots along tracks in the Gallatin National Forest, Montana. Although the results proved difficult to interpret, it was concluded that horses and hikers disturbed more sediment on wet tracks, and therefore caused more erosion, than motorcycles and bicycles.
- Cole et al²⁶ conducted experimental off-track trampling in 18 closed forest, dwarf scrub and meadow & grassland communities (each trampled between 0 – 500 times) over five mountain regions in the US. Vegetation cover was assessed two weeks and one year after trampling, and an inverse relationship with trampling intensity was discovered, although this relationship was weaker after one year than two weeks indicating some recovery of the vegetation. Differences in plant morphology (structure) was found to explain more variation in response than soil and topographic factors. Low-growing, mat-forming grasses regained their cover best after two weeks and were considered most resistant to trampling, while tall forbs (non-woody vascular plants other than grasses, sedges, rushes and ferns) were considered least resistant. The cover of hemicryptophytes (plants with buds at or near the soil surface) and geophytes (plants with buds below the soil surface) was heavily reduced after two weeks but had recovered well after one year. These were therefore considered most resilient to trampling. Chamaephytes (plants with buds above the soil surface) were least resilient to trampling. It was concluded that these would be the least tolerant of a regular cycle of disturbance.
- Cole²⁷ conducted a follow-up study (across four vegetation types) in which shoe type (trainers or walking boots) and trampling weight were varied. Although immediate damage was greater with walking boots, there was no significant difference after one year. Heavier trampers caused a greater

²⁴ The RTP1 report 'Planning for an Ageing Population' (2004) which states that 'From being a marginalised group in society, the elderly are now a force to be reckoned with and increasingly seen as a market to be wooed by the leisure and tourist industries. There are more of them and generally they have more time and more money.' It also states that 'Participation in most physical activities shows a significant decline after the age of 50. The exceptions to this are walking, golf, bowls and sailing, where participation rates hold up well into the 70s'.

²⁵ Wilson, J.P. & J.P. Seney. (1994). Erosional impact of hikers, horses, motorcycles and off-road bicycles on mountain trails in Montana. *Mountain Research and Development* **14**:77-88

²⁶ Cole, D.N. (1995a). Experimental trampling of vegetation. I. Relationship between trampling intensity and vegetation response. *Journal of Applied Ecology* **32**: 203-214

Cole, D.N. (1995b). Experimental trampling of vegetation. II. Predictors of resistance and resilience. *Journal of Applied Ecology* **32**: 215-224

²⁷ Cole, D.N. (1995c). Recreational trampling experiments: effects of trampler weight and shoe type. Research Note INT-RN-425. U.S. Forest Service, Intermountain Research Station, Utah.

reduction in vegetation height than lighter trampers, but there was no differential impact on vegetation cover.

- Cole & Spildie²⁸ experimentally compared the effects of off-track trampling by hikers and horse riders (at two intensities – 25 and 150 passes) in two woodland vegetation types (one with an erect forb understorey and one with a low shrub understorey). Horse trampling was found to cause the largest reduction in vegetation cover. The forb-dominated vegetation suffered greatest disturbance but recovered rapidly. Generally, it was shown that higher trampling intensities caused more disturbance.

4.2.3 A major concern for nutrient-poor terrestrial habitats (e.g., heathlands, sand dunes, bogs and fens) is nutrient enrichment associated with dog fouling (addressed in various reviews²⁹). It is estimated that dogs will defecate within 10 minutes of starting a walk and therefore most nutrient enrichment arising from dog faeces will occur within 400m of a site entrance. In contrast, dogs will urinate at frequent intervals during a walk, resulting in a more spread-out distribution of urine. For example, in Burnham Beeches National Nature Reserve it is estimated that 30,000 litres of urine and 60 tonnes of dog faeces are deposited annually³⁰. While there is limited information on the chemical constituents of dog faeces, nitrogen is one of the main components³¹. Nutrient availability is the major determinant of plant community composition and the effect of dog defecation in sensitive habitats is comparable to a high-level application of fertiliser, potentially result

4.2.4 ting in a shift towards plant communities that are more typical of improved grasslands.

Summary

4.2.5 Chilterns Beechwoods SAC is designated for habitats and species that are sensitive to recreational pressure. A likely increase in residential development across the District will lead to an increase in the local population and demand for access to outdoor spaces. The HRA process needs to adequately assess potential recreational pressure effects of the Plan on this Habitats Site.

4.2.6 At its closest, the Chilterns Beechwoods SAC is located c. 7.3km from the District boundary. A Topic Paper for the Chiltern Beechwoods SAC³² and a visitor survey undertaken by Footprint Ecology³³ identified that the maximum core catchment for recreational pressure for the Chilterns Beechwoods SAC is 12.6km that extends from the Ashridge Commons and Woods SSSI portion of the SAC. As such, this impact pathway will require further consideration within this HRA.

²⁸ Cole, D.N., Spildie, D.R. (1998). Hiker, horse and llama trampling effects on native vegetation in Montana, USA. *Journal of Environmental Management* **53**: 61-71

²⁹ Taylor K., Anderson P., Taylor R.P., Longden K. & Fisher P. (2005). Dogs, access and nature conservation. English Nature Research Report, Peterborough.

³⁰ Barnard A. (2003). Getting the facts – Dog walking and visitor number surveys at Burnham Beeches and their implications for the management process. *Countryside Recreation* **11**:16-19.

³¹ Taylor K., Anderson P., Liley D. & Underhill-Day J.C. (2006). Promoting positive access management to sites of nature conservation value: A guide to good practice. English Nature / Countryside Agency, Peterborough and Cheltenham.

³² Available at [Chilterns Beechwoods Special Area of Conservation \(SAC\) - Background information \(dacorum.gov.uk\)](#) [accessed 12/06/2024]

³³ Available at [Chilterns Beechwoods Special Area of Conservation \(dacorum.gov.uk\)](#) [accessed 12/06/2024]

4.3 Functionally Linked Habitat

- 4.3.1 Chilterns Beechwoods SAC is designated for its population of stag beetle. Adult stag beetles do not feed, and die shortly after mating, so colony persistence is associated with continued presence of larval dead wood habitat. Colonisation of new nest sites is dependent on both reproductive female presence and availability of deadwood habitat for the larvae. In radio-telemetry studies of stag beetle dispersal, the maximum female dispersal distance for an adult female was 727 m from her point of emergence. However, once they have mated, female stag beetles generally return to the spot where they emerged to lay their eggs³⁴. This behaviour limits stag beetle dispersal and means stag beetle populations from the SAC will be largely restricted to that SAC and immediately surrounding habitats.
- 4.3.2 At its closest, the Chilterns Beechwoods SAC is located c. 7.3km from the District boundary. Due to the distance involved, this impact pathway is scoped out from further consideration.

4.4 Atmospheric Pollution (Nitrogen and Ammonia Deposition)

- 4.4.1 The main pollutants of concern for Habitats Sites are oxides of nitrogen (NO_x), ammonia (NH₃) and sulphur dioxide (SO₂), and these are summarised in Table 4. Ammonia can have a directly toxic effect upon vegetation, particularly at close distances to the source such as near road verges³⁵. NO_x can also be toxic at very high concentrations (far above the annual average Critical Level). NO_x and NH₃ both contribute to the total N deposition to soils, potentially leading to deleterious knock-on effects in resident ecosystems. Increases in nitrogen deposition from the atmosphere can, if sufficiently great, enhance soil fertility and lead to eutrophication. This often has adverse effects on community composition and quality of semi-natural, nitrogen-limited terrestrial and aquatic habitats^{36 37}.

Table 1: Main sources and effects of air pollutants on habitats and species³⁸

| Pollutant | Source | Effects on habitats and species |
|------------------------------------|--|---|
| Sulphur Dioxide (SO ₂) | The main sources of SO ₂ are electricity generation, and industrial and domestic fuel combustion. However, total SO ₂ emissions in the UK have decreased substantially since the 1980's. Another origin of sulphur dioxide is the shipping industry and high atmospheric concentrations of SO ₂ have been documented in busy ports. In future years shipping is likely to | Wet and dry deposition of SO ₂ acidifies soils and freshwater, and may alter the composition of plant and animal communities. The magnitude of effects depends on levels of deposition, the buffering capacity of soils and the sensitivity of impacted species. However, SO ₂ background levels have fallen considerably since the 1970's and are now not regarded a |

³⁴ <https://ptes.org/campaigns/stag-beetles/stag-beetle-facts/>

³⁵ http://www.apis.ac.uk/overview/pollutants/overview_NOx.htm.

³⁶ Wolseley, P. A.; James, P. W.; Theobald, M. R.; Sutton, M. A. (2006). Detecting changes in epiphytic lichen communities at sites affected by atmospheric ammonia from agricultural sources. *Lichenologist* **38**: 161-176.

³⁷ Dijk, N. (2011). Dry deposition of ammonia gas drives species change faster than wet deposition of ammonium ions: evidence from a long-term field manipulation. *Global Change Biology* **17**: 3589-3607.

³⁸ Information summarised from the Air Pollution Information System (<http://www.apis.ac.uk/>).

| Pollutant | Source | Effects on habitats and species |
|------------------------------------|---|--|
| | become one of the most important contributors to SO ₂ emissions in the UK. | threat to plant communities. For example, decreases in Sulphur dioxide concentrations have been linked to returning lichen species and improved tree health in London. |
| Acid deposition | Leads to acidification of soils and freshwater via atmospheric deposition of SO ₂ , NO _x , ammonia and hydrochloric acid. Acid deposition from rain has declined by 85% in the last 20 years, which most of this contributed by lower sulphate levels. | Gaseous precursors (e.g. SO ₂) can cause direct damage to sensitive vegetation, such as lichen, upon deposition. Can affect habitats and species through both wet (acid rain) and dry deposition. The effects of acidification include lowering of soil pH, leaf chlorosis, reduced decomposition rates, and compromised reproduction in birds / plants. Not all sites are equally susceptible to acidification. This varies depending on soil type, bed rock geology, weathering rate and buffering capacity. For example, sites with an underlying geology of granite, gneiss and quartz rich rocks tend to be more susceptible. |
| Ammonia (NH ₃) | Ammonia is a reactive, soluble alkaline gas that is released following decomposition and volatilisation of animal wastes. It is a naturally occurring trace gas, but ammonia concentrations are directly related to the distribution of livestock. It is also emitted from some vehicles. Ammonia reacts with acid pollutants such as the products of SO ₂ and NO _x emissions to produce fine ammonium (NH ₄ ⁺) - containing aerosol. Due to its significantly longer lifetime, NH ₄ ⁺ may be transferred much longer distances (and can therefore be a significant trans-boundary issue). While ammonia deposition may be estimated from its atmospheric concentration, the deposition rates are strongly influenced by meteorology and ecosystem type. | The negative effect of NH ₄ ⁺ may occur via direct toxicity, when uptake exceeds detoxification capacity and via N accumulation. Its main adverse effect is eutrophication, leading to species assemblages that are dominated by fast-growing and tall species. For example, a shift in dominance from heath species (lichens, mosses) to grasses is often seen. As emissions mostly occur at ground level in the rural environment and NH ₃ is rapidly deposited, some of the most acute problems of NH ₃ deposition are for small relict nature reserves located in intensive agricultural landscapes. |
| Nitrogen oxides (NO _x) | Nitrogen oxides are mostly produced in combustion processes. Half of NO _x emissions in the UK derive from motor vehicles, one quarter from | Direct toxicity effects of gaseous nitrates are likely to be important in areas close to the source (e.g. roadside verges). A critical level of |

| Pollutant | Source | Effects on habitats and species |
|-------------------------|---|---|
| | <p>power stations and the rest from other industrial and domestic combustion processes.</p> <p>In contrast to the steep decline in Sulphur dioxide emissions, nitrogen oxides are falling slowly due to control strategies being offset by increasing numbers of vehicles.</p> | <p>NO_x for all vegetation types has been set to 30 ug/m³.</p> <p>Deposition of nitrogen compounds (nitrates (NO₃), nitrogen dioxide (NO₂) and nitric acid (HNO₃)) contributes to the total nitrogen deposition and may lead to both soil and freshwater acidification.</p> <p>In addition, NO_x contributes to the eutrophication of soils and water, altering the species composition of plant communities at the expense of sensitive species.</p> |
| Nitrogen deposition | <p>The pollutants that contribute to the total nitrogen deposition derive mainly from oxidized (e.g. NO_x) or reduced (e.g. NH₃) nitrogen emissions (described separately above). While oxidized nitrogen mainly originates from major conurbations or highways, reduced nitrogen mostly derives from farming practices.</p> <p>The N pollutants together are a large contributor to acidification (see above).</p> | <p>All plants require nitrogen compounds to grow, but too much overall N is regarded as the major driver of biodiversity change globally.</p> <p>Species-rich plant communities with high proportions of slow-growing perennial species and bryophytes are most at risk from N eutrophication. This is because many semi-natural plants cannot assimilate the surplus N as well as many graminoid (grass) species.</p> <p>N deposition can also increase the risk of damage from abiotic factors, e.g. drought and frost.</p> |
| Ozone (O ₃) | <p>A secondary pollutant generated by photochemical reactions involving NO_x, volatile organic compounds (VOCs) and sunlight. These precursors are mainly released by the combustion of fossil fuels (as discussed above).</p> <p>Increasing anthropogenic emissions of ozone precursors in the UK have led to an increased number of days when ozone levels rise above 40ppb ('episodes' or 'smog'). Reducing ozone pollution is believed to require action at international level to reduce levels of the precursors that form ozone.</p> | <p>Concentrations of O₃ above 40 ppb can be toxic to both humans and wildlife, and can affect buildings.</p> <p>High O₃ concentrations are widely documented to cause damage to vegetation, including visible leaf damage, reduction in floral biomass, reduction in crop yield (e.g. cereal grains, tomato, potato), reduction in the number of flowers, decrease in forest production and altered species composition in semi-natural plant communities.</p> |

4.4.2 Sulphur dioxide emissions overwhelmingly derive from power stations and industrial processes that require the combustion of coal and oil, as well as

(particularly on a local scale) shipping³⁹. As such, it can be excluded that material increases in SO₂ emissions will not be associated with this HRA. In contrast, NO_x emissions are dominated by the output of vehicle exhausts (more than half of all emissions). A 'typical' housing development will contribute by far the largest portion of its overall NO_x footprint (92%) through associated road traffic. Other sources, although relevant, are of minor importance (8%) in comparison⁴⁰. Emissions of ammonia can also be linked to traffic although vehicles are not the major source. Therefore, emissions of NO_x and ammonia can reasonably be expected to increase primarily due to an increase in the volume of commuter traffic associated with housing growth.

- 4.4.3 The World Health Organisation has the following critical thresholds for plant communities: The critical NO_x concentration (also known as the Critical Level) for the protection of vegetation is 30 µg m⁻³, that for vascular plants for ammonia is 3 µg m⁻³ and the threshold for sulphur dioxide is 20 µg m⁻³. Additionally, ecological studies have determined 'Critical Loads'⁴¹ of atmospheric nitrogen deposition (that is, NO_x combined with ammonia NH₃). Natural England has published guidance regarding the early stages of air quality impact assessment⁴².
- 4.4.4 According to Design Manual for Roads and Bridges Volume LA105 (Air Quality)⁴³, beyond 200m, the contribution of vehicle emissions from the roads to local pollution levels is insignificant. Therefore, this distance has been used throughout this HRA to determine whether Likely Significant Effects (LSEs) on sensitive Habitats Sites may arise due to implementation of the Plan.

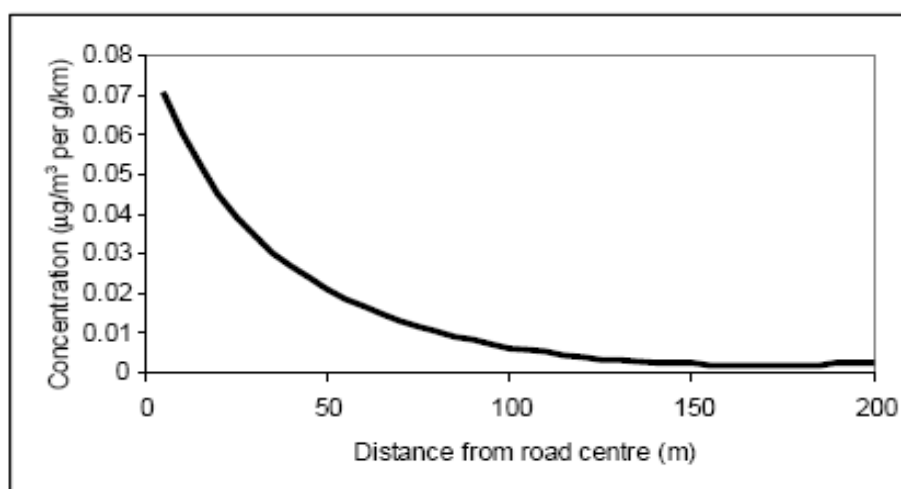


Figure 3 Schematic representation of the reduction in traffic contribution to concentrations of pollutants at different distances from a road

- 4.4.5 Chilterns Beechwoods SAC is the only Habitats Site located within 10km of the District boundary and is sensitive to an increase in atmospheric pollution, primarily as a result of an increased number of commuter journeys due to

³⁹ http://www.apis.ac.uk/overview/pollutants/overview_SO2.htm.

⁴⁰ Proportions calculated based upon data presented in Dore CJ et al. 2005. UK Emissions of Air Pollutants 1970 – 2003. UK National Atmospheric Emissions Inventory. <http://www.airquality.co.uk/archive/index.php> [Accessed on the 21/10/2021]

⁴¹ The critical load is the rate of deposition beyond which research indicates that adverse effects can reasonably be expected to occur.

⁴² [Natural England's approach to advising competent authorities on the assessment of road traffic emissions under the Habitats Regulations - NEA001](#)

⁴³ <https://www.standardsforhighways.co.uk/prod/attachments/10191621-07df-44a3-892e-c1d5c7a28d90?inline=true> [Accessed 23/01/23]

residential development. As such this impact pathway will be considered further within this HRA.

5. Test of Likely Significant Effects

5.1.1 The full Test of Likely Significant Effects is undertaken in Appendix B. This chapter provides a summary of the Test of Likely Significant Effects Assessment provided in Appendix B. Note that, to comply with case law, the Test of Likely Significant Effects does not take account of the strategic recreational pressure mitigation strategy discussed later in this document in the Appropriate Assessment, provided in Chapter 6.

5.2 In Isolation Assessment

5.2.1 Due to the distances involved from LP policies/ allocations to Chilterns Woodlands SAC (c.7.3km), it is considered that all impact pathways can be screened out from resulting in likely significant affects in isolation. Further discussions are continued below in relation to the in-combination assessment.

5.3 In Combination Assessment

LP Policies

5.3.1 The Test of Likely Significant Effects for the LP Policies undertaken in Appendix B identified the following policies that could potentially result in a linking impact pathways to the SAC and thus result in a Likely Significant Effect:

- Strategic Policy SP1: A Spatial Strategy for St Albans District. Whilst much of this policy supports development, it identifies a quantum of housing to be delivered to 2041 (at least 14,603 net new dwellings). Potential linking impact pathway(s): recreational pressure and atmospheric pollution.
- Strategic Policy SP3 – Land and the Green Belt. This policy identifies the Council’s commitment to delivering at least 14,603 net new dwellings to 2041 and to increase overall employment floorspace in the District. Potential linking impact pathway(s): recreational pressure and atmospheric pollution.
- Policy LG2 – Support for Transformation of Hemel Hempstead. This policy identifies the Council’s commitment to delivering at least 4,300 net new homes within the Plan period and the creation of around 6,000 jobs during the plan period in land surrounding Hemel Hempstead (Hemel Garden Communities). Potential linking impact pathway(s): recreational pressure and atmospheric pollution.
- HOU6 – Gypsies, Travellers and Travelling Show People. This policy provides for accommodation of Gypsies, Travellers and Travelling Showpeople within the 12.6km core recreational ZOI. Potential linking impact pathway(s): recreational pressure and atmospheric pollution.
- Strategic Policy SP5 - Employment and the Local Economy. This policy provides for 53ha of employment land at East Hemel Hempstead (Central) and 33.16ha Strategic Rail Freight Interchange. It also identifies that the Policies Map allocates new employment sites. Potential linking impact pathway(s): atmospheric pollution.

LP Allocations

5.3.2 The Test of Likely Significant Effects of the LP Allocations identified nine allocations for residential development are located within the 12.6km core recreational ZOI and that these could result in a Likely Significant Effect upon the SAC in combination. These are:

- H1 - North Hemel Hempstead, AL3 7AU
- H2 - East Hemel Hempstead (North), HP2 7HT
- H3 - East Hemel Hempstead (Central), HP2 7LF
- H4 - East Hemel Hempstead (South), HP2 4PA4
- B3 - West Redbourn, Redbourn, AL3 7HZ
- M6 - South of Harpenden Lane, Redbourn, AL3 7RQ
- M7 - Townsend Lane, Harpenden, AL5 2RH
- M16 - Falconers Field, Harpenden, AL5 3ES
- P3 - Friends Meeting House, Blackwater Lane, Hemel, HP3 8LB
- UC33 - Land Rear of 53 Snatchup, Redbourn, AL3 7HF

5.3.3 Due to their location within the 12.6km core recreational ZOI for the Chilterns Beechwoods SAC, there is potential for the residential allocations identified above to result in an increase in recreational pressure on the SAC in combination with other projects and plans and as such appropriate assessment is undertaken.

6. Appropriate Assessment

6.1 Recreational Pressure

- 6.1.1 Strategic Policy SP1: A Spatial Strategy for St Albans District, Strategic Policy SP3 – Land and the Green Belt, Policy LG2 – Support for Transformation of Hemel Hempstead, and Policy HOU7 – Gypsies, Travellers and Travelling Show People, and allocations H1, H2, H3, H4, B3, M6, M7, M16, P3 and UC33 all provide for new residential development within the 12.6km core recreational ZOI and as such could provide a linking impact pathway to Chilterns Beechwoods SAC via increased recreational pressure (in combination) as a result of increased population living in the new dwellings provided by the LP.
- 6.1.2 No further analysis is necessary or possible given the strategic work already undertaken. Rather the focus of appropriate assessment needs to be on mitigation in the form of the available SANG capacity and its provision.
- 6.1.3 Paragraph 10.8 of the LP acknowledges this issue. It states:
- 6.1.4 *“10.8... A buffer Zone of Influence of 12.6km around this covers part of St Albans District, and the Council is legally required not to issue decisions within this buffer until appropriate mitigation is secured through a Mitigation Strategy. A key element in the Mitigation Strategy will be the identification and/ or creation of Suitable Alternative Natural Greenspace (SANG) to draw people away from using the SAC.”*
- 6.1.5 All allocations that provide for new housing that are located within the 12.6km core recreational ZOI include text that acknowledges the relevance of the ZOI by stating *“The site lies within the Chilterns Beechwoods Special Area of Conservation (CBSAC) Zone of Influence (ZOI). Appropriate contributions must be made towards the Strategic Access Management and Monitoring Strategy (SAMMS). Development proposals will also need to make provision for a new Suitable Alternative Natural Greenspace (SANG), or alternatively contribute towards the maintenance of a suitable SANG project elsewhere.”*
- 6.1.6 In addition, suitable policy wording of the Local Plan is included within Strategic Policy SP10 to ensure that any windfall development that falls within the 12.6km core recreational ZOI does not result in a likely significant effect and also adheres to the forthcoming Mitigation Strategy.
- 6.1.7 Strategic Policy SP10 states:
- “The Council will support proposals that ensure the protection and improvement of the District’s green infrastructure and the wider natural environment, where the proposals:...*
- ...f) Make appropriate contributions towards the Strategic Access Management and Monitoring Strategy (SAMMS), where the proposal is for additional housing within the Chilterns Beechwoods Special Area of Conservation (CBSAC) Zone of Influence (ZOI). Such development proposals will also need to make provision for a new Suitable Alternative Natural Greenspace (SANG), or alternatively contribute towards the maintenance of a suitable SANG project elsewhere.”*

St Albans Strategic Mitigation Strategy

- 6.1.8 Chilterns Beechwoods SAC is located within Dacorum Borough Council. At its closest, the SAC is located 7.3km from the St Albans District boundary (Ashridge Commons and Woods SSSI). The SAC is known to be sensitive to recreational pressure, which has the potential to threaten the SAC's Conservation Objectives.
- 6.1.9 To enable residential development to be bought forward within Dacorum and surrounding authorities, the council commissioned a Visitor Survey by Footprint Ecology⁴⁴ to determine the core recreational Zone of Influence (ZOI). The report identified that *"there are clear and widespread issues at Ashridge Commons and Woods SAC and these have the potential to undermine the conservation objectives for the site, through damage, contamination and fire risk"*. Damage was widespread across the SAC and in some places noted as being "severe". Damage included trampling, disturbance, soil compaction, visitor parking, dog fouling and nutrient enrichment, den building, mountain biking, removal / disturbance of dead wood habitats and footpath widening.
- 6.1.10 The Visitors Survey⁴⁵ of the SAC identified that a minimum of circa 2 million people visit the Ashridge Estate each year. Around half of these enter the SAC via Monument Drive. Whilst the majority of visitors stemmed from Dacorum, a significant number of visitors from further afield also visited the "honeypot" location at Ashwood Ridges. The research identified a maximum core recreational Zone of Influence (ZOI) of 12.6km from Ashridge Commons and Woods SSSI portion of the SAC only. The Tring Woodlands SSSI portion of the SAC was identified to have a core recreational ZOI of 1.7km. Due to its distance from St Albans District (located c 16.5km from the District boundary) does not interact with development within the District and is not discussed further.
- 6.1.11 St Albans DC has been working with Natural England and partner authorities (Buckinghamshire Council, Central Bedfordshire Council and Dacorum Borough Council) in preparing the Chilterns Beechwoods SAC Mitigation Strategy. As the landowner, the National Trust has also been involved. The agreed Mitigation Strategy comprises of two parts, the Strategic Access Management and Monitoring Strategy (SAMMS), and Suitable Alternative Natural Greenspace (SANG) provision. The SAMMS addresses issues within the SAC itself. The interventions required have been identified and agreed. A range of projects will be implemented over a period of at least 80 years, (2022/23 to 2102/2103) by the National Trust. To fund the SAMMS, each new home built located within the ZOI within St Albans are required to pay a tariff of £828.61⁴⁶ (subject to change). The SANG provision will provide alternative natural greenspace for recreation to divert recreational activities away from the SAC. All new residential development within the ZOI must contribute towards either a) a new (bespoke) SANG or b) contribute towards suitable SANG projects elsewhere; this is in addition to contributions towards the SAMMS. Larger developments (10 or more new homes) must provide their

⁴⁴ Panter, C., Liley, D., Lake, S., Saunders, P., & Caals, Z. (2022). Visitor survey, recreation impact assessment and mitigation requirements for the Chilterns Beechwoods SAC and the Dacorum Local Plan. Report by Footprint Ecology for Dacorum Borough Council. Available at [Footprint Ecology Report - March 2022 \(Low resolution\) \(dacorum.gov.uk\)](#)

⁴⁵ Panter, C., Liley, D., Lake, S., Saunders, P., & Caals, Z. (2022). Visitor survey, recreation impact assessment and mitigation requirements for the Chilterns Beechwoods SAC and the Dacorum Local Plan. Report by Footprint Ecology for Dacorum Borough Council. Available at [Footprint Ecology Report - March 2022 \(Low resolution\) \(dacorum.gov.uk\)](#)

⁴⁶ Available at [Chilterns Beechwoods SAC | St Albans City and District Council](#) [Accessed 13/06/2024]

own suitable SANG that meets the guidance from Natural England. Smaller developments (1-9 homes) can contribute towards an existing SANG.

- 6.1.12 As previously detailed the SAMMS element of the Mitigation Strategy has been agreed by Natural England, which leaves only the SANG provision for the development planned by the St Albans Local Plan that requires further analysis. This is provided in the following paragraphs.

SANG Provision to Support the Local Plan.

Hemel Garden Communities (H1, H2, H3 and H4) SANG.

- 6.1.13 The Hemel Garden Community is a large project aimed to deliver circa 11,000 new dwellings around Hemel Hempstead within Dacorum Borough and St Albans District by 2050. The Hemel Garden Communities sites located within St Albans District (Local Plan allocations H1, H2, H4 and potentially H3) are large (due to deliver circa 4,300 new homes during the plan period, and circa 5,500 by 2050) and per the Local Plan and the Chilterns Beechwood SAC Mitigation Strategy, would be required to provide their own bespoke SANG to serve the development.
- 6.1.14 All of the Hemel Garden Community is located within the 12.6km recreational Zol for Chilterns Beechwoods SAC. Due to the large strategic nature of Hemel Garden Communities, the lack of deliverability of SANG could ultimately provide deliverability issues for the residential element of the Hemel Garden Community allocations. To support the development of the Hemel Garden Community, SANG will be required to ensure no adverse effects on the integrity result to the SAC. For the 11,000 homes (across both St Albans District and Dacorum Borough to 2050) a total of 211ha of SANG is anticipated to be needed (in accordance with the Natural England SANG Guidelines of 8ha per 1000 new residents). Land parcels, through the HGC Framework Plan, have been identified to the north and east of Hemel that could potentially provide SANG capacity for the full Hemel Garden Communities to 2050 located within both Dacorum Borough and St Albans District.
- 6.1.15 A Draft SANG Concept Plan (2023) has been created that identifies up to 277ha of potential SANG land, well in excess of the 211ha required. In a Discretionary Advice Service (DAS) response from Natural England (27th February 2023) regarding the proposed SANG, Natural England states “... *that there is a good provision of SANG on-site, and we welcome that the Footprint Ecology standard for calculating SANG capacity of 8ha per 1,000 residents will be met from a pool of 276.5 ha potential SANG land, from which the required area (c.215ha) will be drawn down. Provision of SANG over and above the 8ha per 1,000 residents standard will always be accepted, and we welcome that any additional provision could provide capacity to other developments coming forward in and around Hemel Hempstead.*”
- 6.1.16 *We view this as a good development site for SANG as the proposed areas have good proportions and enough space to accommodate circular walks with wide gaps in between footpaths. The fact that most of the SANG being proposed are arable land is a positive, as it allows greater flexibility for design of the open space...*

- 6.1.17 *...if taken forward, these SANG would provide visitors with alternative destinations to the Chilterns Beechwoods SAC, with a concurrent positive impact on reducing visitor numbers to the SAC” As such,*
- 6.1.18 The DAS response also identifies the need for the “*habitats on these SANG should be established up front and ideally prior to the visitor facilities opening*”. The Council’s housing trajectory document identifies that the first dwellings at the garden community are due to be completed in the year 2029/2030 (50 dwellings to be delivered at H2, and 50 dwellings at H4). The Council also expects sufficient SANG to be available and functioning within the Hemel Garden Communities by this time.

Allocations B3, M6, M7, M16 and P3 (and Windfall Providing 10 or More Dwellings within the Core Recreational Zol)

- 6.1.19 The Council expects any scheme to provide 10 or more dwellings within the Zol to provide their own bespoke SANG. This requirement is outlined in the Chilterns Beechwoods SAC Mitigation Strategy as agreed in the Council’s Policy Committee March 2023⁴⁷. Any SANG will need to be delivered in line with Natural England’s SANG Criteria and agreed with Natural England to ensure the SANG is provided to an appropriate standard.
- 6.1.20 The Council’s draft housing trajectory document identifies that allocation B3 is expected to complete its first dwellings in 2031/2032 (70 dwellings), M6 is due to complete the first 20 dwellings in 2030/2031, M7 is due to complete 20 dwellings in 2030/2031, M16 is due to complete 15 dwellings in 2029/2030, and P3 is due to complete 15 dwellings in 2029/2030. It is noted that the housing trajectory document identifies that all these allocations are not due to be delivered until year 6 (or year 4 post adoption) of the Plan or later. The Local Plan will be subject to review in year 5.
- 6.1.21 At the time of writing (September 2024), a planning application has been submitted to the Council for the southern portion of allocation B3 to deliver 300 dwellings (planning application number 5/2021/3631⁴⁸) (the full allocation is for a total of 545 dwellings). The potential SANG for this site is located within Dacorum. It is located circa 1700m west of the allocation site, joined by Gaddesden Lane. The applicants have submitted an application to Dacorum Council for a change of use from agricultural land to SANG for the proposed SANG site (Dacorum planning application number 5/2024/1397). It is possible that this application will not be decided for several months; however, the advanced nature of this application demonstrates the applicant’s intention to provide SANG for this development.
- 6.1.22 The applicant for allocation M6 is in the process of identifying its own SANG site. It is not known if the applicants for M7, M16 and P3 are currently looking for a SANG solution for their sites. However, as detailed in the Hemel Garden Communities discussion above, it is understood that there is likely to be excess capacity within the Hemel Garden Communities SANG, and this is anticipated to be the primary SANG to support the St Albans District Local Plan. Further, as identified above, it is noted that the housing trajectory

⁴⁷ Available at [Agenda for Strategy & Resources Committee on Thursday, 16th March, 2023, 7.00 pm | St Albans City and District Council \(moderngov.co.uk\)](#) Item 9. [Accessed 20/06/2024]

⁴⁸ Available at [Portal360 - Search applications \(stalbans.gov.uk\)](#) [Accessed 20/06/2024]

document identifies that all these allocations are not due to be delivered until year 6 of the Plan or later. The Local Plan will be subject to review in year 5.

Strategic SANG for Small Allocation Sites (1 to 9 houses) (and Windfall Providing 9 or Less Dwellings)

6.1.23 To assist with meeting Chilterns Beechwoods SAC Mitigation Strategy requirements relating to SANG provision for small sites (sites of 1 to 9 dwellings can provide a financial contribution towards an existing SANG with capacity), the council has identified a land parcel at Jersey Farm Open Space to provide strategic SANG. To support this the Jersey Farm Open Space SANG Management Plan was produced⁴⁹. The Management Plan identified that the site could meet all required Natural England SANG criteria, which Natural England has confirmed. It identified that whilst the site is 8.33ha in size, existing levels of recreational activity exist. Visitor surveys were undertaken by Footprint Ecology in 2023 to investigate existing visitor use, and thus determine any residual visitor capacity. The Visitor Survey identified a residual capacity of 3.95ha which equates to 206 net new dwellings (based on dwelling occupancy of 2.4 people per dwelling)⁵⁰.

6.1.24 The Local Plan provides a single site allocation that is identified to provide 9 or less dwellings within the 12.6km Zol, this is allocation UC33, identified to deliver 5 new dwellings. As such in the context of sufficient strategic SANG capacity to serve Local Plan residential allocations that provide 1 to 9 new dwellings, it is considered that there is ample capacity. Capacity also remains to potentially serve windfall development within the recreational Zol (noting that the quantum of windfall development is not identified). Further, St Albans DC are confident that the delivery of a functioning SANG at Jersey Farm Open Space is achievable within the first 5 years of the Plan. In addition, it is understood that there is likely to be excess capacity within the Hemel Garden Communities SANG, and this is anticipated to be the primary SANG to support the St Albans DC Local Plan.

Summary

6.1.25 Whilst not all allocations have a SANG strategy identified, those without a SANG solution in place are not to be occupied until at least year 6 of the Local Plan. The Council has confirmed that they are confident that appropriate SANG solutions will be delivered for all of the relevant sites within the Local Plan. This confidence is in part demonstrated by the Council's commitment to the Chilterns Beechwoods SAC Mitigation Strategy as agreed in the Council's Policy Committee March 2023⁵¹. It is considered that with the Chilterns Beechwood SAC Mitigation Strategy in place, and the Council's confidence to deliver SANG in a timely fashion, (acknowledging the excess SANG capacity at Hemel Garden Communities), that no adverse effects on the integrity of the Chilterns Beechwoods SAC would result.

⁴⁹ Available at

<https://www.stalbans.gov.uk/sites/default/files/attachments/Jersey%20Farm%20Open%20Space%20SANG%20Management%20Plan%202023.pdf> [Accessed 13/06/2024]

⁵⁰ Bishop, E. & Panter, C. (2023). Capacity Estimates and potential use of Jersey Farm as a SANG. Report by Footprint Ecology

⁵¹ Available at [Agenda for Strategy & Resources Committee on Thursday, 16th March, 2023, 7.00 pm | St Albans City and District Council \(modern.gov.co.uk\)](#) Item 9. [Accessed 20/06/2024]

6.2 Atmospheric Pollution

- 6.2.1 The closest portion of the Chilterns Beechwoods SAC to the District is Ashridge Commons and Woods SSSI (located c 7.3km from the District boundary). Most traffic movements associated with a Local Plan are from journeys to and from work. There are no key road routes within 200m of the SAC that would be used by residents of St Albans and District for regular journeys to work, and as such it is not considered that any additional traffic flows resulting from the LP will result in increased nitrogen levels within this portion of the SAC and as such it will not result in a likely significant effect.
- 6.2.2 The next closest portion of the Chilterns Beechwoods SAC to the District is Tring Woodlands SSSI (located c 16.5km from the District boundary). This SSSI does lie within 200m of a key road (c.100m), the A41. However, the average vehicle commuting distance of a UK resident is approx. 10km and beyond this distance traffic has generally dispersed across the network. As such the Tring Woodland SSSI is located beyond this distance. Due to the large distance involved, it is considered that the LP would not result in an increase in traffic flows (and thus atmospheric nitrogen deposition) on the A41 at Tring Woodland SSSI. As such atmospheric pollution is not considered to be a realistic linking impact pathway between the LP and Chilterns Woodlands SAC. It is considered that this impact pathway would not result in an adverse effect on integrity even in combination with other project and plans.

7. Conclusion

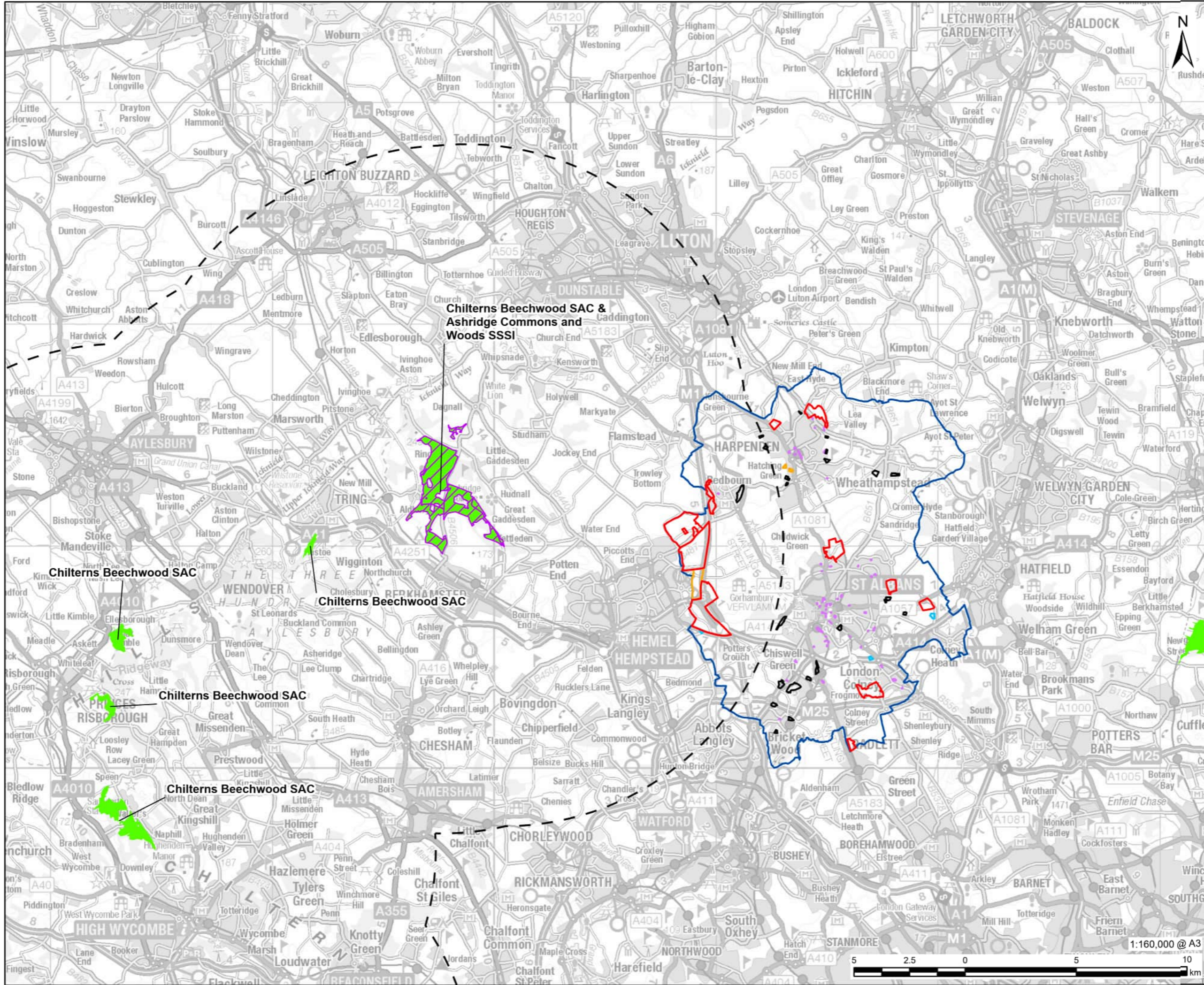
- 7.1.1 A single realistic linking impact pathway between the St Albans DC Local Plan and a Habitats Site was identified. This was recreational pressure (in combination) on Chilterns Beechwoods.
- 7.1.2 Paragraph 10.8 of the LP identifies the need for mitigation to ensure that no adverse effects upon the SAC result (in combination).
- 7.1.3 An assessment of the Chiltern Beechwoods Special Area of Conservation (SAC) by Dacorum Borough Council in 2022 revealed that more action is needed to help protect Ashridge Estate on the Hertfordshire-Buckinghamshire border, and Tring Woodlands, which are under increasing visitor pressure from the surrounding areas. If nothing is done, new development will lead to further visitor pressures and damage to the integrity of the SAC. A recreational Zone of Influence of 12.6km around the SAC covers part of St Albans District, and the Council is legally required not to issue decisions within the recreational ZOI until appropriate mitigation is secured through a Mitigation Strategy. The Mitigation Strategy comprises of two elements, a Strategic Access Management and Monitoring Strategy (SAMMS) and SANG strategy. The SAMMS requires developer contributions per net new dwelling to enable interventions within the Ashridge Estate. A second element in the Mitigation Strategy will be the identification and/ or creation of Suitable Alternative Natural Greenspace (SANG) to draw people away from using the SAC.
- 7.1.4 All Local Plan residential allocations located within the 12.6km core recreational ZOI include text that identifies that they are located within the core recreational ZOI and that... *'The site lies within the Chilterns Beechwoods Special Area of Conservation (CBSAC) Zone of Influence (ZOI). Appropriate contributions must be made towards the Strategic Access Management and Monitoring Strategy (SAMMS). Development proposals will also need to make provision for a new Suitable Alternative Natural Greenspace (SANG), or alternatively contribute towards the maintenance of a suitable SANG project elsewhere.'*
- 7.1.5 The Local Plan contains suitable policy wording to ensure that any allocations and any windfall development that falls within the 12.6km core recreational ZOI does not result in a likely significant effect and also adheres to the forthcoming Mitigation Strategy.
- 7.1.6 Following an analysis of the current position relating to the availability, deliverability and timing of SANG provision in relation to the expected delivery time frames for residential development, it was concluded that, whilst not all allocations have a SANG strategy identified, those without a SANG solution in place are not to be occupied until at least year 6 of the Local Plan. The Council has confirmed that they are confident that appropriate SANG solutions will be delivered for all of the relevant sites within the Local Plan. This confidence is in part demonstrated by the Council's commitment to the Chilterns Beechwoods SAC Mitigation Strategy as agreed in the Council's Policy Committee March 2023⁵². It is considered that with the Chilterns Beechwood

⁵² Available at [Agenda for Strategy & Resources Committee on Thursday, 16th March, 2023, 7.00 pm | St Albans City and District Council \(modern.gov.co.uk\)](#) Item 9. [Accessed 20/06/2024]

SAC Mitigation Strategy in place, and the Council's confidence to deliver SANG in a timely fashion, (acknowledging the excess SANG capacity at Hemel Garden Communities), that no adverse effects on the integrity of the Chilterns Beechwoods SAC would result.

Appendix A Location of Site Allocations and Habitats Sites

Figure A1 – Location of Habitats Sites and the 12.6km core recreational ZOI



LEGEND

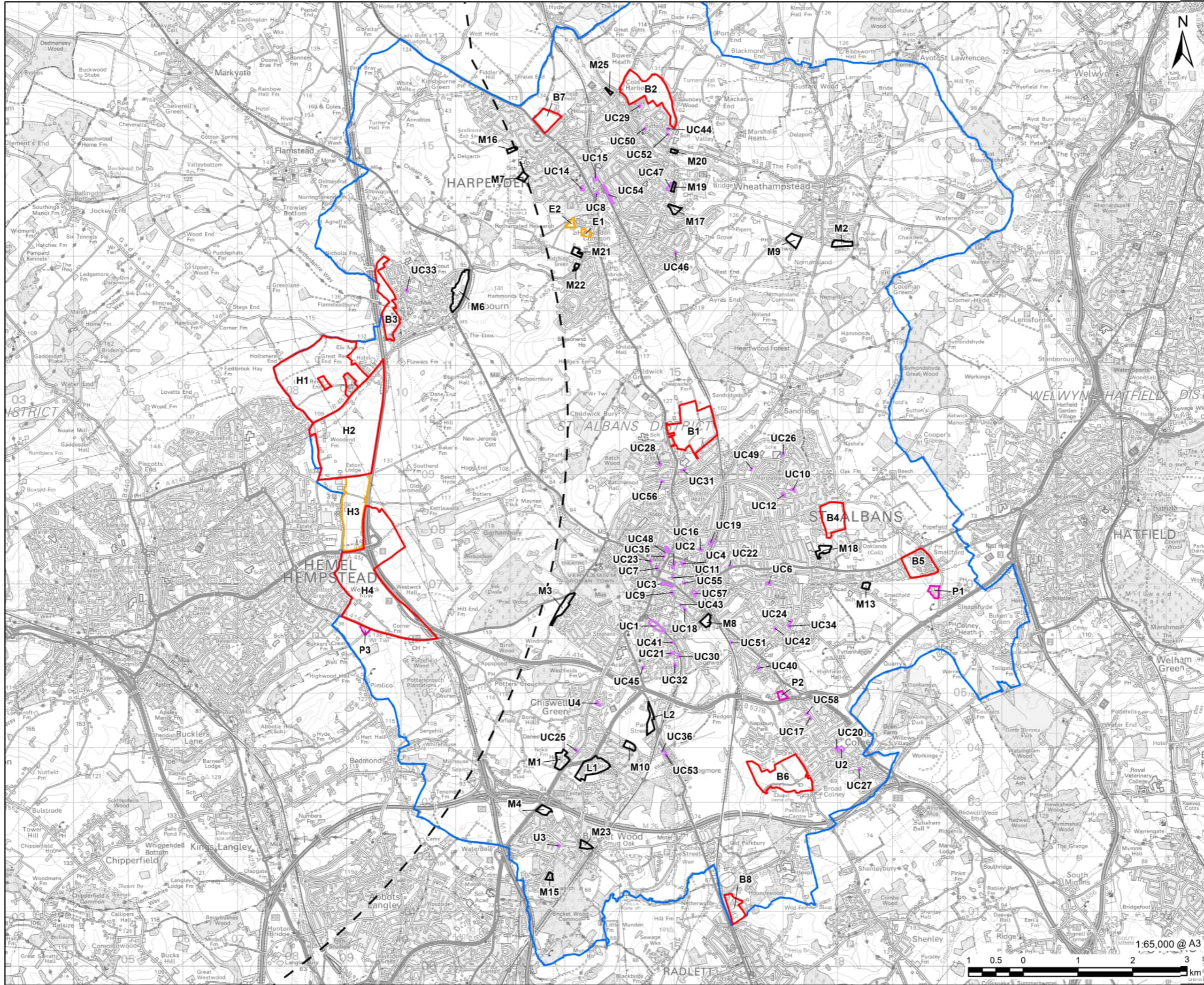
- St. Albans City and District Council Boundary
- 12.6km Recreational Zone of Influence
- Site of Special Scientific Interest (SSSI)
- Special Area of Conservation (SAC)
- Site Allocation**
- Broad Location
- Large Site Allocation
- New Employment Area
- Site Allocation within Previously Developed Land in Green Belt
- Site Allocation within Settlements

NOTES

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Note: Site Allocation ID's displayed on Figure A2

Figure A2 Location of Site Allocations and the 12.6km core recreational Zol



LEGEND

- St. Albans City and District Council Boundary
- 12.6km Recreational Zone of Influence
- Site Allocation**
- Broad Location
- Large Site Allocation
- New Employment Area
- Site Allocation within Previously Developed Land in Green Belt
- Site Allocation within Settlements

NOTES

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ISSUE PURPOSE
FINAL

PROJECT NUMBER
60667196

FIGURE TITLE
Location of Site Allocations



Appendix B LP Test of Likely Significant Effects

B.1 LP Policies Test of Likely Significant Effects

Table 2: LP Policies Test of Likely Significant Effects

7.1.7 Where the HRA Implications cell is coloured **green**, this means that there is no potential for a linking impact pathway between the policy and a Habitats Site; there **is no potential for Likely Significant Effect**, and thus it will not be discussed further within the report. Where the HRA Implications cell is coloured **orange**, this means that there is potential for a linking impact pathway between the policy and a Habitats Site; there **is potential for Likely Significant Effect**, and thus it has been discussed further within the report.

| Policy Reference | HRA Implications |
|--|---|
| <p>Strategic Policy SP1: A Spatial Strategy for St Albans District</p> | <p>Potential for Likely Significant Effect.</p> <p>Much of this policy supports development, it identifies broad locations for residential development, and a quantum of housing to be delivered to 2041 (at least 14,603 net new dwellings; 885 per annum).</p> <p>Potential linking impact pathways are recreational pressure, and atmospheric pollution.</p> |
| <p>Strategic Policy SP2 – Responding to the Climate Emergency</p> | <p>No.</p> <p>This is a development management policy relating to responding to the climate emergency. There are no realistic linking impact pathways present.</p> |
| <p>CE1 - Promoting Sustainable Design, Construction and Building Efficiency</p> | <p>No.</p> <p>This is a development management policy relating to promoting sustainable design, construction and building efficiency. There are no realistic linking impact pathways present.</p> |

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| <p>CE2 - Renewable and Low Carbon Energy</p> | <p>No.</p> <p>This is a development management policy relating to renewable and low carbon energy. There are no realistic linking impact pathways present.</p> |
| <p>Strategic Policy SP3 – Land and the Green Belt</p> | <p>Potential for Likely Significant Effect.</p> <p>This policy identifies the Council’s commitment to delivering at least 14,603 net new dwellings; 885 per annum between 1 October 2024 to 31 March 2041 and to increase overall employment floorspace in the District.</p> <p>Potential linking impact pathways are recreational pressure, and atmospheric pollution.</p> |
| <p>LG1 – Broad Locations</p> | <p>No.</p> <p>This is a development management policy relating to broad locations of development. There are no realistic linking impact pathways present.</p> |
| <p>Policy LG2 – Support for Transformation of Hemel Hempstead</p> | <p>Potential for Likely Significant Effect.</p> <p>This policy identifies the Council’s commitment to delivering at least 4,300 net new homes, and the creation of around 6,000 jobs during the plan period in land surrounding Hemel Hempstead (Hemel Garden Communities).</p> <p>Potential linking impact pathways are recreational pressure, and atmospheric pollution.</p> |
| <p>LG3 - Hemel Garden Communities Place Principles</p> | <p>No.</p> <p>This is a development management policy relating to Hemel Garden Communities Place Principles. There are no realistic linking impact pathways present.</p> <p>This is a positive policy as includes the requirement of SANG to divert recreational pressure away from the sensitive Chilterns Beechwoods SAC.</p> |
| <p>LG4 – Large, Medium and Small Sites</p> | <p>No.</p> |

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| | <p>This is a development management policy relating to large, medium and small sites. There are no realistic linking impact pathways present.</p> |
| LG5 – Green Belt | <p>No.</p> <p>This is a development management policy relating to the green belt. There are no realistic linking impact pathways present.</p> |
| LG6 - Green Belt Compensatory Improvements | <p>No.</p> <p>This is a development management policy relating to the green belt compensatory improvements. There are no realistic linking impact pathways present.</p> |
| LG7 – Affordable housing development in the Green Belt (rural exception sites) | <p>No.</p> <p>This is a development management policy relating to affordable housing development in the green belt (rural exception sites). There are no realistic linking impact pathways present.</p> |
| LG8 – Small Scale Development in Green Belt Settlements | <p>No.</p> <p>This is a development management policy relating to small scale development in green belt settlements. There are no realistic linking impact pathways present.</p> |
| LG9 – Extension or Replacement of Buildings in the Green Belt | <p>No.</p> <p>This is a development management policy relating to extension or replacement of buildings in the green belt. There are no realistic linking impact pathways present.</p> |
| Strategic Policy SP4 - Housing | <p>No.</p> <p>This is a development management policy relating to housing. There are no realistic linking impact pathways present.</p> |
| HOU1 – Housing Mix | <p>No.</p> |

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| | <p>This is a development management policy relating to housing mix. There are no realistic linking impact pathways present.</p> |
| HOU2 – Affordable Housing | <p>No.</p> <p>This is a development management policy relating to affordable housing. There are no realistic linking impact pathways present.</p> |
| HOU3 – Specialist Housing | <p>No.</p> <p>This is a development management policy relating to specialist housing. There are no realistic linking impact pathways present.</p> |
| HOU4 – Accessible and Adaptable Housing | <p>No.</p> <p>This is a development management policy relating to accessible and adaptable housing. There are no realistic linking impact pathways present.</p> |
| HOU5 – Self-Build and Custom-Build Housing | <p>No.</p> <p>This is a development management policy relating to self-build and custom build housing. There are no realistic linking impact pathways present.</p> |
| HOU6 – Gypsies, Travellers and Travelling Show People | <p>Potential for Likely Significant Effect.</p> <p>This policy provides for accommodation of Gypsies, Travellers and Travelling Showpeople within the 12.6km core recreational ZOI.</p> <p>Potential linking impact pathways include recreational pressure and atmospheric pollution.</p> |
| Strategic Policy SP5 - Employment and the Local Economy | <p>Potential for Likely Significant Effect.</p> <p>This policy provides for 53ha of employment land at East Hemel Hempstead (Central) and 33.16ha Strategic Rail Freight Interchange. It also identifies that the Policies Map allocates new employment sites.</p> |

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| | Potential linking impact pathways is atmospheric pollution. |
| EMP1 - Protected Employment Areas | No. This is a development management policy relating to protected employment areas. There are no realistic linking impact pathways present. |
| EMP2 – Strategic Rail Freight Interchange (SRFI) | No. This is a development management policy relating to the SRFI. This policy supports the development rather than allocating it. There are no realistic linking impact pathways present. |
| EMP3 - St Albans City Core Principal Office Location | No. This is a development management policy relating to St Albans City Core Principal Office Location. This. There are no realistic linking impact pathways present. |
| EMP4 - Hertfordshire Innovation Quarter (Herts IQ) | No. This is a development management policy supporting development at the Herts IQ. There are no realistic linking impact pathways present. |
| EMP5 – Employment Skills | No. This is a development management policy supporting development at employment skills. There are no realistic linking impact pathways present. |
| Strategic Policy SP6 – City, Town and Village Centres and Retail | No. This is a development management policy supporting development in city, town and village centres and retail. No specific type, location or quantum of development is mentioned. There are no realistic linking impact pathways present. |
| TCR1 – Protecting Retail and Main Town Centre Uses | No. |

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| | <p>This is a development management policy protecting retail and main town centre uses. There are no realistic linking impact pathways present.</p> |
| TCR2 –Retail Uses outside Existing Centres | <p>No.</p> <p>This is a development management policy relating to retail uses outside existing centres. There are no realistic linking impact pathways present.</p> |
| TCR3 - Out-of-Centre Retail Parks | <p>No.</p> <p>This is a development management policy relating to out of centre retail parks. There are no realistic linking impact pathways present.</p> |
| TCR4 - Visitor Economy | <p>No.</p> <p>This is a development management policy relating to the visitor economy. No type, location or quantum of development is identified. There are no realistic linking impact pathways present.</p> |
| TCR5 – St Albans City Centre Culture, Heritage, Civic Pride and the Leisure Economy | <p>No.</p> <p>This is a development management policy relating to St Albans City Centre Culture, Heritage, Civic Pride and the Leisure Economy. There are no realistic linking impact pathways present.</p> |
| TCR6 – St Albans City Centre Public Realm and movement | <p>No.</p> <p>This is a development management policy relating to St Albans City Centre Public realm and movement. There are no realistic linking impact pathways present.</p> |
| TCR7 – St Albans City Centre – Vibrant and Mixed City Centre Economy | <p>No.</p> <p>This is a development management policy relating to St Albans City Centre Vibrant and Mixed City Centre Economy. There are no realistic linking impact pathways present.</p> |

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| <p>Strategic Policy SP7 - Community Infrastructure</p> | <p>No. This is a development management policy relating to community infrastructure. There are no realistic linking impact pathways present.</p> |
| <p>COM – Education</p> | <p>No. This is a development management policy relating to education. There are no realistic linking impact pathways present.</p> |
| <p>COM2 - Cemeteries and Burial Grounds</p> | <p>No. This is a development management policy relating to cemeteries and burial grounds. There are no realistic linking impact pathways present.</p> |
| <p>COM3 - Community, Leisure and Sports Facilities</p> | <p>No. This is a development management policy relating to community, leisure and sports facilities. There are no realistic linking impact pathways present.</p> |
| <p>COM4 - Public Houses</p> | <p>No. This is a development management policy relating to public houses. There are no realistic linking impact pathways present.</p> |
| <p>COM5 - St Albans City Football Club</p> | <p>No. This is a development management policy relating to St Albans City Football Club. There are no realistic linking impact pathways present.</p> |
| <p>Strategic Policy SP8 - Transport Strategy</p> | <p>No. This is a development management policy relating to transport strategy. There are no realistic linking impact pathways present.</p> |

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| <p>TRA1 – Transport Considerations for New Development</p> | <p>No. This is a development management policy relating to transport considerations for new development. There are no realistic linking impact pathways present.</p> |
| <p>TRA2 – Major Transport Schemes</p> | <p>No. This is a development management policy relating to major transport schemes. This policy does not allocation these schemes, but supports them. There are no realistic linking impact pathways present.</p> |
| <p>TRA3 – Development Generating New Lorry Movements</p> | <p>No. This is a development management policy relating to development that generates new lorry movements. There are no realistic linking impact pathways present.</p> |
| <p>TRA4 – Parking</p> | <p>No. This is a development management policy relating to parking. There are no realistic linking impact pathways present.</p> |
| <p>Strategic Policy SP9 – Utilities Infrastructure</p> | <p>No. This is a development management policy relating to utilities infrastructure. There are no realistic linking impact pathways present.</p> |
| <p>UIN1 – Broadband</p> | <p>No. This is a development management policy relating to broadband. There are no realistic linking impact pathways present.</p> |
| <p>UIN2 – Telecommunications</p> | <p>No. This is a development management policy relating to telecommunications. There are no realistic linking impact pathways present.</p> |

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| <p>Strategic Policy SP10 – Natural Environment and Biodiversity</p> | <p>No.</p> <p>This is a development management policy relating to natural environment and biodiversity. There are no realistic linking impact pathways present.</p> <p>This is a key positive hook policy that ensures that no net increase in residential development will result in an increase in recreational pressure on the Chilterns Beechwoods SAC.</p> |
| <p>NEB 1 – Woodlands, Trees and Landscape Features</p> | <p>No.</p> <p>This is a development management policy relating to woodlands, trees and landscape features. There are no realistic linking impact pathways present.</p> |
| <p>NEB 2 – Local Green Spaces</p> | <p>No.</p> <p>This is a development management policy relating to local green spaces. There are no realistic linking impact pathways present.</p> |
| <p>NEB 3 – Non-Designated Local Green Space</p> | <p>No.</p> <p>This is a development management policy relating to non-designated local green spaces. There are no realistic linking impact pathways present.</p> |
| <p>NEB 4 - Significant Publicly Accessible Green Areas</p> | <p>No.</p> <p>This is a development management policy relating to non-significant publicly accessible green areas. There are no realistic linking impact pathways present.</p> |
| <p>NEB 5 - Blue Infrastructure</p> | <p>No.</p> <p>This is a development management policy relating to blue infrastructure. There are no realistic linking impact pathways present.</p> |
| <p>NEB 6 – Biodiversity and Biodiversity Net Gain</p> | <p>No.</p> |

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| | <p>This is a development management policy relating to biodiversity. There are no realistic linking impact pathways present.</p> |
| <p>NEB 7 - Biodiversity Provision in the Design of New Buildings and Open Spaces</p> | <p>No.</p> <p>This is a development management policy relating to Biodiversity Provision in the Design of New Buildings and Open Spaces. There are no realistic linking impact pathways present.</p> |
| <p>NEB 8 – Managing Flood Risk</p> | <p>No.</p> <p>This is a development management policy relating to managing flood risk. There are no realistic linking impact pathways present.</p> |
| <p>NEB 9 – Agricultural Land</p> | <p>No.</p> <p>This is a development management policy relating to agricultural land. There are no realistic linking impact pathways present.</p> |
| <p>NEB 10 – Landscape and Design</p> | <p>No.</p> <p>This is a development management policy relating to landscape and design. There are no realistic linking impact pathways present.</p> |
| <p>NEB11 – Chilterns National Landscape</p> | <p>No.</p> <p>This is a development management policy relating to the Chilterns National Landscape. There are no realistic linking impact pathways present.</p> |
| <p>NEB 12 - Green Space Standards and New Green Space Provision</p> | <p>No.</p> <p>This is a development management policy relating to Green Space Standards and New Green Space Provision. There are no realistic linking impact pathways present.</p> |
| <p>Strategic Policy SP11 – Historic Environment</p> | <p>No.</p> |

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| | <p>This is a development management policy relating to the historic environment. There are no realistic linking impact pathways present.</p> |
| HE1 – Designated heritage assets | <p>No.</p> <p>This is a development management policy relating to designated heritage assets. There are no realistic linking impact pathways present.</p> |
| HE2 – Non-designated heritage assets | <p>No.</p> <p>This is a development management policy relating to non-designated heritage assets. There are no realistic linking impact pathways present.</p> |
| HE3 – Archaeology | <p>No.</p> <p>This is a development management policy relating to archaeology. There are no realistic linking impact pathways present.</p> |
| HE4 – Scheduled Ancient Monuments | <p>No.</p> <p>This is a development management policy relating to scheduled ancient monuments. There are no realistic linking impact pathways present.</p> |
| HE5 – Archaeological Sites for Local reservation | <p>No.</p> <p>This is a development management policy relating to archaeological sites for local preservation. There are no realistic linking impact pathways present.</p> |
| HE6 – Archaeological Sites Subject to a Recording Condition | <p>No.</p> <p>This is a development management policy relating to archaeological sites subject to a recording condition. There are no realistic linking impact pathways present.</p> |
| HE7 – Change of use and heritage assets | <p>No.</p> |

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| | <p>This is a development management policy relating to change of use and heritage assets. There are no realistic linking impact pathways present.</p> |
| HE8 – Responsible retrofitting | <p>No.</p> <p>This is a development management policy relating to responsible retrofitting. There are no realistic linking impact pathways present.</p> |
| Strategic Policy SP12 – High-Quality Design | <p>No.</p> <p>This is a development management policy relating to high quality design. There are no realistic linking impact pathways present.</p> |
| DES1 – Design of New Development | <p>No.</p> <p>This is a development management policy relating to design of new development. There are no realistic linking impact pathways present.</p> |
| DES2 – Public Space | <p>No.</p> <p>This is a development management policy relating to public space. There are no realistic linking impact pathways present.</p> |
| DES3 – Efficient Use of Land | <p>No.</p> <p>This is a development management policy relating to effective land use. There are no realistic linking impact pathways present.</p> |
| DES4 – Extensions to Existing Buildings | <p>No.</p> <p>This is a development management policy relating to extensions to existing buildings. There are no realistic linking impact pathways present.</p> |
| DES5 – Residential Amenity Standards | <p>No.</p> |

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| | <p>This is a development management policy relating to residential amenity standards. There are no realistic linking impact pathways present.</p> |
| DES6 – Building Heights | <p>No.</p> <p>This is a development management policy relating to building heights. There are no realistic linking impact pathways present.</p> |
| DES7 – Servicing of Development | <p>No.</p> <p>This is a development management policy relating to servicing of development. There are no realistic linking impact pathways present.</p> |
| DES8 – Shopfronts and Advertisements | <p>No.</p> <p>This is a development management policy relating to shopfronts and advertisements. There are no realistic linking impact pathways present.</p> |
| Strategic Policy SP13 – Health and Wellbeing | <p>No.</p> <p>This is a development management policy relating to health and wellbeing. There are no realistic linking impact pathways present.</p> |
| HW1 – Noise and Air Pollution | <p>No.</p> <p>This is a development management policy relating to noise and air pollution. There are no realistic linking impact pathways present.</p> |
| HW 2 – Light Pollution | <p>No.</p> <p>This is a development management policy relating to light pollution. There are no realistic linking impact pathways present.</p> |
| HW 3 – Contaminated Land | <p>No.</p> |

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| | This is a development management policy relating to contaminated land. There are no realistic linking impact pathways present. |
| HW 4 – Groundwater Pollution | No. This is a development management policy relating to groundwater pollution. There are no realistic linking impact pathways present. |
| HW5 – Health Impact Assessments | No. This is a development management policy relating to health impact assessments. There are no realistic linking impact pathways present. |
| HW6 – New development and existing uses (agent of change principle) | No. This is a development management policy relating to new development and existing uses pollution. There are no realistic linking impact pathways present. |
| Strategic Policy SP14 - Delivery of Infrastructure | No. This is a development management policy relating to delivery of infrastructure. There are no realistic linking impact pathways present. |
| IMP1 – Additional Infrastructure Requirements for Strategic Scale Development | No. This is a development management policy relating to additional infrastructure requirements or strategic scale development. There are no realistic linking impact pathways present. |

B.2 LP Site Allocation Test of Likely Significant Effects

- 7.1.8 Where the HRA Implications cell is coloured **green**, this means that there is no potential for a linking impact pathway between the policy and a Habitats Site; there **is no potential for Likely Significant Effect**, and thus it will not be discussed further within the

report. Where the HRA Implications cell is coloured **orange**, this means that there is potential for a linking impact pathway between the policy and a Habitats Site; there **is potential for Likely Significant Effect**, and thus it will be discussed further within the report.

Table 3: LP Site Allocation Test of Likely Significant Effects

| Site Allocation | Notes | HRA Implications |
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| <p>H1 - North Hemel Hempstead, AL3 7AU</p> | <p>In addition to built development (Primarily residential 1,500 units (indicative) in total (1,125 in Plan period)), the site will include SANG provision</p> | <p>Potential for Likely Significant Effect.</p> <p>Located within the 12.6km core recreational Zone of Influence of Chilterns Beechwoods SAC.</p> <p>The allocation states that:</p> <p><i>'The site lies within the Chilterns Beechwoods Special Area of Conservation (CBSAC) Zone of Influence (ZOI). Appropriate contributions must be made towards the Strategic Access Management and Monitoring Strategy (SAMMS). Development proposals will also need to make provision for a new Suitable Alternative Natural Greenspace (SANG), or as part of the wider SANG network across the HGC Growth Areas.</i></p> |
| <p>H2 - East Hemel Hempstead (North), HP2 7HT</p> | <p>In addition to built development (Primarily residential 1,600 units (indicative) in total (1,235 in Plan period), the site will include SANG/ Country Park provision</p> | <p>Potential for Likely Significant Effect.</p> <p>Located within the 12.6km core recreational Zone of Influence of Chilterns Beechwoods SAC.</p> <p>The allocation states that:</p> <p><i>'The site lies within the Chilterns Beechwoods Special Area of Conservation (CBSAC) Zone of Influence (ZOI). Appropriate contributions must be made towards the Strategic Access Management and Monitoring Strategy (SAMMS). Development proposals will also need to make provision for a new Suitable Alternative Natural</i></p> |

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| | | <p><i>Greenspace (SANG), or as part of the wider SANG network across the HGC Growth Areas..'</i></p> |
| <p>H3 - East Hemel Hempstead (Central), HP2 7LF</p> | <p>In addition to built development (Employment Led Mixed Use (Enterprise Zone)), the site will include improvements to countryside access link and delivery of the HGC Green Loop</p> | <p>Potential for Likely Significant Effect.</p> <p>Located within the 12.6km core recreational Zone of Influence of Chilterns Beechwoods SAC.</p> <p>The allocation states that:</p> <p><i>'The site lies within the Chilterns Beechwoods Special Area of Conservation (CBSAC) Zone of Influence (ZOI). Generally, use classes for this site will not be relevant in contributing to the CBSAC Mitigation Strategy. However, relevant uses will need to make appropriate contributions towards the Strategic Access Management and Monitoring Strategy (SAMMS). If relevant, Development proposals will also need to make provision for a new Suitable Alternative Natural Greenspace (SANG), as part of the wider SANG network across the HGC Growth Areas.'</i></p> |
| <p>H4 - East Hemel Hempstead (South), HP2 4PA4</p> | <p>In addition to built development (Primarily residential 2,400 units (indicative) in total (1,940 in Plan period)), the site will include Strategic and local public open space improvements to Green Loops and SANG provision</p> | <p>Potential for Likely Significant Effect.</p> <p>Located within the 12.6km core recreational Zone of Influence of Chilterns Beechwoods SAC.</p> <p>The allocation states that:</p> <p><i>'The site lies within the Chilterns Beechwoods Special Area of Conservation (CBSAC) Zone of Influence (ZOI). Appropriate contributions must be made towards the Strategic Access Management and Monitoring Strategy (SAMMS). Development proposals will also need to make provision for a new Suitable Alternative Natural</i></p> |

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| | | <i>Greenspace (SANG), or as part of the wider SANG network across the HGC Growth Areas..'</i> |
| B1 - North St Albans, AL3 6DD | Primarily residential 1,097 units (indicative) (this includes 150 from planning permission 5/2021/0423) | No. Located outside of the Chilterns Beechwoods SAC Recreational 12.6km ZOI. |
| B2 - North East Harpenden, AL5 5EG | Primarily residential 738 units (indicative) | No. Located outside of the Chilterns Beechwoods SAC Recreational 12.6km ZOI. |
| B3 - West Redbourn, Redbourn, AL3 7HZ | Primarily residential 544 units (indicative) and care home development. | Potential for Likely Significant Effect. Located within the 12.6km core recreational Zone of Influence of Chilterns Beechwoods SAC. The allocation states that: <i>'The site lies within the Chilterns Beechwoods Special Area of Conservation (CBSAC) Zone of Influence (ZOI). Appropriate contributions must be made towards the Strategic Access Management and Monitoring Strategy (SAMMS). Development proposals will also need to make provision for a new Suitable Alternative Natural Greenspace (SANG), or alternatively contribute towards the maintenance of a suitable SANG project elsewhere.'</i> |
| B4 - East St Albans, AL4 9JJ | Primarily residential 472 units (indicative) (additional to adjoining permission) | No. Located outside of the Chilterns Beechwoods SAC Recreational 12.6km ZOI. |

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| B5 - Glinwell, Hatfield Road, St Albans, AL4 0HE | Primarily residential 485 units (indicative) | No. Located outside of the Chilterns Beechwoods SAC Recreational 12.6km ZOI. |
| B6 - West of London Colney, AL2 1LN | Primarily residential 324 units (indicative) | No. Located outside of the Chilterns Beechwoods SAC Recreational 12.6km ZOI. |
| B7 - North West Harpenden, AL5 3NP | Primarily residential 293 units (indicative) | No. Located outside of the Chilterns Beechwoods SAC Recreational 12.6km ZOI. |
| B8 - Harper Lane, north of Radlett, WD7 7HU | Primarily residential 274 units (indicative) | No. Located outside of the Chilterns Beechwoods SAC Recreational 12.6km ZOI. |
| L1 - Burston Nurseries, North Orbital Road, St Albans, AL2 2DSc | Residential 180 units (indicative) (additional to permission 5/2020/3022) | No. Located outside of the Chilterns Beechwoods SAC Recreational 12.6km ZOI. |
| L2 - West of Watling Street, Park Street, AL2 2PZ | Primarily residential 104 units (indicative) | No. Located outside of the Chilterns Beechwoods SAC Recreational 12.6km ZOI. |
| L3 - Bedmond Lane, St Albans, AL3 4AH | Residential 101 units (indicative) | No. Located outside of the Chilterns Beechwoods SAC Recreational 12.6km ZOI. |

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| <p>M2 - Hill Dyke Road, Wheathampstead, AL4 8TR</p> | <p>Primarily residential 85 units (indicative)</p> | <p>No. Located outside of the Chilterns Beechwoods SAC Recreational 12.6km ZOI.</p> |
| <p>M3 - Bedmond Lane, St Albans, AL3 4AH</p> | <p>Primarily residential 70 units (indicative)</p> | <p>Needs to be assessed when new shape file is available</p> |
| <p>M4 - North of Oakwood Road, Bricket Wood, AL2 3PT</p> | <p>Primarily residential 74 units (indicative)</p> | <p>No. Located outside of the Chilterns Beechwoods SAC Recreational 12.6km ZOI.</p> |
| <p>M6 - South of Harpenden Lane, Redbourn, AL3 7RQ</p> | <p>Housing 68 units (indicative)</p> | <p>Potential for Likely Significant Effect. Located within the 12.6km core recreational Zone of Influence of Chilterns Beechwoods SAC. The allocation states that: <i>'This site lies within the Chilterns Beechwoods Special Area of Conservation (CBSAC) Zone of Influence (ZOI). Appropriate contributions must be made towards the Strategic Access Management and Monitoring Strategy (SAMMS). Development proposals will also need to make provision for a new Suitable Alternative Natural Greenspace (SANG), or alternatively contribute towards the maintenance of a suitable SANG project elsewhere.'</i></p> |
| <p>M7 - Townsend Lane, Harpenden, AL5 2RH</p> | <p>Housing 65 units (indicative)</p> | <p>Potential for Likely Significant Effect. Located within the 12.6km core recreational Zone of Influence of Chilterns Beechwoods SAC. The allocation states that:</p> |

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| | | <i>'The site lies within the Chilterns Beechwoods Special Area of Conservation (CBSAC) Zone of Influence (ZOI). Appropriate contributions must be made towards the Strategic Access Management and Monitoring Strategy (SAMMS). Development proposals will also need to make provision for a new Suitable Alternative Natural Greenspace (SANG), or alternatively contribute towards the maintenance of a suitable SANG project elsewhere.'</i> |
| M8 - Verulam Golf Club, St Albans, AL1 1JG | Housing 65 units (indicative) | No. Located outside of the Chilterns Beechwoods SAC Recreational 12.6km ZOI. |
| M9 - Amwell Top Field, Wheathampstead, AL4 8DZ | Residential 60 units (indicative) | No. Located outside of the Chilterns Beechwoods SAC Recreational 12.6km ZOI. |
| M10 - Tippendell Lane and Orchard Drive, How Wood, AL2 2HJ | Residential 51 units (indicative) | No. Located outside of the Chilterns Beechwoods SAC Recreational 12.6km ZOI. |
| M13 – North of Boissy Close, Colney Heath, AL4 0UE | Residential 49 units (indicative) | No. Located outside of the Chilterns Beechwoods SAC Recreational 12.6km ZOI. |
| M15 - Bucknalls Drive, Bricket Wood, AL2 3YT | Residential 44 units (indicative) | No. Located outside of the Chilterns Beechwoods SAC Recreational 12.6km ZOI. |

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| <p>M16 - Falconers Field, Harpenden, AL5 3ES</p> | <p>Residential 39 units (indicative)</p> | <p>Potential for Likely Significant Effect.</p> <p>Located within the 12.6km core recreational Zone of Influence of Chilterns Beechwoods SAC.</p> <p>The allocation states that:</p> <p><i>‘Most of the site lies within the Chilterns Beechwoods Special Area of Conservation (CBSAC) Zone of Influence (ZOI). Appropriate contributions must be made towards the Strategic Access Management and Monitoring Strategy (SAMMS). Development proposals will also need to make provision for a new Suitable Alternative Natural Greenspace (SANG), or alternatively contribute towards the maintenance of a suitable SANG project elsewhere.’</i></p> |
| <p>M17 - North of Wheathampstead Road, Harpenden, AL5 1AB</p> | <p>Residential 38 units (indicative)</p> | <p>No.</p> <p>Located outside of the Chilterns Beechwoods SAC Recreational 12.6km ZOI.</p> |
| <p>M18 - East of Kay Walk, St Albans, AL4 0XH</p> | <p>Residential 37 units (indicative)</p> | <p>No.</p> <p>Located outside of the Chilterns Beechwoods SAC Recreational 12.6km ZOI.</p> |
| <p>M19 - Piggottshill Lane, Harpenden, AL5 5UN</p> | <p>Residential 29 units (indicative)</p> | <p>No.</p> <p>Located outside of the Chilterns Beechwoods SAC Recreational 12.6km ZOI.</p> |
| <p>M20 - Lower Luton Road, Harpenden, AL5 5AF</p> | <p>Residential 25 units (indicative)</p> | <p>No.</p> |

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| | | Located outside of the Chilterns Beechwoods SAC Recreational 12.6km ZOI. |
| M21 - Rothamsted Lodge, Hatching Green, AL5 2GT | Residential 25 units (indicative) (this includes 5 units from planning permission 5/2022/1814 | No. Located outside of the Chilterns Beechwoods SAC Recreational 12.6km ZOI. |
| M22 - Wood End, Hatching Green, Harpenden, AL5 2JT | Residential 15 units (indicative) | No. Located outside of the Chilterns Beechwoods SAC Recreational 12.6km ZOI. |
| M23 - Ashdale Lye Lane, Bricket Wood, AL2 3LQ | Residential 9 units (indicative) | No. Located outside of the Chilterns Beechwoods SAC Recreational 12.6km ZOI. |
| M25 - Baulk Close, Harpenden, AL5 4LY | Residential 8 units (indicative) | No. Located outside of the Chilterns Beechwoods SAC Recreational 12.6km ZOI. |
| P1 - Smallford Works, Smallford Lane, AL4 0SA | Housing 58 units (indicative) | No. Located outside of the Chilterns Beechwoods SAC Recreational 12.6km ZOI. |
| P2 – Land at North Orbital Road, AL2 1DL | Housing 64 units (indicative) | No. Located outside of the Chilterns Beechwoods SAC Recreational 12.6km ZOI. |
| P3 - Friends Meeting House, Blackwater Lane, Hemel, HP3 8LB | Housing 15 units (indicative) | Potential for Likely Significant Effect. |

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| | | <p>Located within the 12.6km core recreational Zone of Influence of Chilterns Beechwoods SAC.</p> <p>The allocation states that:</p> <p><i>‘Most of the site lies within the Chilterns Beechwoods Special Area of Conservation (CBSAC) Zone of Influence (ZOI). Appropriate contributions must be made towards the Strategic Access Management and Monitoring Strategy (SAMMS). Development proposals will also need to make provision for a new Suitable Alternative Natural Greenspace (SANG), or alternatively contribute towards the maintenance of a suitable SANG project elsewhere.’</i></p> |
| <p>U2 - Land South West of London Colney Allotments, AL2 1RG</p> | <p>Residential 28 units (indicative)</p> | <p>No.</p> <p>Located outside of the Chilterns Beechwoods SAC Recreational 12.6km ZOI.</p> |
| <p>U3 - Former Bricket Wood United Reformed Church, AL2 3QR</p> | <p>Residential 10 units (indicative)</p> | <p>No.</p> <p>Located outside of the Chilterns Beechwoods SAC Recreational 12.6km ZOI.</p> |
| <p>U4 – Greenwood United Reformed Church AL2 3HG</p> | <p>Residential 5 units (indicative)</p> | <p>No.</p> <p>Located outside of the Chilterns Beechwoods SAC Recreational 12.6km ZOI.</p> |
| <p>UC1 – Sainsbury’s Supermarket, Everard Close, St Albans AL1 2QU</p> | <p>Residential 92 units (indicative)</p> | <p>No.</p> <p>Located outside of the Chilterns Beechwoods SAC Recreational 12.6km ZOI.</p> |

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| UC2 - Civic Close Car Park Bricket Road, St Albans, AL1 3JX | Residential 57 units (indicative) | No. Located outside of the Chilterns Beechwoods SAC Recreational 12.6km ZOI. |
| UC3 - London Road Car Park, London Road, St Albans, AL1 1NG | Residential 36 units (indicative) | Needs to be assessed when new shape file is available |
| UC4 - Car Park to rear of 32- 34 Upper Marlborough Road, St Albans, AL1 3 UU | Residential 16 units (indicative) | No. Located outside of the Chilterns Beechwoods SAC Recreational 12.6km ZOI. |
| UC5 - 18- 20 Catherine Street St Albans, AL3 5BY | Residential 33 units (indicative) | No. Located outside of the Chilterns Beechwoods SAC Recreational 12.6km ZOI. |
| UC6 - 13-19 Sutton Road & 5- 11a Pickford Road St Albans, AL1 5JH | Residential 29 units (indicative) | No. Located outside of the Chilterns Beechwoods SAC Recreational 12.6km ZOI. |
| UC7 - 5 Spencer Street, St Albans, AL3 5EH | Residential 27 units (indicative) | No. Located outside of the Chilterns Beechwoods SAC Recreational 12.6km ZOI. |
| UC8 - Public Hall, 6 Southdown Road, Harpenden, AL5 1TE | Residential 24 units (indicative) | No. Located outside of the Chilterns Beechwoods SAC Recreational 12.6km ZOI. |

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| UC9 - Keyfield Terrace Car Park, Keyfield Terrace, St Albans, AL1 1PD | Residential 10 units (indicative) | No. Located outside of the Chilterns Beechwoods SAC Recreational 12.6km ZOI. |
| UC10 - Garage Block rear of 109-179 Hughenden Road, St Albans, AL4 9QW | Residential 24 units (indicative) | No. Located outside of the Chilterns Beechwoods SAC Recreational 12.6km ZOI. |
| UC11 - 50 Victoria Street St Albans, AL1 3HZ | Residential 6 units (indicative) | No. Located outside of the Chilterns Beechwoods SAC Recreational 12.6km ZOI. |
| UC12 - Garage Block Between Hughenden Road and The Ridgeway, St Albans, AL4 9RH | Residential 20 units (indicative) | No. Located outside of the Chilterns Beechwoods SAC Recreational 12.6km ZOI. |
| UC14 - Car Park to rear of 3 Church Green (Waitrose), Harpenden, AL5 2TJ | Residential 19 units (indicative) | No. Located outside of the Chilterns Beechwoods SAC Recreational 12.6km ZOI. |
| UC15 - Bowers Way East Car Park Bowers Way, Harpenden, AL5 4EQ | Residential 31 units (indicative) | No. Located outside of the Chilterns Beechwoods SAC Recreational 12.6km ZOI. |
| UC16 - Garage Block west of Thirlestane, St Albans, AL1 3PE | Residential 16 units (indicative) | No. Located outside of the Chilterns Beechwoods SAC Recreational 12.6km ZOI. |

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| UC17 - Garage Block off Cotlandswick, London Colney, AL2 1ED | Residential 5 units (indicative) | No. Located outside of the Chilterns Beechwoods SAC Recreational 12.6km ZOI. |
| UC18 - Garage block to front of 94-142 Riverside Road, Riverside Road, St Albans, AL1 1SE | Residential 13 units (indicative) | No. Located outside of the Chilterns Beechwoods SAC Recreational 12.6km ZOI. |
| UC19 - 54 Lemsford Road St Albans, AL1 3PR | Residential 43 units (indicative) | No. Located outside of the Chilterns Beechwoods SAC Recreational 12.6km ZOI. |
| UC20 - 104 High Street London Colney, AL2 1QL | Residential 21 units (indicative) | No. Located outside of the Chilterns Beechwoods SAC Recreational 12.6km ZOI. |
| UC21 - Garages off Chapel Place, St Albans, AL1 2JZ | Residential 11 units (indicative) | No. Located outside of the Chilterns Beechwoods SAC Recreational 12.6km ZOI. |
| UC22 - Car Park to rear of 77-101 Hatfield Road, Hatfield Road, St Albans, AL1 4JL | Residential 9 units (indicative) | No. Located outside of the Chilterns Beechwoods SAC Recreational 12.6km ZOI. |
| UC23 - Garage Site adj. Verulam House, Verulam Road, St Albans, AL3 5EN | Residential 9 units (indicative) | No. Located outside of the Chilterns Beechwoods SAC Recreational 12.6km ZOI. |

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| UC24 - Garages Rear of Hill End Lane (North), St Albans, AL4 0AE | Residential 8 units (indicative) | No. Located outside of the Chilterns Beechwoods SAC Recreational 12.6km ZOI. |
| UC25 - 318 Watford Road, Chiswell Green, AL2 3DP | Residential 10 units (indicative) | No. Located outside of the Chilterns Beechwoods SAC Recreational 12.6km ZOI. |
| UC26 - Garage Block to Malvern Close, St Albans, AL4 9SZ | Residential 9 units (indicative) | No. Located outside of the Chilterns Beechwoods SAC Recreational 12.6km ZOI. |
| UC27 - Berkeley House, Barnet Road, London Colney, AL2 1BG | Residential 8 units (indicative) | No. Located outside of the Chilterns Beechwoods SAC Recreational 12.6km ZOI. |
| UC28 - New Greens Residents Association, 2 High Oaks, St Albans, AL3 6DL | Residential 10 units (indicative) | No. Located outside of the Chilterns Beechwoods SAC Recreational 12.6km ZOI. |
| UC29 - Garage Block off Noke Shot, Harpenden, AL5 5HS | Residential 8 units (indicative) | No. Located outside of the Chilterns Beechwoods SAC Recreational 12.6km ZOI. |
| UC30 - Garages Between Abbots Avenue West and Abbey Line, St Albans, AL1 2JH | Residential 5 units (indicative) | No. Located outside of the Chilterns Beechwoods SAC Recreational 12.6km ZOI. |

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| <p>UC31 - Garages rear of Tudor Road, St Albans, AL3 6AY</p> | <p>Residential 9 units (indicative)</p> | <p>No. Located outside of the Chilterns Beechwoods SAC Recreational 12.6km ZOI.</p> |
| <p>UC32 - Garages off Creighton Avenue, St Albans, AL1 2LZ</p> | <p>Residential 5 units (indicative)</p> | <p>No. Located outside of the Chilterns Beechwoods SAC Recreational 12.6km ZOI.</p> |
| <p>UC33 - Land Rear of 53 Snatchup, Redbourn, AL3 7HF</p> | <p>Residential 5 units (indicative)</p> | <p>Potential for Likely Significant Effect. Located within the 12.6km core recreational Zone of Influence of Chilterns Beechwoods SAC. The allocation states that: <i>‘This site lies within the Chilterns Beechwoods Special Area of Conservation (CBSAC) Zone of Influence (ZOI). Appropriate contributions must be made towards the Strategic Access Management and Monitoring Strategy (SAMMS). Development proposals will also need to make provision for a new Suitable Alternative Natural Greenspace (SANG), or alternatively contribute towards the maintenance of a suitable SANG project elsewhere.’</i></p> |
| <p>UC34 - Garages Rear of Hill End Lane (South), St Albans, AL4 0AE</p> | <p>Residential 7 units (indicative)</p> | <p>No. Located outside of the Chilterns Beechwoods SAC Recreational 12.6km ZOI.</p> |
| <p>UC35 - Market Depot, Drovers Way, St Albans, AL3 5FA</p> | <p>Residential 11 units (indicative)</p> | <p>No. Located outside of the Chilterns Beechwoods SAC Recreational 12.6km ZOI.</p> |

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| UC36 - Garages off Park Street Lane, Park Street, AL2 2ND | Residential 5 units (indicative) | No. Located outside of the Chilterns Beechwoods SAC Recreational 12.6km ZOI. |
| UC40 - Land Rear of New House Park Shops, St Albans, AL1 1UJ | Residential 6 units (indicative) | No. Located outside of the Chilterns Beechwoods SAC Recreational 12.6km ZOI. |
| UC41 - Garages at Grindcobbe, St Albans, AL1 2ED | Residential 6 units (indicative) | No. Located outside of the Chilterns Beechwoods SAC Recreational 12.6km ZOI. |
| UC42 - Garages off Thirlmere Drive, St Albans, AL1 5QS | Residential 7 units (indicative) | No. Located outside of the Chilterns Beechwoods SAC Recreational 12.6km ZOI. |
| UC43 - Garage block to west of 32-46 Riverside Road, St Albans, AL1 1SD | Residential 5 units (indicative) | No. Located outside of the Chilterns Beechwoods SAC Recreational 12.6km ZOI. |
| UC44 - Garage Block off Millford Hill, Harpenden, AL5 5BN | Residential 5 units (indicative) | No. Located outside of the Chilterns Beechwoods SAC Recreational 12.6km ZOI. |
| UC45 - Garages off Watling View (West), St Albans, AL1 2PA | Residential 5 units (indicative) | No. Located outside of the Chilterns Beechwoods SAC Recreational 12.6km ZOI. |
| UC46 - Garage Blocks adj. to 76 Oakley Road and 151 | Residential 6 units (indicative) | No. |

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| Grove Road, Harpenden, AL5 1HJ | | Located outside of the Chilterns Beechwoods SAC Recreational 12.6km ZOI. |
| UC47 - Crabtree Fields / Land at Waldegrave Park, Harpenden, AL5 5SA | Residential 5 units (indicative) | No. Located outside of the Chilterns Beechwoods SAC Recreational 12.6km ZOI. |
| UC48 - Car Park adj. to 42-46 Adelaide Street, St Albans, AL3 5BH | Residential 5 units (indicative) | No. Located outside of the Chilterns Beechwoods SAC Recreational 12.6km ZOI. |
| UC49 - Garage Block rear of 18-30 Furse Avenue, St Albans, AL4 9NE | Residential 5 units (indicative) | No. Located outside of the Chilterns Beechwoods SAC Recreational 12.6km ZOI. |
| UC50 - Southview Car Park, Lower Luton Road, Harpenden, AL5 5AW | Residential 5 units (indicative) | No. Located outside of the Chilterns Beechwoods SAC Recreational 12.6km ZOI. |
| UC51 - Garage Block to south of Abbots Park Abbots Park, St Albans, AL1 1TW | Residential 5 units (indicative) | No. Located outside of the Chilterns Beechwoods SAC Recreational 12.6km ZOI. |
| UC52 - Garage Block off Tallents Crescent, Harpenden, AL5 5BS | Residential 5 units (indicative) | No. Located outside of the Chilterns Beechwoods SAC Recreational 12.6km ZOI. |
| UC53 - Motor Repair Garage, Paynes Yard, Park Street Lane, AL2 2NE | Residential 11 units (indicative) | No. |

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| | | Located outside of the Chilterns Beechwoods SAC Recreational 12.6km ZOI. |
| UC54 - Harpenden Railway Station Car Park East, Harpenden, AL5 4SP | Residential 95 units (indicative) | No. Located outside of the Chilterns Beechwoods SAC Recreational 12.6km ZOI. |
| UC55 - 44-52 Lattimore Road, St Albans, AL1 3XW | Residential 17 units (indicative) | No. Located outside of the Chilterns Beechwoods SAC Recreational 12.6km ZOI. |
| UC56 - Garages to the rear of Portman House, Therfield Road, St Albans, AL3 6BN | Residential 6 units (indicative) | No. Located outside of the Chilterns Beechwoods SAC Recreational 12.6km ZOI. |
| UC57 – Car Park and Garages to the rear of Telford Court, Alma Road, St Albans, AL1 3BP | Residential 6 units (indicative) | No. Located outside of the Chilterns Beechwoods SAC Recreational 12.6km ZOI. |
| UC58 - Cotlandswick Garages B, London Colney, AL2 1EG | Residential 5 units (indicative) | No. Located outside of the Chilterns Beechwoods SAC Recreational 12.6km ZOI. |
| OS1 - Land to the North of Bricket Wood, bounded by the M25 and A405 North Orbital | Community facilities. Total site area 6.52 ha | No. Located outside of the Chilterns Beechwoods SAC Recreational 12.6km ZOI. Further, this allocation does not provide residential development and as such recreational pressure is not relevant linking impact pathways. |

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| <p>OS2 - Toulmin Drive / Highelms, St Albans, AL3 6DX</p> | <p>Community facilities. Total site area 0.19ha</p> | <p>No. Located outside of the Chilterns Beechwoods SAC Recreational 12.6km ZOI. Further, this allocation does not provide residential development and as such recreational pressure is not relevant linking impact pathways.</p> |
| <p>OS3 - Extension to Rothamsted Research, Harpenden Campus, AL5 2JQ</p> | <p>Employment. Total site area 1.86ha</p> | <p>No. Located outside of the Chilterns Beechwoods SAC Recreational 12.6km ZOI. Further, this allocation does not provide residential development and as such recreational pressure is not relevant linking impact pathways.</p> |
| <p>OS4 - Extension to Rothamsted Research, Harpenden Campus, AL5 2JQ</p> | <p>Employment. Total site area 1.67 ha</p> | <p>No. Located outside of the Chilterns Beechwoods SAC Recreational 12.6km ZOI. Further, this allocation does not provide residential development and as such recreational pressure is not relevant linking impact pathways.</p> |

Appendix C Glossary of Terms

| Term | Definition |
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| Appropriate Assessment (AA) | The term given to the second, detailed, stage of the Habitats Regulations Assessment process. An assessment that is appropriate to determine whether the integrity of a Habitats Site will be affected |
| Chiltern Beechwoods Special Area of Conservation (CBSAC) | The acronym for the area that is covered by the Chiltern Beechwoods Special Area of Conservation, a site designated for its international important habitats and non-avian species by the Conservation of Habitats and Species Regulations 2017. |
| Chartered Institute of Ecology and Environmental Management (CIEEM) | The professional body by which ecologists are held to account. They provide a Code of Professional Conduct by which ecologists must adhere. |
| Discretionary Advice Service (DAS) | A service offered by Natural England to provide pre-application and post-consent advice in relation to development on land |
| District Council (DC) | The local government authority that covers a smaller area within a county such as a town or part of a large city, or part of a County. |
| European Union (EU) | A political and economic alliance of 27 countries, known as member states or EU countries. The United Kingdom officially left the EU in 2020. |
| Habitats Sites | Any site which would be included within the definition at regulation 8 of the Conservation of Habitats and Species Regulations 2017 for the purpose of those regulations, including candidate Special Areas of Conservation, Sites of Community Importance, Special Areas of Conservation, Special Protection Areas and any relevant Marine Sites. Before Brexit, these were referred to as European Sites. Specifically, these are Special Areas of Conservation, Special Protection Areas and Ramsar Sites. |

Hemel Garden Communities Programme A cross-boundary proposal to transform Hemel Hempstead through the regeneration of the existing town and delivery of new housing and infrastructure in St Albans City & District Council and Dacorum Borough Council areas.

(HGC)

Habitats Regulation Assessment (HRA) An assessment of the impact on the integrity of a Habitats Site (including Ramsar sites) of a project or a plan either alone or in combinations, with respect to the site's Conservation Objectives in line with the Conservation of Habitats and Species Regulations 2017 (as amended).

Imperative Reasons of Overriding Public Interest (IROPI) A test under Article 6(4) of the Habitats Directive transcribed into British law within the Conservation of Habitats and Species Regulations 2017 (as amended). When identifying IROPI a competent authority must consider whether all three elements of IROPI are met:

- Imperative: the plan or project is necessary (whether urgent or otherwise) for one or more of the outlined reasons.
- Overriding: the interest served by the plan or project outweighs the harm to the integrity of the site as assessed in light of the weight to be given to the protection of such sites under the directive.
- Public Interest: a public good is delivered rather than a solely private interest.

Local Plan (LP) A document that sets out planning policies and proposals for a new development. It guides decisions of future development including topics such as housing, employment, and infrastructure. Section 3 of the National Planning and Policy Framework (NPPF) requires that each local planning authority prepares a Local Plan for its area and that this is updated every five years.

Likely Significant Effect (LSE) An initial assessment of whether an action (for example developing a site) could have a detrimental impact on a Habitats Site. Impact pathways are used to determine whether there is the potential for an effect to occur. The assessment is made before considering any proposed mitigation.

Local Transport Plan (LTP) A long-term management strategy for an organisation or site that seeks to deliver sustainable transport objectives and is regularly reviewed

Ministry of Housing, Communities and Local Government A ministerial department of the UK Government responsible for housing communities and local government in England.

(MHCLG)

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| National Site Network (NSN) | A network of sites within UK territory comprising protected sites already designated under the Habitats Directive (Council Directive 92/43/EEC) and certain elements of the Wild Birds Directive (Directive 2009/147/EC). Now transposed into UK domestic Law by the Conservation of Habitats and Species Regulations 2017 (as amended). Comprises all SPA and SACs within the UK. Formally referred to as European Natural 2000 Sites. |
| Ramsar site | A Ramsar site is a wetland of international importance that has been designated under the criteria of the Ramsar Convention on Wetlands for containing representative, rare or unique wetland types or for their importance in conserving biological diversity. They are treated as of the same significance of SPAs and SACs within the HRA process as a matter of government policy. |
| Special Area of Conservation (SAC) | Areas defined by regulation 3 of the Conservation of Habitats and Species Regulations 2017 which have been given special protection as important conservation sites for their notable habitats or non-avian species. |
| Strategic Access Management and Monitoring Strategy (SAMMS) | A strategic strategy that details management and monitoring prescriptions for a specific Habitats Site to ensure no adverse effects on the integrity result. |
| Suitable Alternative Natural Greenspace (SANG) | Areas of natural recreational greenspace created to draw visitors away from other sensitive areas of land and reduce / limit the recreational load. These are similar to country parks, but they have to be created in accordance with Natural England's SANG standards and have to fit certain criteria. Each SANG site will have a defined SANG capacity that can serve a set number of dwellings/ residence. |
| Special Protection Area (SPA) | Areas classified under regulation 15 of the Conservation of Habitats and Species Regulations 2017 which have been identified as being of international importance for the breeding, feeding, wintering or the migration of rare and vulnerable species of birds. |
| Site of Special Scientific Interest (SSSI) | Site of Special Scientific Interest; a nationally important wildlife site. All European sites on the UK mainland are also designated as SSSIs |

Zone of Influence (Zoi) A theoretical area within which something could affect something else. In the example within this HRA, we discuss a recreational Zoi. Within this zone, an increase in population has the potential to influence recreational pressure within the Chiltern Beechwoods SAC.

