

17 Landscape and Visual

17.1 Introduction

- 17.1.1 This chapter has prepared by FPCR Environment & Desing Ltd (FPCR) and presents an assessment of the likely significant effects of the Development on landscape character and visual amenity. A Landscape & Visual Impact Assessment (LVIA) has been produced and is presented in this chapter.
- 17.1.2 The purpose of the LVIA is to review landscape character and visual amenity, and to assess the landscape and visual effects of the Development (i.e., that is presented by this application) on the receiving landscape receptors and visual receptors.
- 17.1.3 Mitigation measures are identified, where appropriate, to avoid, reduce or offset any significant adverse effects identified and/or enhance likely beneficial effects. The nature and significance of the likely residual effects are then reported. An assessment of the cumulative effects of the project with other cumulative developments (as identified in Chapter 3 and Appendix 3.4) is also presented.
- 17.1.4 The chapter is supported by the following figures and appendices:
- Figure 17.1: Site Location
 - Figure 17.2: Aerial Photograph
 - Figure 17.3: Landscape Character Areas
 - Figure 17.4: Designations
 - Figure 17.5: Topography
 - Figure 17.6: Zone of Theoretical Visibility (ZTV)
 - Figure 17.7: Visual Appraisal and Viewpoints
 - Figure 17.8 - 17.38: LVIA Figures and Photo viewpoints;
 - Appendix 17.1: Planning Policy and Guidance;
 - Appendix 17.2: LVIA Methodology and Assessment Criteria GLVIA3;
 - Appendix 17.3: Landscape Effects Table;
 - Appendix 17.4: Visual Effects Table; and
 - Appendix 17.5: Outline Landscape and Ecology Management Plan (LEMP).

Competence

- 17.1.5 In accordance with the EIA Regulations, the ES chapter has been carried out by competent experts. The chapter has been undertaken by suitably qualified and experienced landscape architects from FPCR using industry-established approaches and methods as supported by guidance. The ES chapter has been led by Elizabeth Fry (BA Jt Hons, MA, CMLI), a director of the practice with 25 years' experience.

- 17.1.6 Elizabeth Fry has significant LVIA and EIA experience covering a wide range of landscape and environmental schemes, from small and medium scale housing developments to major residential led projects, garden villages, sustainable urban extensions as well as mixed-use and employment only developments, including sensitive and green/ grey belt sites. FPCR are a multi-disciplinary environmental and design consultancy with over 50 years' experience of architecture, landscape, ecology, urban design, masterplanning and environmental impact assessment. The practice is a member of the Landscape Institute (LI), the Institute of Sustainability and Environmental Professionals (ISEP), and the Urban Design Group. FPCR are frequently called upon to provide expert evidence at Public and Local Plan Inquiries. FPCR have experience and expertise of LVIAs and the EIA process.

17.2 Planning Policy and Guidance

- 17.2.1 The following sections provide a summary of the planning policy and guidance that is considered to be of relevance to this chapter and the Development. For a detailed review of relevant planning policy, please refer to Appendix 17.1. Further planning context is contained within the application's Planning Statement.

Planning Policy Context

National

- 17.2.2 The following national planning policy is considered relevant to the Development:

- National Planning Policy Framework (NPPF, December 2024, amended February 2025)¹.

Local

- 17.2.3 The following local planning documents and policies (both adopted and draft) are considered relevant to the Development from a landscape and visual perspective and have been considered as part of the chapter, this includes:

- St Albans City and District Council (SADC) Draft Local Plan 2041 – Regulation 19 Publication (September 2024)²:
 - Strategic Policy SP3: Land and the Green Belt
 - LG1: Broad Locations
 - LG3: Hemel Garden Communities Growth Area Place Principles
 - Strategic Policy SP10: Natural Environment, Biodiversity and Green and Blue Infrastructure
 - NEB1: Woodlands, Trees and Landscape Features
 - NEB7: Biodiversity Provision in the Design of New Buildings and Open Spaces
 - NEB8: Managing Flood Risk
 - NEB10: Landscape and Design
 - NEB11: Chilterns National Landscape
 - NEB12: Green Space Standards and New Green Space Provision

- Strategic Policy SP12: High Quality Design
 - DES1: Design of New Development
 - DES2: Public Space
- Strategic Policy SP13: Health and Wellbeing
- Redbourn Neighbourhood Plan 2020-2038³
 - Policy Red 6: New Housing Sites

Guidance

17.2.4 The following planning guidance is relevant to the Development:

- Planning Practice Guidance (PPG)⁴.
- Guidelines for Landscape and Visual Impact Assessment, Third Edition (GLVIA3)⁵
- Landscape Institute Technical Guidance Notes: 02-21 (TGN 02-21) 'Assessing landscape value outside national designations'⁶; 2024-01 'Notes and Clarifications on Aspects of Guidelines for Landscape and Visual Impact Assessment, Third Edition GLVIA3 (2024)⁷ and 06/19 'Visual Representation of Development Proposals'

Other Relevant Strategies, Guidelines or Documents

17.2.5 The following documents are considered to be relevant to the Development from a landscape and visual perspective and have been considered as part of the chapter:

- Chilterns National Landscape Management Plan (2025)⁸;
- Hertfordshire Green Infrastructure Strategy (2022)⁹;
- St Albans District Green Infrastructure Plan (2011)¹⁰;
- Hemel Garden Communities Green Infrastructure Strategy (2024)¹¹;
- Hemel Garden Communities Strategic Design Code (draft Sept 2024);
- National Character Area Profile 110: Chilterns (2025);
- Hertfordshire Landscape Character Area Statements (2000-2005);
- St Albans City and District Council, (2024) St Albans Local Plan 2041, Broad Locations – Landscape + Visual Appraisal; and
- North Hemel Hempstead Landscape Assessment (Sept 2024).

17.3 Assessment Methodology

Consultation

EIA Scoping Opinion

17.3.1 A request for a Scoping Opinion was submitted by the Applicant to SADC on 27th March 2025. The Scoping Report accompanied the request (Appendix 3.2). This explained that Landscape would be 'scoped' into the ES. The Scoping Report set out the proposed methodology and approach for the LVIA (landscape chapter) and included a series of suggested visual receptors and photograph viewpoints. The Scoping Opinion (Appendix 3.3) was issued by SADC on 23rd May 2025 which included comments from statutory

consultees. Table 17.1 summarises key comments raised by consultees relevant to this chapter and how these have been responded to.

Table 17.1: EIA Scoping Response Summary

Consultee and Comment	Response
SADC Landscape – 14 Jan 2025	
SADC's Landscape Officer concluded that, <i>'I think the Potential Receptors / Locations that are to be considered during the winter field work is a supported approach and these are welcomed to ensure that all areas where views of the site might be attained are assessed. The viewpoints themselves are supported and would cover a sufficient area. A preference of mine would be to include a viewpoint on the western boundary opposite viewpoint 8 at the entrance of the single track road from Holtsmere End Lane'</i>	It is noted that the SADC Landscape Officer concluded that the suggested viewpoints for the assessment were acceptable and would cover a sufficient area. As requested, an additional viewpoint has been included from the western Site boundary at the junction of Holtsmere End Lane and Little Revel End (Lane) (Figure 17.7: Viewpoint 2B).
HCC Landscape – 30 April 2025	
HCC's Landscape Officer concluded that, <i>'It is acknowledged that there is limited visibility between the Site and the National Landscape due to intervening screening features of landform and vegetation.</i> <i>We acknowledge that the final study area will be informed by a Zone of Theoretical Visibility Plan (ZTV) which will be based on the maximum building heights and extent parameters. This information may result in the potential for additional viewpoints to be identified and as such there should be some flexibility to include those additional viewpoints.</i> <i>It is noted that the Landscape and Visual Impact Assessment will be prepared as an ES Chapter. A detailed baseline appraisal for assessment purposes is proposed to be informed through a review of landscape characterisation works, together with field surveys of the site and the surrounding landscape. This is a supported approach.</i> <i>We note the submission of the Viewpoint Location Plan; this was agreed prior and we</i>	A ZTV has been prepared and is based upon the Heights Strategy Plan contained within the ES. It is noted that the HCC Landscape Officer concluded that the suggested viewpoints for the assessment were acceptable and would cover a sufficient area. Whilst a Site visit was carried out during October 2024 when vegetation was still in leaf, only the winter photography obtained in February 2025 is included within this chapter (Figures 17.7-17.38). Seasonal variations have been taken into account through the assessment. It is noted that the baseline approach together with the proposed methodology has been accepted. It is noted that the mitigation approach is supported in principle. As explained under 'Embedded Mitigation', the Development will come forward in phases and the associated Green Infrastructure will be delivered as part of that phase, such that later phases would have the benefit of establishing and maturing Green Infrastructure. It is expected that the SANG will be implemented via a phased approach as set

Consultee and Comment	Response
<i>are accepting that the proposed viewpoints are respective of the surrounding area and the potential visual receptors and locations that could be impacted by the proposed development. We also note that the applicant has undertaken Winter Photography to provide a 'worst case scenario' Summer Photography has also been undertaken and as such the LVIA will be able to comment on seasonal variation. This is a supported approach.</i> <i>We are supportive of the proposals to assess cumulative impact on the site and the surrounding area. The inclusion of the other Hemel sites is supported as they will have significant impact on the proposed development both in regard to visual impact but also in relation to screening of the potential impact from surrounding locations.</i> <i>The proposed Methodology is supported.</i> <i>The Mitigation Approach is supported in principle, understanding how the phased approach to the scheme would impact the mitigation proposals should be highlighted within the LVIA. A Plan showing the phased approach and how this would impact the Green Infrastructure delivery as this will ultimately impact the visual impact of the site as it comes forward for delivery'.</i>	out in Chapter 5: Description of Development. The chapter takes all of the above into consideration, and the assessment is based upon this approach. It is noted that there is no request for a Residential Visual Amenity Assessment (RVAA). Field work has enabled judgements to be made on visual receptors, including residential, therefore we agree that a RVAA is not necessary.

SADC Scoping Opinion -23 May 2025

SADC's Case Officer concluded that, '<i>The proposed scope of the EIA is considered acceptable with regard to Landscape and Visual Effects. The comments made in the consultation response from HCC's Landscape Officer must be taken into account, particularly with regard to the phasing for the site and how this would impact Green Infrastructure delivery and, by proxy, mitigation proposals. The comments of SADC Arboricultural Officer should also be taken into consideration'.</i>	Scoping comments made by the HCC Landscape Officer are addressed above. Comments from the SADC Arboricultural Officer are addressed within Chapter 13: Biodiversity. The mitigation approach is supported in principle by the HCC Landscape Officer. As explained under 'Embedded Mitigation', the Development will come forward in phases and the associated Green Infrastructure will be delivered as part of that phase, such that later phases would have the benefit of establishing and maturing Green
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Consultee and Comment	Response
	Infrastructure. It is expected that the SANG will be implemented via a phased approach as set out in Chapter 5: Description of Development. The chapter takes all of the above into consideration, and the assessment is based upon this approach.

Pre-Application Consultation

- 17.3.2 In addition to the consultation undertaken via the EIA Scoping process, consultation has been undertaken with Natural England, specifically on the SANG proposals in the form of an illustrative landscape strategy. The consultation with NE began on the 14th January 2025 and included an on-line meeting on the 18th March 2025. The purpose was to explain the general approaches to the location, extent and composition of the SANG. Further information is contained in Chapter 13: Biodiversity.
- 17.3.3 Engagement has taken place with SADC, DBC and HCC during the pre-application stage and this has included regular meetings with HCC's Landscape Officer (and other SADC and HCC Officers) on the emerging Development to include masterplanning, landscape and visual matters, and Green Infrastructure. Design Review Panels also took place in May and September 2025 with Design South East, and HCC and SADC Officers, to discuss the emerging proposals. There has also been co-ordination meetings with the East Hemel applicant design team on the proposals for the B487 Hemel Hempstead/ Redbourn Road to ensure alignment of the proposals with those at East Hemel.

Summary of Assessment Scope

- 17.3.4 This chapter assesses the following impacts and consequential potential effects upon landscape character and visual amenity which *could* lead to significant effects. The following is taken from the application's Scoping Report:

Construction and Completed Development Effects

- Effects upon the landscape character of the Site and its immediate context;
- Effects upon the landscape character of the Study Area;
- Effects upon landscape receptors within or bordering the Site (e.g. woodland belts, hedgerows, mature trees); and
- Effects upon visual amenity for visual receptors (e.g. residents, rights of way and road users within and close to the Site and its immediate context, and from the Study Area that have views of the Site and therefore development upon it).

Cumulative Assessment:

- 17.3.5 The cumulative assessment considers the same potential effects (where possible and where the necessary information is available) as set out for the Development above.

Non-Significant Effects

- 17.3.6 These are identified through the assessment process.

Study Area

- 17.3.7 The Site Location (Figure 17.1) and Aerial Photograph (Figure 17.2) identify the Site location and context. Following an initial survey, a Study Area of c.1.5km was considered appropriate to use for both the desk study and site assessment work. The Study Area is where it is judged that within this landscape there could be degrees of impact (i.e., change) and therefore effects, which could be significant, on landscape and visual receptors as a result of the Development.
- 17.3.8 The Study Area was determined by a Zone of Theoretical Visibility (ZTV)¹ study based upon the Heights Strategy Plan contained within the ES together with field work. The identified visual receptors and viewpoint locations are mostly within c.1km of the Site, save for three receptors located to the north-west, being no more than c.1.6km from the Site boundary due to the gently undulating landform, intervening woodland, the settlement edge of Hemel Hempstead and field boundary vegetation which limit wider visibility of the Site. The ZTV also informed the extent of the Study Area when considering potential cumulative effects.
- 17.3.9 The ZTV, based upon the Heights Strategy Plan, is shown at Figure 17.6 and the Visual Appraisal and Viewpoints (Figure 17.7) shows the location of the identified visual receptors and viewpoint locations. The viewpoint locations for the assessment have been agreed with HCC's Landscape Officer via the Scoping Opinion.

Baseline Characterisation Approach

Existing Baseline

- 17.3.10 The approach to defining the baseline conditions within the study area for the assessment has involved a combination of desk-based research and field work, as set out below.

Desk Study

- 17.3.11 The baseline conditions for the Study Area were informed by a review of the documents listed at paragraph 17.2.5 above.

Field Study

- 17.3.12 A Site visit and field work assessment was carried out in October 2024, February 2025 and May 2025² to gain an understanding of the Site and Study Area landscape, associated features and overall context as well as the likely visible extent of the Site (and Development upon it), potential visual receptors and viewpoint locations. Carrying out the field study during the winter months enabled winter photographs to be obtained and therefore a 'worst case' scenario appraisal of potential visibility of the Site. Visual receptors and photograph locations were agreed with the HCC Landscape Officer. Photography was undertaken in accordance with GLVIA3 and Landscape Institute Technical Guidance Note on 'Visual Representation of Development Proposals' (TGN 06/19).

¹ Zone of Theoretical Visibility (ZTV): A map usually digitally produced, showing areas of land within which a development is theoretically visible. [GLVIA3]

² May 2025 fieldwork was part of a Design Review Panel Site Visit.

Future Baseline

- 17.3.13 In the event that no Development comes forward on the Site, it is expected that the Site would continue to be managed for agricultural purposes; albeit given its draft allocation in the emerging Local Plan and its location within the Hemel Garden Communities it is expected that there would be planning applications for development upon it.
- 17.3.14 The future baseline conditions may alter as a result of climate change in that certain species may become dominant and outcompete other less robust species or alternative crops may be grown to better suit the change in temperatures. This scenario *could* affect existing established vegetation which *may* in turn allow greater visibility of the Site and therefore potentially require additional embedded mitigation to avoid an increase in landscape and visual effects if Development came forward upon it.

Assessment Method

- 17.3.15 This chapter (Landscape and Visual Impact Assessment (LVIA)) has been prepared based upon the 'Guidelines for Landscape and Visual Impact Assessment, Third Edition (GLVIA3)', published by the Landscape Institute and the Institute of Environmental Management and Assessment (2013). The assessment also takes account of guidance set out in the following Landscape Institute's Technical Guidance Notes: 02-21 (TGN 02-21) 'Assessing landscape value outside national designations'; 2024-01 'Notes and Clarifications on Aspects of Guidelines for Landscape and Visual Impact Assessment, Third Edition GLVIA3 (2024)'; and Landscape Institute Technical Guidance Note on 'Visual Representation of Development Proposals' (TGN 06/19).

- 17.3.16 In summary, the GLVIA3 states:

'Landscape and Visual impact assessment (LVIA), is a tool used to identify and assess the significance of and the effects of change resulting from development on both landscape as an environmental resource in its own right and on people's views and visual amenity.' (GLVIA3 paragraph 1.1.)

- 17.3.17 There are two components of LVIA:

'Assessment of landscape effects; assessing effects on the landscape as a resource in its own right;

Assessment of visual effects: assessing effects on specific views and on the general visual amenity experienced by people.' (GLVIA3 paragraph 2.21.)

- 17.3.18 The components of this chapter include: baseline studies; description and details of the landscape proposals and mitigation measures to be adopted as part of the scheme; identification and description of likely effects arising from the Development; and an assessment of the significance of these effects.
- 17.3.19 In terms of baseline studies the assessment provides an understanding of the landscape that may be affected, its constituent elements, character, condition and value. For the visual baseline this includes an understanding of the area in which the Development may be visible, the people who may experience views, and the nature of views.

- 17.3.20 The judgements that are made in respect of landscape and visual effects are a combination of the sensitivity of the receptors and the magnitude of the effect, alongside professional qualitative judgment which is a very important part of the LVIA process as expressed by GLVIA3.

Construction

- 17.3.21 The methodology and assessment criteria used to identify and assess the likely construction effects of the Development is detailed below.

Completed Development

- 17.3.22 The methodology and assessment criteria used to identify and assess the likely effects of the completed Development is detailed below.

Cumulative Effects

- 17.3.23 GLVIA3 defines landscape and visual cumulative effects as those that:

'result from additional changes to the landscape or visual amenity caused by the proposed development in conjunction with other developments (associated with or separate to it), or actions that occurred in the past, present or are likely to occur in the foreseeable future.'
(Landscape Institute and IEMA, 2002: 85)

- 17.3.24 The list of cumulative schemes (Appendix 3.4) identified within Table 17.2 below has been reviewed for their potential to give rise to cumulative landscape and visual effects with the Development. Those that have been considered of particular relevance and importance given their geographical location to the Site, and likely combined effects on landscape character and visual amenity are schemes H2, 1, 2, B3 and Hm01 and are assessed further as part of the cumulative assessment.

Table 17.2: List of Cumulative Schemes

No.	Planning Ref.	Location
St Albans City and District Council		
H2		East Hemel Hempstead (North) Part of the HGC allocation - up to 1,600 new homes.
1	5/2016/2845	Land Between Three Cherry Trees Lane and Cherry Tree Lane, Hemel Hempstead Phase 2 - Spencers Park Phase 2 West Outline planning application to include up to 600 dwellings (C3), land for primary school (D1), land for local centre uses (A1, A3, A4, A5, D1, D2), land for up to 7,500 square metres of employment uses (B1, B2, B8), landscaping, open space and play area.
2	5/2021/3631	Land At Gaddesden Lane, Redbourn Construction of up to 300 new homes including 35% affordable new homes, new landscaping, public open space and associated infrastructure works.
3	5/2024//2171	Land to East of Hemel Hempstead, Hemel Hempstead Road, Redbourn (SADC Site Allocations H2, H3, H4)

No.	Planning Ref.	Location
		Construction of up to 4,000 new dwellings (to include 40% affordable housing, 5 extra-care facilities each comprising 70-80 self-contained units, 3 nursing homes (each of 70-80 beds) and 16 supporting living units); up to 53ha of employment.
4	5/2025/1946	Land Between Redbourn Bypass Dunstable Road and Harpenden Lane Redbourn Hertfordshire Mixed use development comprising approximately 1,000 new homes, a primary school, care home facility, community buildings, employment space and green infrastructure including SANG provision.

Dacorum Borough Council

5	21/03793/MOA	Land off Green Lane, Hemel Hempstead Hybrid application for redevelopment of the site in 4 plots to provide up to 26,640 sqm of new commercial floorspace.
6	22/03812/MFA	Land at Eastman Way, Atlas Copco, Hemel Hempstead Industrial Estate, Swallowdale Lane, Hemel Hempstead Demolition of existing building and redevelopment of the site to provide a commercial building (Flexible uses within Class E (g)(iii), B2 and/or B8 of the Use Class Order (including ancillary office provision)), with associated enabling works, access, parking, landscaping, and infrastructure.
7	4/03266/18/MF	LA3, Land at West Hemel Hempstead Hybrid planning application for mixed use proposed development at west Hemel Hempstead, pursuant to Policy LA3 of the adopted site allocations development plan document (2017) to provide for up to 1,100 dwellings (with up to 40% affordable housing).
8	21/04556/MFA	Plots 1 & 2 Maylands Avenue, Hemel Hempstead Construction of 234 apartments and 1,486 sqm of commercial floor space, provided in three main buildings ranging from 5 to 9 storeys on two podiums, with associated car parking, landscaping, amenity space and service areas.
9	19/02749/MOA	Land at Marchmont Farm, Piccotts End Lane, Hemel Hempstead Outline planning for up to 350 dwellings, land for 5 gypsy & traveller pitches. Vehicular access from A4147, public open space including extension to Margaret Lloyd Park and associated landscaping, infrastructure and drainage. Detailed approval for access arrangements
10	21/04508/MOA	Land West of Leighton Buzzard Road and North of Galley Hill Leighton Buzzard Road, Hemel Hempstead Construction of up to 390 dwellings (C3 Use), including up to 40% affordable housing and 5% self build, a residential care home for up to 70-beds (C2 use), along with associated landscaping and open space with access from Leighton Buzzard Road.
11	25/01742/MOA	Land North of Polehanger Lane Berkhamsted Road Hemel Hempstead Hertfordshire

No.	Planning Ref.	Location
	25/02145/SCE	Outline Planning Application for up to 750 dwellings, a neighbourhood centre comprising up to 1000 sqm Class E/ F2 floorspace, two form entry primary school, Public Open Space, Suitable Alternative Natural Greenspace, associated infrastructure and engineering works with all matters reserved except for access to the site from Berkhamsted Road.

Development Consent Order (DCO)

12	DCO	London Luton Airport Expansion DCO The Application would grant development consent for the expansion of London Luton Airport to enable an increase in overall passenger capacity to 32 million passengers per annum. The Application would involve the construction of a new passenger terminal and additional aircraft stands among further associated infrastructure works.
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SADC Site Allocations

B3	West Redbourn	Residential-led scheme of approximately 545 units and a new 2FE Primary school.
M6	South of Harpenden Lane, Redbourn	Residential-led scheme of approximately 68 units.

Dacorum Borough Council Site Allocations (draft DBC Local Plan)

Hm01	North Hemel Hempstead Growth Area	Around 1,500 dwellings by 2041, with up to 3,500 additional homes (to include provision for older people) to be delivered beyond the plan period subject to masterplanning; three 3FE and one 2FE primary schools (including nursery provision on three); and one 8FE secondary school. Gypsy and Traveller site for 8 pitches.
Hm03	Hemel Hempstead Hospital	Around 450 dwellings (to include provision for older people), subject to master planning and a 3FE primary school (including nursery provision).
Hm04	Paradise	Around 350 dwellings, subject to masterplanning with Class E and F1 uses at ground floor level where viable.
Hm06	Riverside	Around 500 Homes subject to masterplanning with main town centre uses appropriate at ground floor level and expansion of the car park.
Hm13	Polehanger Lane	Around 750 homes including provision for older people, subject to master planning. A neighbourhood centre to include a community building. A 2FE Primary school (including nursery provision). Suitable Alternative Natural Greenspace (16ha).

Assessment Criteria

Assessment of Landscape Effects

- 17.3.25 GLVIA3 states that '*An assessment of landscape effects deals with the effects of change and development on landscape as a resource.*' (GLVIA3 paragraph 5.1.)
- 17.3.26 The baseline landscape is described by reference to existing published Landscape Character Assessments and by a description of the Site and its context.
- 17.3.27 A range of landscape effects can arise through development. These can include:
- Change or loss of elements, features, aesthetic or perceptual aspects that contribute to the character and distinctiveness of the landscape;
 - Addition of new elements that influence character and distinctiveness of the landscape; and
 - Combined effects of these changes.
- 17.3.28 The characteristics of the existing landscape resource are considered in respect of the susceptibility of the landscape resource to the change arising from the Development. The value of the existing landscape is also considered.
- 17.3.29 Each effect on landscape receptors is assessed in terms of size or scale, the geographical extent of the area influenced and its duration and reversibility. In terms of size or scale of change, the judgement takes account of the extent of the existing landscape elements that will be lost or changed, and the degree to which the aesthetic or perceptual aspects or key characteristics of the landscape will be altered by removal or addition of new elements. Geographical extent is considered by reference to the extent of the area over which there will be a change. Duration is considered for the landscape effects, with short term effects being defined as those lasting less than 5 years, medium term effects lasting between 5 and 10 years and long-term effects being defined as anything over 10 years in duration.
- 17.3.30 The level of effect is determined by considering the sensitivity of the landscape receptors and the magnitude of effect on the landscape. Final conclusions on the overall landscape effects are drawn from the assessment components described. This assessment describes the nature of the landscape effects, and whether these are adverse, beneficial or neutral at the following stages of development; construction, full completion (year 1) and longer term (year 15). i.e. 15 years post completion to include established and maturing green infrastructure). GLVIA3 refers to assessment on completion (year 1) and in the long term (year 15).
- 17.3.31 Further detail of the criteria used in the assessment, including landscape sensitivity, are set out in Appendix 17.2 LVIA Methodology and Assessment Criteria GLVIA3.

Assessment of Visual Effects

- 17.3.32 An assessment of visual effects deals with the effects of change and development on the views available to people and their visual amenity. This assessment describes the nature of the visual effects and, whether these are adverse, beneficial, or neutral at the following stages of development; construction, full completion (year 1) and longer term (year 15 i.e.

15 years post completion to include established and maturing green infrastructure). GLVIA3 refers to assessment on completion (year 1) and in the long term (year 15).

17.3.33 The first stage in the assessment is to identify approximate visibility/ visibility mapping. This is done by either a computerised ZTV, in this case based upon the Heights Strategy Plan contained within the ES, or by manual methods using map study and field evaluation. A series of viewpoints are included within the assessment that are representative of views towards the Site from surrounding visual receptors. Other views of the Site are included where it supports the description and understanding of the Site's landscape and visual characteristics.

17.3.34 The views also typically represent what can be seen from a variety of distances and different viewing experiences.

17.3.35 It is important to remember that visual receptors are all people. For each affected viewpoint the assessment considers both the susceptibility to change in views and the value attached to views. GLVIA3 states:

'The visual receptors most susceptible to change are generally likely to include:

- Residents at home;
- People, whether residents or visitors, who are engaged in outdoor recreation, including use of public rights of way, whose attention or interest is likely to be focused on the landscape or particular views;
- Visitors to heritage assets or to other attractions, where views of the surroundings are an important contributor to the experience;
- Communities where views contribute to the landscape setting enjoyed by residents in the area;
- Travellers on road, rail or other transport routes tend to fall into an intermediate category of moderate susceptibility to change. Where travel involves recognised scenic routes awareness of views is likely to be particularly high.' (GLVIA3 paragraph 6.33.)

'Visual receptors likely to be less sensitive to change include:

- People engaged in outdoor sport or recreation which does not involve or depend upon appreciation of views of the landscape; and
- People at their place of work whose attention may be focused on their work or activity, not on their surroundings, and where the setting is not important to the quality of working life (although there may be on occasion be cases where views are an important contributor to the setting and to the quality of working life.' (GLVIA3 paragraph 6.34.).

17.3.36 Each of the visual effects is evaluated in terms of its size or scale, the geographical extent of the area influenced and its duration or reversibility.

17.3.37 In terms of size or scale, the magnitude of visual effects takes account of:

- 'The scale of the change in the view with respect to the loss or addition of features in the view and changes in its composition, including proportion of the view occupied by the proposed development;

- The degree of contrast or integration of any new features or changes in the landscape with the existing or remaining landscape elements and characteristics in terms of form, scale and mass, line height, colour and texture;
- The nature of the view of the proposed development, in terms of the relative amount of time over which it will be experienced and whether views will be full, partial or glimpses.’ (GLVIA3 paragraph 6.39.)

17.3.38 The geographical extent of the visual effect in each viewpoint is likely to reflect:

- The angle of view in relation to the main activity of the receptor;
- The distance of the viewpoint from the proposed development; and
- The extent of the area over which the changes would be visible.

17.3.39 As with landscape effects, the duration of the effect could be short to long term or permanent and the same definitions apply. The criteria used in this assessment, including visual sensitivity and magnitude of change, are set out in Appendix 17.2 LVIA Methodology and Assessment Criteria GLVIA3.

Overall Landscape and Visual Effects

17.3.40 The final conclusions on effects, whether adverse, beneficial or neutral, are drawn from the separate judgements on the sensitivity of the receptors and the magnitude of the effects. This overall judgement is formed from a reasoned professional overview of the individual judgements against the assessment criteria.

17.3.41 GLVIA3 notes, at paragraphs 5.56 and 6.44, that there are no hard and fast rules with regard to the level of effects. GLVIA3 observes that it is not essential to establish a series of thresholds for the different levels of effects, although the distinction between levels can be helpfully defined by using a word scale such as major, moderate, minor and negligible. The following descriptive thresholds have been used for this chapter:

- Major
- Moderate
- Minor
- Negligible

17.3.42 Where it is determined that the assessment falls between or encompasses two of the defined criteria terms, then the judgement may be described as, for example, Major/ Moderate or Moderate/ Minor. This indicates that the effect is assessed to lie between the respective definitions or to encompass aspects of both.

Assessing Significance

17.3.43 A judgement is reached, based on the assessment, as to whether an effect is significant or not. Those degrees of effects that are considered to be significant by the assessor for this chapter are judged to be effects that are either Major or Major/ Moderate.

Significance of Landscape Effects

17.3.44 GLVIA3 states, at paragraph 5.56, that:

'There are no hard and fast rules about what makes a significant effect, and there cannot be a standard approach since circumstances vary with the location and context and with the type of proposal. At opposite ends of the spectrum it is reasonable to say that:

- Major loss or irreversible negative effects, over an extensive area, on elements and/ or aesthetic and perceptual aspects that are key to the character of nationally valued landscapes are likely to be of the greatest significance;
- Reversible negative effects of short duration, over a restricted area, on elements and/ or aesthetic and perceptual aspects that contribute to but are not key characteristics of the character of landscapes of community value are likely to be of the least significance and may, depending on the circumstances, be judged as not significant;
- Where assessments of significance place landscape effects between these extremes, judgements must be made about whether or not they are significant, with full explanations of why these conclusions have been reached.' (GLVIA3 paragraph 5.56.)

Significance of Visual Effects

17.3.45 GLVIA3 states, at paragraph 6.44, that:

'There are no hard and fast rules about what makes a significant effect, and there cannot be a standard approach since circumstances vary with the location and context and with the type of proposal. In making a judgement about the significance of visual effects the following points should be noted:

Effects on people who are particularly sensitive to changes in views and visual amenity are more likely to be significant;

Effects on people at recognised and important viewpoints or from recognised scenic routes are more likely to be significant;

Large-scale changes which introduce new, non-characteristic or discordant or intrusive elements into the view are more likely to be significant than small changes or changes involving features already present within the view.' (GLVIA3 paragraph 6.44.)

Assumptions and Limitations

17.3.46 The following assumptions and limitations have informed this assessment:

- The assessment process considers the likely significant effects of the Development using the current knowledge of the Site and its context; site surveys and investigation; and desktop analysis which includes the publicly accessible information listed above, relevant legislation, guidance and best practice at the time of preparing the chapter.
- Every reasonable effort has been made to obtain baseline information and to accurately predict the effects of the Development. The baseline fieldwork analysis, carried out during winter 2024/ 2025 to ensure a good understanding of seasonal visibility across the landscape, includes photographic viewpoints (i.e. 'Type 1 Annotated Viewpoint Photographs' as referred to in TGN 06/19¹²). As these were taken during the winter months, the photographs demonstrate views when vegetation is not in leaf, thus representing a 'worst case' scenario where there is likely to be greater visibility across the landscape than would be the case during summer when planting provides stronger

filtering effects and containment. Photographs were taken from publicly accessible locations to provide representative views for visual receptors. It was not possible to take photographs from properties as these are private views. However, reasoned assumptions are made on visibility through the fieldwork and, where possible, photographs from nearby public locations used.

- The residual landscape and visual effects of the Development take into account the growth of the proposed planting and in particular the proposed woodland and tree planting. Typical growth rates for this planting is drawn from published sources and assumes that the proposed woodland and trees will generally be c.7-9 metres high after 15 years.

17.4 Baseline Conditions

Existing Baseline

Landscape Character

National Character

17.4.1 National Character Area (NCA) profiles have been prepared by Natural England for the 159 NCAs defined across England (updated May 2024). These NCA profiles describe the key characteristics, the landscape today and how it has changed over time, key facts and data, natural capital and key ecosystem services and landscape change. They also set out statements of environmental opportunity, landscape attributes and opportunities for each NCA. Figure 17.3: Landscape Character illustrates the relevant NCA and other defined character areas within the context of the Site and Study Area.

17.4.2 At this very broad landscape scale, the Site lies within NCA 110: 'Chilterns'¹³ which covers an extensive stretch of land between Stevenage and Arlesey, Central Bedfordshire in the north-east, and Reading and Streatley, West Berkshire in the south-west.

NCA 110: Chilterns

17.4.3 This NCA is described as a *'an attractive patchwork of mixed farmland and woodland, with fields surrounded by hedgerows. Around half of the National Character Area (NCA) falls within the Chilterns Area of Outstanding Natural Beauty (AONB)³. A small area south of the River Thames falls within the North Wessex Downs AONB. Outside the AONBs there are major settlements with extensive urban fringes. These include Luton, Hemel Hempstead and High Wycombe. Motorways and railways make the area very accessible from London. There are many opportunities for visitors and local people to enjoy the outdoors. These include rights of way and open access commons, woods and downland...On the chalk plateau, settlement includes a scatter of farms and villages, linked by ancient routes. These sometimes take the form of sunken lanes. The Chilterns are one of the most wooded lowland landscapes in the country. Woodland makes up 14% of the area of the NCA...'*

17.4.4 Key Characteristics of NCA 110 are:

- 'The chalk plateau is incised by parallel branching valleys gently shelving to the south-east into the London Basin. The large chalk aquifer is abstracted for water to supply

³ Land that is designated as an Area of Outstanding Natural Beauty (AONB) is now referred to as a National Landscape.

London and its surrounds and also supports flows of springs, chalk streams and the River Thames.

- There are several chalk streams. Features associated with a history of modification include historic mills, watercress beds, culverts and habitat enhancements.
- The north-west facing escarpment is an abrupt relief feature beside low-lying vales, breached notably by the Thames at the Goring Gap. The escarpment lowers northwards, terminating as distinct hills. The Chiltern ridge offers panoramic views.
- A mixture of arable, grassland and woodland and the numerous commons reflects the dominance of Grade 3 agricultural land. Ancient woodland has remained on extensive clay-with-flint deposits, while very steep slopes are rarely cultivated. There are, however, not inconsiderable areas of Grade 1 and 2 land that are associated with lower-lying areas and river valleys.
- The Chilterns are one of the most wooded lowland landscapes in England. The area is particularly renowned for its extensive native beechwoods, several of which are designated as part of the Chilterns Beechwoods Special Area of Conservation (SAC). Other distinctive features include rare box woods, 'hanging' woods on steep slopes and rare yew woods, including Hartslock Wood SAC.
- Pre-18th-century fields defined by ancient, often sinuous hedged boundaries are scattered throughout, including co-axial fields. Parliamentary enclosure fields are limited. Large modern fields, usually with ancient boundaries, cover the better agricultural land, most notably in the north-east.
- Remnants of various historic land use types can combine rich and diverse habitats and archaeology. Many key places are publicly accessible, including Registered Parks and Gardens, historic downland and common land. Traditional flood plain landscapes and orchards are the most restricted in extent. Historic routeways, hedged boundaries and watercourses provide connectivity.
- Historic downland preserves prehistoric archaeology and supports high numbers of rare and scarce chalk grassland vascular plants, mosses and liverworts. Diversity is enhanced by a mosaic of chalk grassland, scrub and woodland, with Hartslock Wood SAC being one example.
- Species strongly associated with the Chilterns include the red kite, pasque flower, stag beetle, Chiltern gentian, shepherd's needle, chalkhill blue butterfly and native box. Aston Rowant SAC protects an internationally important juniper scrub population. Farmland birds and deer are a feature of the wider countryside.
- Nucleated settlements of medieval origin and land farmed since prehistory are found alongside watercourses and springs in the through-valleys and at the foot of the scarp. Elsewhere, dispersed farmsteads dating from the medieval period and mid-19th century development around commons are characteristic of the plateau.
- The River Thames and its flood plain mark a distinctive area in the south. The river is a focus for settlement, abstraction and recreation.
- Major transport routes, including motorways, radiate from adjacent Greater London, associated with significant 20th-century development and extensive urban fringe areas.
- Brick and flint are the dominant traditional building materials, with Totternhoe Stone (clunch) being less common, but still as distinctive.

- Numerous parkland landscapes define large, historic estates. Designs by Humphry Repton and Lancelot ‘Capability’ Brown are represented, and the houses, follies and wooded features provide local landmarks.
- Extensive rights of way, commons, open access downland, woodland and some parklands provide access to the countryside. The Thames Path, the Ridgeway and the Grand Union Canal are high-profile recreation routes; locally promoted routes include the Chilterns Cycleway. Private leisure land uses, including golf courses and horse paddocks, are common near urban centres.’

17.4.5 The NCA includes ‘Statements of Environmental Opportunity (SEO)’. SEOs 1, 3 and 4 are considered relevant, and these are set out below:

17.4.6 **SEO 1:** *‘Manage the wooded landscape, the woodlands, hedgerows...with the aim of conserving and enhancing biodiversity and the historic landscape and its significant features; maximising the potential for recreation...’*

For example by:

- Managing all wooded features to benefit biodiversity...
- Conserving all historic boundary features, including veteran trees, and creating optimal edge habitat...’

17.4.7 **SEO 3:** *‘Conserve the Chilterns’ groundwater resource...Seek to secure, now and in the future, sustainable water use...that are valued by the public.’*

For example by:

- Planning any developments to minimise demands and impacts on the water resource, including incorporating features such as sustainable urban drainage systems (SuDS).’

17.4.8 **SEO 4:** *‘Enhance local distinctiveness and create or enhance green infrastructure within existing settlements and through new development, particularly in relation to the urban fringe and growth areas...Ensure that communities can enjoy good access to the countryside.’*

For example by:

- Designing and locating development to maintain landscape character and enhance green infrastructure provision...
- Seeking to conserve the setting of the two AONB landscapes outside of their boundaries when undertaking development...
- ...Manage green spaces and routes across the landscape as a connected network...
- ... integrating the public transport and cycle network and creating new or improved multi-user routes and green spaces...
- Maximising the appeal of existing and new green spaces and sustainable transport routes close to people’s homes and workplaces, including in the urban fringe where it could also strengthen landscape character.

- Establishing improved and new green infrastructure that supports natural processes through securing resilient ecological networks...
- Enhancing the rural and urban scene by promoting the use of traditional local building materials and vernacular styles and utilising appropriate infrastructure. Draw on best practice as developed by, for example, the Chilterns AONB.
- Designing all development...to support sustainable soil and water use, flood management and pollution prevention, incorporating features such as SuDS...Consider opportunities to combine with green space, to realise biodiversity and access benefits.
- Identifying key viewpoints where the appearance of the landscape is particularly valued. Monitor and conserve these viewpoints as a priority and promote them as visitor destinations as appropriate.'

17.4.9 The extent to which these SEO aspirations are being met within the NCA to achieve change in the landscape is measured by a series of 'Super Landscape Objectives' (SLOs), the results of these are combined to give an indication of the overall landscape change, or trend, within a fixed period of time. For NCA 110, the overall landscape change is 'Mixed Change, Mainly Declining'.

Local Landscape Character

Hertfordshire Landscape Character Area Statements (2000-2005) St Albans District

17.4.10 This Landscape Character Area Statement¹⁴ collates the district-scale Landscape Character Area (LCA) Statements, prepared as part of the Hertfordshire Landscape Character Assessment that apply to the St Albans District only. It should be noted that this chapter focuses on this document rather than the Dacorum Landscape Character Assessment, which also includes the Hertfordshire LCAs relevant to the district. The Site falls within 2 Landscape Character Areas (LCAs) – LCA 95: 'Revel End Plateau' and LCA 96: 'Upper Ver Valley' (see Figure 17.3) which are summarised below.

LCA 95: Revel End Plateau

17.4.11 LCA 95: 'Revel End Plateau' covers the northern, north-eastern/ western and central parts of the Site and the landscape to the north. It is described as, '*an area of gently undulating upland with a discontinuous field pattern bordering the M1 corridor. Discrete woodland blocks help to screen the motorway. Surrounding gentle slopes define the character area boundary. The limit of the settlement of Redbourn coincides with the edge of the plateau to the east. Arable farmland and isolated patches of pasture linked to the farmsteads are the predominant land uses. A nursery, recreation ground and school playing fields influence the area's character on the northern edges of Redbourn and the M1 corridor interrupts the area's unity*'.

17.4.12 Key characteristics of LCA 95 are:-

- 'Arable farmland
- Discrete woodlands and plantations
- Urban fringe recreation
- M1 transport corridor
- Urban fringe land uses including pasture
- Isolated farmsteads

- Field copses'

17.4.13 Distinctive features include:-

- 'Flamsteadbury Farm
- Overhead power lines
- Great and Little Revel End Farms'

17.4.14 In terms of 'visual and sensory perception', the LCA states, *'the area is only locally visible from surrounding areas due to the level and elevated landform. It is generally a coherent landscape with some areas downgraded by the impact of the adjacent urban development or transport corridor (M1). Views within the area are filtered by vegetation, particularly hedgerow trees and high verges. It is a medium to large scale landscape with open views across the arable fields'*. The assessment does not consider the landscape to be rare, stating that, *'this open arable landscape associated with an upland plateau is common across northern Hertfordshire'*.

17.4.15 Under 'visual impact' the LCA states, *'there are few detracting features in this area...The influences of...Hemel Hempstead and their adjacent land uses are more significant on the character [than the M1]. Overhead power lines have a widespread visual impact'*.

17.4.16 Landscape Condition and Strength of Character are assessed as 'Moderate' which results in a Strategy for Managing Change of '**Improve and Conserve**'. Several guidelines are included within the assessment to help achieve this, including:

- 'Promote a clear strategy for the visual...mitigation of all major roads within the area and to positively integrate these corridors into the local landscape character.
- Promote awareness and consideration of the setting of the AONB [National Landscape], and views to and from it, when considering development...'

LCA 96: Upper Ver Valley

17.4.17 LCA 96: 'Upper Ver Valley' covers the western, southern and eastern parts of the Site and the local landscape to the south and east. It is described as, *'a broad, open river valley with gentle slopes and extensive views...Large arable fields on the valley's gentle slopes are characteristic...A continuous strip of pasture tracks the base of the dry valley from Redbourn along the Hempstead road...'*

17.4.18 Key characteristics of LCA 96 that are relevant to the Site include:

- 'Open, gently undulating valley slopes
- Large arable fields
- Lack of field boundaries on valley slopes
- Hedge banks along lanes crossing slopes
- Pockets of pasture along the urban edges and the dry valley between Redbourn and Hemel Hempstead'.

17.4.19 Distinctive features include:

- 'M1 corridor
- Disused railway line – now a footpath and cycle way
- Aubrey's hill fort'.

17.4.20 In terms of 'visual and sensory perception', the LCA states, '*...the open slope character permits extensive views across the arable landscape resulting in visual unity in the area...*'. The assessment considers the landscape to be less common, stating that, '*Although this is one of a number of river valleys in the county, it is unusual to find a valley that is so broad and open*'.

17.4.21 Landscape Condition is assessed as 'Good' and Strength of Character is assessed as 'Moderate' which results in a Strategy for Managing Change of '**Conserve and Strengthen**'. Several guidelines are included within the assessment to help achieve this, which include:

- 'Encourage the reversal of habitat fragmentation and the creation and improvement of habitat links to create eco-corridors
- Promote a clear strategy for the visual and noise mitigation of...roads and positively integrate these corridors into the local landscape character
- Encourage reversion from arable uses to...grassland
- Enhance and restore hedgerows...as characteristic field boundary patterns
- Encourage the retention and enhancement of rights of way...

LCA 94: Buncefield Plateau

17.4.22 LCA 94: 'Buncefield Plateau' covers an area further south of the Site and the LCA 96: 'Upper Ver Valley'. There is some inter-visibility with the Site and therefore the LCA is considered within this chapter. LCA 94 is described as, '*an extensive, linear, undulating plateau confined to the west by the urban settlement of Hemel Hempstead...The plateau is crossed by dry valleys, creating an undulating topography...*'.

17.4.23 Key characteristics of LCA 94 that are relevant to the Site include:

- 'Arable farmland
- Upland and dry valleys
- Long views'.

17.4.24 Distinctive features include:

- 'Overhead power lines'.

17.4.25 In terms of 'visual and sensory perception', the LCA states, '*...the area is only locally visible because of its plateau location and the views within the area are extensive across the open arable land...the M1 still has a major impact on this sub area. The motorway is elevated across the dry valleys, which without vegetation screening increases its dominance. The area generally has an inhospitable and neglected image, dominated by major adjacent industrial influences...*'. The assessment considers the plateau landscape to be 'common

in Hertfordshire as is the interruption of character areas by major transport routes and settlement’.

17.4.26 Landscape Condition is assessed as ‘Poor’ and Strength of Character is assessed as ‘Strong’ which results in a Strategy for Managing Change of ‘**Restore condition to maintain character**’. Several guidelines are included within the assessment to help achieve this.

17.4.27 LCA 124: ‘Gaddesden Row’ covers an area north-west of the Site and LCA 95: ‘Revel End Plateau’. There is no clear inter-visibility with the Site and therefore the LCA is not considered further within this chapter.

St Albans Local Plan 2041, Broad Locations – Landscape + Visual Appraisal (2024)

17.4.28 This appraisal¹⁵, prepared by SADC, covers each of the ‘Broad Locations’ identified within the Local Plan for development. The Site is identified as ‘H1 – North Hemel Hempstead’ which covers the Site and surrounding land, which broadly forms the draft allocation of North Hemel Hempstead in the Local Plan. The appraisal draws on the Hertfordshire LCA statements for LCAs 95 and 96 as referenced above.

17.4.29 The report considers Potential Development Effects of development on the Site (H1) under a series of subheadings. These being:

- ‘Landscape Character + Features’
 - The transition between the gently undulating and elevated upland in the north of the Site and the dry valley along Hempstead Road.
 - The pastoral landscape setting of the notable farmsteads at Great and Little Revel End, and Holtsmere End.
 - The setting and character of Little Revel End Farm a notable cluster of traditional agricultural buildings.
 - The rural character of Little Revel End Lane and associated hedgerow and trees.
- Designated Landscapes
 - There is no intervisibility with the Chilterns National Landscape.
- Settlement Form, Edge + Setting
 - The Site is physically and visually separated from the existing settlement and lacks connectivity.
 - The robust settlement boundary vegetation provided along Holtsmere End Lane.
 - Extending the settlement of Hemel Hempstead to the north-east, reducing the gap between the settlement and Redbourn.
- Visual Amenity
 - Users of PRoW within the Site.
 - Users of Little Revel End Lane – and the Nickey Line to the south.
 - Residents and visitors within the Site and its setting.

- Users travelling along Hemel Hempstead Road.
- Receptors to elevated vantage points east of the M1.
- View from Chilterns NL will require assessment’.

17.4.30 The appraisal also sets out a series of Strategic and Site-Specific Measures for the Site Allocation Policy H1, including:

- ‘Respond to context and character.
- Retain and protect important landscape features and views.
- Create multifunctional green/ blue infrastructure and open space networks for people and/ or wildlife.
- Provide new structural native planting.
- Pylon easement’.

North Hemel Landscape Assessment (2024)

17.4.31 The assessment¹⁶, prepared by Hankinson Duckett Associates for SADC, considers, from a landscape and visual perspective, the potential for development on land to the north-east of Hemel Hempstead as part of the wider Hemel Garden Community development. It forms part of the evidence base for the emerging Local Plan and is comprehensive and detailed in its approach, including photographs and wireframes. The report considers sensitivity based upon a five point scale and provides a high-level assessment of the likely resulting landscape and visual effects of development at the Site.

17.4.32 The report divides the study area into seven ‘Assessment Parcels’. The Site lies partly within Parcel E: ‘Gaddesden Lane Southern Slopes’, but mostly within Parcel F: ‘Revel End Slopes’. Parcel G: ‘Upper Veal Valley’ lies to the east (See Figure 17.3). A description of each parcel is provided below.

Parcel E: Gaddesden Lane Southern Slopes (north-eastern section of the Site)

17.4.33 Parcel E covers the land between Gaddesden Lane, Pancake Wood, Great Revel End Farm and Hay Wood. Part of the eastern edge of the Site, near Great Revel End Farm (proposed as a Community Park and SANG within the Development), lies within Parcel E. The report describes its character as:

‘...relatively large sloping arable fields, but also incorporates two narrower linear fields between Holtsmere End Lane and Great Revel End Farm. The majority of hedgerow field boundaries and roadsides have hedgerows and trees, although there are gaps and the large field sizes reduce the sense of enclosure higher up the slope. Woodland is limited to small groups of trees. The area is unsettled except for Great Revel End Farm, which includes listed buildings, and a pair of dwellings along Gaddesden Lane. A single public right of way crosses the parcel, heading south from Gaddesden Lane. Lines of pylons travel up the slope, converging at the edge of the Assessment Parcel’.

- 17.4.34 The landscape and visual sensitivity to built development is assessed as being 'High-Medium'⁴. The outline assessment of Potential Effects includes the following conclusions and recommendations:

'Potential Landscape Effects

It is recommended that development on the north east facing slopes which form the assessment parcel should therefore be retained as open space and SANG or farmland.

With no substantive built development envisaged for this Assessment Parcel, it is expected that the magnitude and significance of landscape effects would be relatively limited, subject to detailed design and assessment.

Potential Effects on Visibility

Views are contained along the bottom of the valley, however there are more expansive views of the Assessment Parcel...from high ground to the east, including along public footpath 40...

Given views from the north, it is envisaged that there would be no substantive built development within this Assessment Parcel, thereby limiting visual effect on both internal and more distant views, subject to detailed assessment.

Potential Effects on the AONB

...it is envisaged that any development within this Assessment Parcel would be restricted to open space or SANG, thereby limiting adverse effects on the AONB.

Woodland and hedgerows, and the sense of tranquillity within the AONB, which contribute to the special qualities of the designated landscape, would be unaltered.

Potential to Avoid or Reduce Adverse Effects

Maintaining the slopes as open space, SANG or retained farmland, with enhanced landscape structure along field boundaries in a way that is in keeping with the existing landscape character, would be beneficial.

Additional characteristic planting on the higher ground to the south-west of the parcel would assist in reducing potential predicted adverse effects of proposed development within adjoining Assessment Parcels to the west and south-west.'

Parcel F: Revel End Slopes (majority of the Site)

- 17.4.35 The majority of the Site lies within Parcel F. The parcel covers the land between Holtsmere End Lane, Great Revel End Farm, B487 Hemel Hempstead Road and Hemel Hempstead settlement edge at Woodhall Farm. Little Revel End (Lane) crosses the parcel. Settlement

⁴ High-Medium =the indicators are notable within the assessment parcel and there are above average examples across the majority of the parcel.

is limited to Little Revel End farmstead and three properties at the parcel's northern edge. It is described as:

'primarily relatively large arable fields with occasionally smaller pastoral fields associated with the farmstead and dwellings to the north. Boundaries are generally well vegetated with hedgerows and trees, but there are gaps and field amalgamation has occurred. Public footpath 11 crosses the area and connects with footpaths 10 and 9 within the east...'

- 17.4.36 The landscape and visual sensitivity to built development is assessed by the report as 'Medium'⁵. The outline assessment of Potential Effects includes the following conclusions and recommendations:

Potential Landscape Effects

The parcel has a lower sensitivity than other parcels within the study area, which indicates that it is more suitable for development...Any development should retain existing significant landscape feature such as the hedgerows and trees along field boundaries and roads wherever practical...Development in this area would likely result in a moderate adverse magnitude of change and overall effect. The exact magnitude and significance of these effects would be subject to detailed design.

Potential Effects on Visibility

Close range views of development would be possible from the public rights of way which cross the Assessment Parcel, with rural views of fields and distant views to rising ground west of the M1 replaced with views of residential development.

The local ridge line between Hay Wood and Pancake Wood would primarily obscure views of development from the north, including from the AONB, although there may be limited glimpses of rooftops seen in the distance above intervening vegetation from footpath 40 along the ridge to the north.

From the south, development within the southern portion...would be prominent in the view from along Hemel Hempstead Road and a short length of the Nickey Line and likely glimpsed through gaps in vegetation from footpath 13 near Woodend Farm. Development would be clearly identifiable in the middle distance from rights of way on rising ground east of the M1, albeit from limited vantage points...Development would not be perceivable from Redbourn...

Given the sensitivity of footpath users and the large number of motorists along Hemel Hempstead Road development...would initially likely have a high adverse visual effect on both and more distant views, subject to detailed assessment.

Potential Effects on the AONB

The area has a limited relationship to the AONB, primarily due to the local ridge line between Hay Wood and Pancake Wood to the north...It is envisaged that development of the parcel

⁵ Medium =the indicator is identifiable within the assessment parcel to a moderate degree but is unremarkable compared to other examples within the study area.

west of the pylons would not have a noticeable adverse effect on the general southern setting of the AONB.

Potential to Avoid or Reduce Adverse Effects

Restricting development to west of the pylons and/or setting houses back from Hemel Hempstead Road would assist in maintaining a sense of separation between Hemel Hempstead and Redbourn...Trees along Holtsmere End Lane should be protected and retained...It is considered that new planting has the potential to offset the loss of existing landscape features and reduce the visual effects of the proposals, particularly from the wider landscape.' (page 49)

Parcel G: Upper Vea Valley

- 17.4.37 Parcel G covers the land immediately south-east of the Site between Gaddesden Lane, the M1, Nickey Line and Pancake Wood, crossing Hemel Hempstead Road. It is located south-east of Parcel E however there is potential for limited inter-visibility with the Site and therefore is considered within this chapter. It is described as:

'primarily of dispersed low density settlement, agricultural buildings, traveller sites and a hotel, interspersed with associated paddocks and other small parcels of mainly pastoral land. Exceptions to this are a central larger arable field, and grassland north of Pancake Wood. The northernmost portion of the Assessment Parcel includes the remains of The Aubreys Fort Scheduled Monument, encircled by trees. Other small tree groups, boundary vegetation including trees associated with residential properties, trees along the Nickey Line and parkland style trees within fields, give the area a treed feel and soften development'.

- 17.4.38 The landscape and visual sensitivity to built development is assessed as 'Medium'. The outline assessment of Potential Effects includes the following conclusions:

'Potential Landscape Effects

It is envisaged that there would be no substantive development within Assessment Parcel G...The overall landscape effect would likely be negligible, however there is opportunity to enhance landscape features such as filling gaps in the hedgerow network, including along the north side of Hemel Hempstead Road.

Potential Effects on Visibility

Views experienced from external vantage points, such as from public footpath 12 beyond the M1 to the east, includes existing dispersed low density settlement and other urban influences within the parcel. Distant views towards built development on higher ground within Assessment Parcel F to the west, would be seen in context with structure within parcel G.

Potential Effects on the AONB

The Assessment parcel is relatively distant from the AONB, already contains low density development and with no significant development envisaged, there would be no adverse effect on the wider setting to the AONB.' (p50)

- 17.4.39 In its concluding section the report states the following:

'The study area sits within an undulating landscape with a strong existing landscape framework. Woodland and tree belts are characteristic of the wider landscape, which provides opportunity for successful mitigation strategies that could assimilate a settlement into the wider landscape over time. This would reflect the existing approach to the settlement edge of Hemel Hempstead'.(para 10.1)

17.4.40 It goes on to state that the process:

'has enabled establishment of a potential development extent and landscape strategy, which aims to limit adverse effects on landscape character, landscape features and views, to an acceptable level for the scale of development envisaged, and over time would enhance landscape structure of the area in keeping with the character of the nearby Chilterns National Landscape (AONB)'. (para 10.3)

17.4.41 In terms of landscape sensitivity to development, the assessment recommends that:

'built form should be avoided on the...Gaddesden Lane Southern Slopes (Parcel E)...Given its location and existing mixture of development, it is envisaged that the potential development extent would not extend into the Upper Vea Valley (Parcel G)...the extent of development within the Revel End Slopes (Parcel F) should avoid weakening the separate identities of Hemel Hempstead and Redbourn by limiting landscape and visual effects to 'Moderate' adverse, through detailed design development, including a robust mitigation strategy'. (paras 10.4-10.5)

17.4.42 It acknowledges that,

'the exact magnitude and significance of potential landscape and visual effects would be subject to detailed design and assessment, however initially there is likely to be a 'Moderate' adverse effect generally, with some instances of 'High' effect, such as on the views experienced by walkers through the proposed development area. However, the recommended comprehensive landscape strategy of tree planting, including new areas of woodland, tree belts and new and enhanced hedgerow structure...would increasingly reduce adverse landscape and visual effects over time. This would include the potential effects on the setting to the Chilterns National Landscape (AONB)'. (para 10.6).

17.4.43 And that:

'The potential for the land at the edges of the allocation to be secured as SANG, would also offer the ability to provide compensatory improvements to the remaining Green Belt' (para 10.9)

Designations

17.4.44 The Site is not covered by any national or local landscape quality designation. The Designations Plan (Figure 17.4) shows the Site and the wider landscape of the Study Area within the Metropolitan Green Belt. The Site's draft allocation in the SADC Draft Local Plan proposes the release part of the Site within the Green Belt, with the land east of the overhead pylons defining the proposed new Green Belt boundary.

17.4.45 The edge of the Chilterns National Landscape (NL) lies c.800m north west of the Site at its closest point. There is no clear intervisibility between the designation and that part of the

Site proposed for built development (i.e. west of the pylons) owing to the intervening screening features of landform which comprises the local ridge between Hay Wood and Pancake Wood and overlapping mature vegetation, which includes woodland cover (e.g. Hay Wood). The lack of intervisibility between the Site and the Chilterns NL is a conclusion reached within the North Hemel Landscape Assessment (2024).

- 17.4.46 There are no Scheduled Monuments, listed buildings or structures within the Site. Great Revel End Farm, outside the Site at the north-eastern boundary, contains Grade II Listed buildings, and Woodend Farm Cottages, which lies close to the Site south of the B487 Hemel Hempstead / Redbourn Road, is also Grade II Listed. Redbourn Conservation Area lies c.1km to the north-east, beyond the M1 motorway, within which a number of listed buildings are located. The Aubreys camp, Scheduled Monument lies approximately 320m east of the Site. Chapter 14: Cultural Heritage considers impacts and effects on designated and non-designated heritage assets.
- 17.4.47 Ancient woodland is located to the north-east, north-west – the majority of Hay Wood – and west of the Site. While the Chilterns Beechwoods Special Area of Conservation (SAC) is located beyond the study area to the west and north-west, the Site lies within its Zone of Influence (specifically the Ashridge Commons and Woods Buffer of 12.6km) and therefore triggers a requirement for Suitable Alternative Natural Greenspace (SANG) which forms part of the Development proposals. Impact and effects on the SAC, together with commentary and mitigation measures delivered by the SANG are addressed in ES Chapter 13: Biodiversity.

Topography

- 17.4.48 The following should be read in conjunction with the Topography Plan (Figure 17.5).

Context – Landform

- 17.4.49 The Site lies within an undulating landscape of plateaus and valleys with localised high points of c.145m Above Ordnance Datum (AOD) to the north (between New Wood and Flamsteadbury Farm) and north-west (Green Acre Farm, Corner Farm).
- 17.4.50 There is a local ridge to the north of the Site which runs in arc broadly from Hay Wood to Pancake Wood.
- 17.4.51 Landform steadily rises to the south, from the Nickey Line (disused rail line) towards Punch Bowl Lane and to the south-west into Hemel Hempstead.

Site - Landform

- 17.4.52 The Site contains a small plateau within its northern part, but like the local landscape is also undulating in its character. It generally slopes from c.130m AOD along Holtsmere End Lane at the north-western corner towards the shallow dry valley along the edge of Hemel and the B487 Hemel Hempstead Road which sits at c.105-100m AOD. This localised valley extends into the Site between Little and Great Revel End Farms.

Site and Immediate Context

- 17.4.53 Located north-east of Hemel Hempstead, the Site lies between the settlement edge of Woodhall Farm, Holtsmere End Lane and the hamlet of Holtsmere End, the B487 Hemel Hempstead Road / Redbourn Road and open farmland. Holtsmere End Lane defines the

western and northern boundaries. Part of the B487 Hemel Hempstead Road lies within the southern part of the Site. Hemel Hempstead lies to the west of the Site. The village of Redbourn lies to the east of the Site. The M1 motorway crosses the landscape north to south a short distance further east of the Site.

- 17.4.54 The Site surrounds a small number of properties at Little Revel End. Great Revel End Farm and North Barn are located adjacent to the north-eastern and south-eastern edges of the Site. Properties between Little Revel End (Lane) and the B487 Hemel Hempstead Road also border the Site in the south-east. There are properties to the north of the Site within the hamlet of Holtsmere End.
- 17.4.55 The Nickey Line – a disused railway line, now recreational footpath and cycleway – is located near to the Site, just south of the B487 Hemel Hempstead Road, and connects to the Hertfordshire Way long distance footpath route.
- 17.4.56 Immediately south of the Site and Hemel Hempstead Road is the East Hemel Hempstead draft allocation which is part of the wider HGC development.
- 17.4.57 The Site is not currently subject to any notable permanent or fixed light sources. However, the local landscape is illuminated to varying degrees; the settlement edge of Hemel Hempstead provides a permanent light source, though this is filtered by mature vegetation along Holtsmere End Lane, as do the farmsteads and properties adjacent to the Site, albeit minimal. Lamp columns along the B487 Hemel Hempstead Road are limited to the junction with Holtsmere End Lane although these, together with passing vehicular traffic, also cause a relatively constant degree of light spill. The Site and its immediate context is not covered by any dark skies policy.

Site Features

- 17.4.58 The Site is in agricultural use comprising a series of open undulating fields of varying size and shape, which are defined, in part, by mature tree belts and hedgerows with individual trees. A strong and largely continuous tree belt borders the Site's western edge along Holtsmere End Lane. Little Revel End (Lane) runs through the centre of the Site and connects with Holtsmere End Lane.
- 17.4.59 Three Public Rights of Way (PRoW) cross the Site (as identified on Figure 17.2); footpath Ref. Redbourn 009 extends eastwards from Little Revel End, passing North Barn, footpath Ref. Redbourn 010 connects Little Revel End with Great Revel Farm continuing north-eastwards to Gaddesden Lane, footpath Ref. Redbourn 011 provides a link between Holtsmere End Lane and PRoW 010/ Great Revel End Farm. A narrow lane – Little Revel End – also passes east to west through the Site connecting Holtsmere End Lane with the B487 Hemel Hempstead Road which lies partly within the Site.
- 17.4.60 Tall electricity pylons and powerlines cross the Site in a north-south direction and are a prominent visual detractor within the Site.

Landscape Value

- 17.4.61 In terms of 'landscape value' it is appropriate to examine the role of the Site and its immediate context in terms of the range of local factors set out in Landscape Institute (LI) Technical Guidance Note (TGN) 02-21 and summarised in the methodology. This considers the landscape in terms of a range of factors as set out below.

- 17.4.62 Designations: The surrounding landscape lies within the Metropolitan Green Belt, which is a spatial designation. The Site and its immediate context is not covered by any landscape quality designations at either a national or local level. The edge of the Chilterns NL lies c.0.8km north of the Site.
- 17.4.63 Natural Heritage: The Site and immediate area are not subject to any ecological designations. The Site contains a mix of arable farmland and grassland, and a connected network of tree belts and hedgerows with trees support foraging and commuting bats and several trees afford bat potential. Chapter 13: Biodiversity which provides commentary on ecology matters and assesses the ecological effects of the Development. An Arboricultural Assessment accompanies the application (Appendix 13.10). In summary there is a varied tree stock across the Site but there is a high proportion of Grade A High Quality and Grade B Moderate Quality trees. None of the mature trees on Site are judged to be of 'veteran status'.
- 17.4.64 Cultural Heritage: There are no Scheduled Monuments, Conservation Areas or Listed Buildings within the Site, however Listed Buildings occur close to the Site at Great Revel End Farm, Woodend Farm Cottages, and at Holtsmere End. The Aubreys camp Scheduled Monument lies to the east. Part of Redbourn is covered by a Conservation Area designation. Refer to ES Chapter 14: Cultural Heritage which provides commentary on heritage matters and assesses the heritage effects of the Development on heritage assets.
- 17.4.65 Landscape Condition: The overall quality of the Site and its immediate context is relatively good with strong features of mature tree belts and hedgerows with individual trees. Although the Site has an open character, it is contained within the wider landscape by surrounding landform, woodland planting, mature tree belts and hedgerows. Perimeter and internal vegetation is generally well maintained.
- 17.4.66 Associations: The Site and its immediate context have no known cultural or historic associations in terms of notable artists, writers or specific events.
- 17.4.67 Distinctiveness: The Site and the local landscape do not lie within a rare landscape character area at either national or local level. It is representative and typical of the 'Revel End Plateau' and 'Upper Ver Valley' LCAs with the adjacent B487 Hemel Hempstead Road and settlement edge having a degree of influence upon landscape character. The Site is strongly influenced by the pylons and power lines crossing it.
- 17.4.68 Recreational Value. The Site is crossed by three public footpaths stretching across the area in north-east to south-west and south-east to north-west directions. The routes interconnect, providing good coverage and links to Little Revel End, which also crosses the Site, Holtsmere End Lane and the B487 Hemel Hempstead Road.
- 17.4.69 Perceptual (Scenic): While there are some pleasant views across parts of the Site, the extent of these varies depending on location and orientation as well as proximity to pylons, tree belts and hedgerows. While the Site and immediate area are considered to be pleasant due to its semi-rural nature of farmland, well-treed narrow lanes and fields bound by mature trees and hedgerows. It is considered that its landscape character does not display anything 'out of the ordinary', nor does it have any pronounced sense of scenic quality.
- 17.4.70 Perceptual (Wildness and tranquillity): Owing to its scale and overall containment within the wider landscape, the Site and immediate area affords some peace and tranquillity as would

be expected. However, this is less evident close to the southern boundary with the B487 Hemel Hempstead Road and where there is generally more activity, i.e. adjacent to the edge of Hemel Hempstead at Woodall Farm and around the farms and residential properties bordering the Site. Overall, this results in parts of the Site and the immediate landscape having some degree of tranquillity although this is not pronounced. There is no sense of wildness.

17.4.71 **Functional Aspects:** The PRoW crossing the Site are proposed as 'Long Distance and Promoted Routes' / 'Local Green Corridor' within the SADC and HGC Green Infrastructure strategies. Holtsmere End Land forms part of the promoted 'Green Loop' within the HGC. Landscape elements of woodland, mature trees and hedgerows within and around the Site and in the local landscape contribute to the healthy functioning of this landscape.

17.4.72 In conclusion and having appraised the above factors and a word scale of '*high, medium and low*', it is judged that the Site and the immediate landscape is of **Medium** landscape value.

Visual Baseline

Visual Amenity

17.4.73 The baseline visual study includes an understanding of the area in which the Development may be visible, the groups of people who may experience views, the viewpoint locations where they may be affected and the nature of these views.

Visual Receptors

17.4.74 Visual receptors include residents; users of PRoW, open spaces and recreational facilities; highway users; and people at their place of work. In general, and as expressed by GLVIA3, the first two categories (residents and rights of way users) are normally of higher susceptibility to change, although the surrounding context can, in some cases, have a bearing on susceptibility.

17.4.75 The availability of views of the Site has been undertaken in parallel with the baseline landscape study. The fieldwork analysis has determined those visual receptors within the landscape that have views of the Site (full, partial, glimpsed), and therefore potential views of the Development.

Visibility Mapping

17.4.76 A ZTV has been carried out as shown on Figure 17.6. To assist the visual study, the ZTV has been generated based upon a scenario of 10.5m and 12m high buildings (equivalent to 2.5 and 3 storey dwellings) across the proposed built development area as expressed on the Heights Strategy Plan. The ZTV also allows for level changes as set out within Chapter 6: Construction. See Chapter 5: Description of Development for further information.

17.4.77 The ZTV identifies the theoretical visibility of the Development and takes into account filtering/ screening effects within the landscape, such as landform and existing vegetation, as much as possible. The ZTV provides a useful starting point to understand theoretically visibility. However, more refined visual analysis through 'ground truthing' is necessary and has been undertaken through field work which has uncovered the nuances of localised filtering/ screening effects (e.g. trees, hedgerows, buildings) to enable a greater understanding of the Site's visibility and the extent of receptors' views (full, partial or glimpsed).

- 17.4.78 The field work has included reviewing visibility from within the Study Area to include potential views from residential properties and communities (e.g. Hemel Hempstead and Redbourn); PRoW⁶ including those within and close to the Site (e.g. Nickey Line and Hertfordshire Way within the Study Area; receptors from within the Chilterns NL; and transport users of local roads (e.g. the B487 Hemel Hempstead Road / Redbourn Road). Through this exercise, receptors have been identified that have views of the Site to varying degrees and therefore potential views of Development upon it.
- 17.4.79 The Visual Appraisal and Viewpoints (Figure 17.7) identifies the visual receptors that are assessed along with viewpoint locations. These are considered to be fair and representative for the purposes of the assessment and provide a proportionate approach in terms of the likely impacts (change) and consequential level of effect upon receptors within the Study Area. Receptors and viewpoints to be considered by the assessment process have been agreed with HCC's Landscape Officer.

Photo Viewpoints

- 17.4.80 Baseline photographs – 'Photo Viewpoints' – as referred to in this LVIA are 'Type 1 Annotated Viewpoint Photographs' (Landscape Institute Technical Guidance Note on 'Visual Representation of Development Proposals' (TGN 06/19)), taken on the 5th of February and 16th July 2025, are included at Figures 17.8-17.38 and briefly described below. The majority of photographs were taken in February 2025 and provide winter views when there is generally greater visibility across the landscape and provide a 'worst case' scenario. Seasonal differences in terms of visibility have been factored into the commentary and the assessment process as appropriate. Viewpoints are included to demonstrate views for visual receptors such as residents, PRoW and highway users.

Viewpoints 1A-1C: Sequential views from Hemel Hempstead Road (B487)

- 17.4.81 Representative of road users on the approach to the Site, relatively open close-range views across the southern part of the Site are available (1A, 1B) however, internal vegetation limits the extent of visibility. Pylons and power lines are dominant at the roadside and stretching across the Site and land to the south. Views into the Site are more restricted close to the Holtsmere End Lane junction where roadside vegetation is taller (1C).

Viewpoints 2A-2E: Sequential views from Holtsmere End Lane

- 17.4.82 Holtsmere End Lane is a single lane track contained by mature tree belts. Users of the lane experience intermittent views into the Site, either where there are gaps in vegetation, or from the junction with Little Revel End (Lane) and from the PRoW/ field access points. Visibility extends across the western part of the Site, being limited by internal vegetation and the mature tree belt along the lane which filters views. More open views are available from the north, extending towards the edge of Hemel Hempstead. Internal hedgerows with mature trees foreshorten parts of the views, pylons and power lines are dominant/ evident stretching across the Site and wider landscape. Users experience filtered and glimpsed views of the residential edge of Woodhall Farm (Hemel Hempstead) which is set back from the tree line.

⁶ PRoW= Public Right of Way

Viewpoints 3A-3E: Sequential views from PRow 'Redbourn 011'

- 17.4.83 Located within the Site, footpath users experience open views across the majority of the Site. Internal tree belts west and south of Little Revel End Farm limit the extent of visibility further east, though there is some visibility of land south of the B487 Hemel Hempstead Road. The upper section and roofline of both the farm and properties bordering Holtsmere End Lane at Woodhall Farm are glimpsed through boundary vegetation. Pylons and power lines are a dominant feature when looking across the Site.

Viewpoints 4A-4C: Sequential views from PRow 'Redbourn 010'

- 17.4.84 Representative of footpath users north-east of the Site. Views extend into the Site area however these are filtered to some degree by internal hedgerows in the eastern part of the Site adjacent to North Barn, visible on slightly higher ground beyond (4A). Close to Great Revel End Farm, the view is more open across the eastern part of the Site (4B). The tree belt along the farm/ Site boundary and the internal mature vegetation limits the extent of view further west. The farmyard dominates part of the view, also preventing visibility further west. There is some visibility of rising land south of the B487 Hemel Hempstead Road. Again, pylons and power lines stretching across the Site landscape are an obvious element and landform foreshortens parts of some views (4C).

Viewpoints 5A-5B: Sequential views from Little Revel End (lane)

- 17.4.85 Landform and the continuous established hedgerow along the Little Revel End (Lane) channel the view along the route and generally limit visibility of the Site, or there are some areas visible near the high point west of Little Revel End Farm. The available view extends to the northern boundary and mature trees enclosing the farm, and the south/ south-east towards the internal tree belts. Pylons and power lines are generally dominant, close to the lane.

Viewpoint 6: View south-west from PRow 'Redbourn 009'

- 17.4.86 Users of the footpath experience open views across the eastern part of the Site, filtered to some degree by internal field boundary hedgerows and trees. The variation in landform also limits the extent of visibility. Little Revel End is contained by mature vegetation. Pylons and power lines are a dominant feature stretching across the Site and wider landscape.

Viewpoint 7: View south-east from byway 'Great Gaddesden UCR3'

- 17.4.87 A channelled view into the north-western part of the Site, visibility is heavily restricted by mature trees within the adjacent property curtilage as well as those bordering Holtsmere End Lane and the Site boundary further south.

Viewpoint 8: View south-east from bridleway 'Great Gaddesden 047'

- 17.4.88 The Site is not clearly visible owing to the mature field boundary which foreshortens the view. Holtsmere End Farm can be seen among vegetation to the east.

Viewpoint 9: View south-east from Gaddesden Lane

- 17.4.89 An open view towards Hay Wood and adjacent tree belt and field boundary hedgerow which collectively prevents any views towards the Site. Pylons are an evident feature across the landscape.

Viewpoints 10A-10B: Sequential views from PRow 'Flamstead 040'

- 17.4.90 Representative of elevated vantage points north of the Site, views extend across open farmland towards Hay Wood and Holtsmere End Farm on higher ground beyond Gaddesden Lane which sits within the valley. Both the undulating landform and field boundary vegetation heavily restrict visibility of the Site. Pylons and power lines remain a dominant feature stretching through the landscape.

Viewpoint 11: View west from PRow 'Redbourn 012'

- 17.4.91 Limited visibility of the Site is available beyond the open arable field in the foreground and the M1 motorway corridor. Mature vegetation along the M1 as well as that within the Site restricts visibility to relatively small 'pockets' within the overall wider view. Pylons and power lines stretch across the landscape and, together with traffic along the M1 tend to dominate the view.

Viewpoint 12: View north-west from Nickey Line/ Hertfordshire Way

- 17.4.92 While users of the PRow will experience this open view into the Site from this location, the view is not representative of the long-distance route which is 'in-cutting' for the majority of its length and lined with mature tree belts, therefore restricting outward and inward views. The view, where there is a gap in the vegetation extends across an open field in the foreground to the southern part of the Site beyond the B487 Hemel Hempstead Road. The Site landform rises towards Little Revel End – the lane and farm – the western part of the Site is visible beyond the lane however internal vegetation prevents visibility of the north-eastern area. Pylons and power lines are dominant across the landscape. Other than this viewpoint, for the most part these receptors have no clear views of the Site on account of the mature vegetation beside the route and its landform character.

Viewpoints 13A-13B: Sequential views from PRow 'Redbourn 013'

- 17.4.93 A relatively distant view is afforded across the arable field in the foreground towards the western part of the Site, partly visible beyond field boundary hedgerows, and Holtsmere End located close to the northern Site boundary. Pylons and power lines are evident within the Site area and wider landscape being less dominant from 13A given they are further away from the viewpoint location. Closer to the site (13B), visibility is limited to the southern area, beyond the B487 Hemel Hempstead Road, and is foreshortened by internal vegetation and landform. The roofline of North Barn and associated buildings is visible.

Viewpoint 14: View north-east from bridleway 'Hemel Hempstead 128'

- 17.4.94 A view is available across arable farmland in the foreground towards Holtsmere End Lane and the western part of the Site beyond. The mature tree belt along the lane heavily filters visibility. Views of the Site are largely limited to the south-west where the sloping landform is more prominent beyond the vegetation. Some sections of the boundary vegetation are lower in height allowing greater visibility. Pylons and power lines cross the Site as well as the landscape west of the lane.

Viewpoint 15: View south-west from PRow 'Great Gaddesden 048'

- 17.4.95 The mature tree belt along Holtsmere End Lane together with hedgerow planting alongside the PRow restricts visibility of the Site to glimpsed views through the vegetation only.

Viewpoint 16: View south-west from PRow 'Flamstead 041'

- 17.4.96 This is an elevated vantage point within the Chilterns NL. Views extend across open farmland towards Greenlane Farm as well as Holtsmere End and Hay Wood on higher ground beyond Gaddesden Lane which sits within the valley. Both the undulating landform and field boundary vegetation heavily restrict visibility of the Site, which is limited to the eastern part only. Pylons and power lines are evident crossing the landscape in the distance.

Summary of Visual Baseline

- 17.4.97 The baseline analysis results in a number of reasoned conclusions which are summarised below.

- Key visual influences upon the Site include the adjacent farmsteads and properties, surrounding farmland, the pylons and power lines crossing the Site area and wider landscape as well as the edge of Hemel Hempstead and the B487 Hemel Hempstead Road.
- The Site is well contained within the wider landscape by perimeter and internal vegetation – including strong tree belts – and landform which predominantly restrict inward and outward views to just beyond the Site boundary, save for a few more distant locations affording glimpsed views from higher ground to the east and north of the Site, resulting in a relatively limited visual envelope overall.
- Close-range visual receptors are limited to residents of farmsteads and properties adjacent and close to the Site, users of the PRow crossing the Site and surrounding landscape, the B487 Hemel Hempstead Road immediately south which falls partly within the Site, Holtsmere End Lane immediately west and north, and Little Revel End (Lane) passing through the Site.
- Clearest views of the Site are experienced by PRow Redbourn 11 which crosses the northern part of the Site.
- Other than limited views from properties north and east of Shenley Road at the north-eastern edge of Hemel Hempstead (Woodhall Farm), there are no views of the Site for the majority of visual receptors within Hemel Hempstead. Where views occur, they are limited to residents on the very edge of Woodhall Farm and heavily filtered and obscured by the mature tree belts along either side of Holtsmere End Lane.
- Visibility from the Chilterns NL is prevented by the intervening screening effects of local landform and substantial intervening vegetation. Visibility is restricted to the eastern parts of the Site (which will form the proposed Community Park/SANG), with these views being distant (c. 1km+) and filtered by intervening vegetation.
- There are no clear views of the Site from Redbourn on account of overall distance (the settlement is c. 1.1km north east of the Site, over the M1 motorway) and intervening overlapping features in the landscape which includes hedges, trees and woodland.
- There are no views from the PRow Redbourn 009 adjacent to The Aubreys camp Scheduled Monument on account of woodland beside the route and intervening screening elements in the landscape.
- Light spill is caused to varying degrees, by the farms and properties adjacent and near to the Site, as well as the edge of Hemel Hempstead and traffic passing along the B487 Hemel Hempstead Road. Collectively, these light sources create a level of visual prominence after dark upon the Site and local area.

Future Baseline

- 17.4.98 The likely evolving and future baseline of the Site – as can reasonably be expected – if no development comes forward, has been evaluated. It is considered that the Site would continue to be farmed as agricultural land in a similar way to how it currently operates, and conditions would remain as existing (described above) and appropriately managed. The landscape pattern of the Site *could* change if internal hedgerows and/ or tree belts were to be removed, and the Site character *could* alter if the Site ceased to be farmed and is left to colonise naturally.
- 17.4.99 As a result of climate change, certain species may become dominant and outcompete other less robust species or alternative crops may be grown to better suit the change in temperatures. It is anticipated that none of the receptors identified are any more or less sensitive to the potential change in future baseline conditions should the Development not be delivered. The Site would continue to be subject to the influences of built development of the wider HGC – North Hemel and East Hemel – assuming these come forward. Should the Development not come forward it is likely that the Site would be subject to future planning applications given that it is allocated for development in the SADC Draft Local Plan.

Summary of Receptors and Sensitivity

- 17.4.100 Receptors and their value and susceptibility to change which results in their judged sensitivity are summarised within the Landscape Effects Table, Appendix 17.3 and the Visual Effects Table, Appendix 17.4.

17.5 Embedded Mitigation (Scheme Design and Management)

General Approach

- 17.5.1 Green Infrastructure (GI) forms a key consideration and driver in developing the layout for the Site and Development which adopts a ‘ground up’ landscape led approach. The Site’s inherent well-established features of mature perimeter vegetation, such as the tree belt along Holtsmere End Lane, and internal hedgerows with trees, provide an existing strong green framework for the new Development and will be ‘embedded’ within the layout as shown on the Land Use and Green Infrastructure Parameter Plan, forming the basis of a dedicated network of inter-connected green corridors. These features will be retained and reinforced through additional structural landscape planting and other new GI habitats to assimilate Development into its context. This is designed to successfully integrate the Development within the local landscape and to minimise the incidence and significance of adverse effects. Retained vegetation and new GI is identified on the Land Use and Green Infrastructure Parameter Plan (Figure 5.1) and further information on these matters are set in the Development Specification and Key Principles Document.
- 17.5.2 Careful consideration has been given to building heights and proposed site levels through the iterative design process. Building heights have been devised based on the iterative process of the LVIA and in particular site visibility for visual receptors to ensure that the built form is of an appropriate height so that development is assimilated into the landscape. Noting that development platforms will be required to ensure efficient and logical development parcels, the approach to level changes is for the masterplan to ‘work’ with the landscape based on sensitive design, taking into account existing retained vegetation.

- 17.5.3 The existing landscape resource, visual receptors and amenity of the Site have been considered by the planning and design process and have informed the resultant Development. This approach has entailed collaboration between landscape, architectural design, ecological and other professionals. The GI strategy for the Development is described further in Chapter 5: Description of Development and Appendix 5.2: Development Specification (Key Design Principles).
- 17.5.4 The baseline findings of this ES chapter, together with other environmental topics, have shaped the layout for the Site and the primary mitigation measures are embedded within the Parameter Plans (Appendix 5.1). These design measures, such as the extent of built development parcels, points of access, building heights, landscape strategy (GI framework of retained and new planting types and habitats) are introduced to ensure that the Development is appropriately and sensitively assimilated into the landscape so that the impact and consequential adverse effects on landscape and visual receptors are minimised and that environmental enhancements can be established.

Construction Stage

- 17.5.5 The production of a CEMP, will be secured by planning condition. The CEMP will ensure good working practices in line with appropriate standards. Procedures within this will mitigate and reduce the level of some adverse landscape and visual effects at the construction stage. All construction works will be carried out in accordance with best practice procedures to minimise adverse impacts on landscape character, and to minimise, as far as practicable, adverse impacts on visual amenity during the construction phase. The application of a CEMP is considered to be an appropriate secondary (standard) mitigation measure to minimise degrees of adverse effects.
- 17.5.6 Measures to protect existing landscape features (described below) will be included within the detailed CEMP to be agreed with SADC. These are expected to include reference to boundary management and public protection in terms of site security, perimeter fencing, hoarding and compound areas etc., of which further detail will be agreed, as well as the location of site huts and plant to be sited with consideration to locally sensitive visual receptors. An Outline CEMP is included at Appendix 6.1 and details the environmental actions relating to landscape and visual matters.

Completed Development - Landscape Design and Green Infrastructure

Objectives

- 17.5.7 A Green Infrastructure Strategy accompanies the application. In line with Draft Local Plan policy and GI Strategies, the key objectives of the GI Strategy for the Development are to:
- Provide a multi-functional and sustainable, welcoming and attractive setting, rich and distinctive in character, which provides positive benefits for landscape character and biodiversity, and promotes health and well-being and adaption to climate changes.
 - Respect and relate well to the character and appearance of the Development context. In particular, the adjacent farmsteads; Great Revel End, Little Revel End, North Barn, and residential properties along Holtsmere End Lane; at the eastern edge of Hemel and north of the Site, as well as Woodend Farm to the south, Holtsmere End Lane, Little Revel End (Lane) and the B487 Hemel Hempstead Road corridor, PRoW crossing and near to the Site, as well as the overall characteristics and features of the Site landscape and

surroundings, such as the well treed context and landform. The wider HGC sites coming forward, i.e. East Hemel, will also be key considerations.

- Conserve and enhance the Site's existing perimeter and retained internal vegetation to create a strong green infrastructure framework and setting for the new Development. This will introduce new elements, promoting biodiversity as well as recreation to create a high-quality, sustainable, rich and diverse place to live, as well as an additional amenity for existing residents, that has potential to contribute positively towards quality of life, health and social well-being.

Landscape and Green Infrastructure (GI) Proposals

17.5.8 The key features of the Development are as follows:

Existing

- Retention of existing boundary and internal vegetation comprising mature tree belts on Holtsmere End Lane, individual mature trees and hedgerows. The existing pond would also be retained.
- Reinforcement and enhancement of existing boundary and internal hedgerows with new native planting and locating these features in areas of green space.
- Appropriate and sensitively designed landscape treatment along the interfaces with the existing farmsteads and properties, which will include new suitable 'offsets'.
- The retention of Little Revel End (Lane) and its associated hedgerows within a green corridor.
- The retention of Holtsmere End Lane and its mature tree belt. The lane will form part of the proposed HGC Green Loop.
- Retention of the existing PRoW through the Site and the creation of an extensive network of new recreational routes. Connections to Little Revel End (Lane) and Holtsmere End Lane are also proposed, providing links with the B487 Hemel Hempstead Road, Hemel Hempstead and the surrounding countryside as well as the Nickey Line and wider HGC.

Proposed

- Minimising removal of vegetation to a limited number of trees and short sections of hedgerow to create the new access and road infrastructure. The Land Use and Green Infrastructure Parameter Plan (Figure 5.1) shows allowances made for breaks in existing vegetation. These allowances for breaks are up to 10m in width to provide access, PRoW and street connections. Within the Sustainable Transport Corridor (STC) corridor, wider breaks of approximately 25m have been allowed for.
- Delivery of compensatory planting to provide mitigation for losses of vegetation to enable site access, streets connections and infrastructure. This includes new hedgerows and tree planting across the Site and beside the B487 Hemel Hempstead Road. New hedgerows, trees and green space along the B487 will provide compensation for the loss of hedgerow in this part of the Site.
- The provision of c.55.02 hectares of land dedicated to GI. This represents approximately c.52% of the total Site area.
- Native woodland and tree belts are proposed along the northern, north-eastern and southern perimeters as well as north to south alongside Great Revel End Farm and Little Revel End (connecting the proposed tree belt at Holtsmere End Lane with that at Hemel

Hempstead Road) as part of a 'multi-functional wooded landscape buffer' to reinforce existing planting, and strengthen the overall framework of the Site. New planting alongside existing vegetation will assimilate the Development into the landscape and will assist in 'softening' views of the built form.

- A variety of urban and natural open spaces linked by 'active' wildlife and recreational corridors will create a diverse, green environment and an attractive setting for the built development. A series of new separate, yet connected, parks, including a large Community Park / SANG (a minimum of 28.8ha), will each have a different focus – to encompass space for both formal and informal recreation, including sports pitches and equipped children's play as well as allotments and a community orchard.
- The existing hedgerow network will be encompassed within interconnected green corridors linking the areas of public open space to maintain and encourage wildlife habitat and activity. These will be of sufficient space to ensure existing hedges and trees are protected and can thrive, and at the same time allow for appropriate layers of new planting. This will create well-considered landscape interfaces/ 'offsets' between these features and built development.
- Establishment of new habitats including extensive areas of meadow grassland – in addition to woodland, scrub, tree and hedgerow cover – to increase opportunities for wildlife across the Site.
- SuDS features – to include a series of attenuation ponds – will be designed to maximise biodiversity value and planted to knit into the existing landscape, further benefitting wildlife habitats locally. The existing pond near to Great Revel End Farm will be managed to enhance its contribution to the Site landscape in terms of an ecological and recreational asset.
- The new Community Park encompasses the required Strategic Alternative Natural Greenspace (SANG) which will be designed to offset disturbance and pressures on the Chilterns Beechwoods SAC. The SANG will be a minimum of 28.8ha and will be designed to be an accessible area of green space with habitat creation and recreational routes following design principles set out by Natural England.
- Whilst a detailed matter it is expected that street trees and planting will be included along streets and routes to help filter, soften the appearance of, and integrate the housing within the landscape, minimising potential visual effects upon surrounding identified receptors while strengthening local landscape character.
- A well-considered and appropriate lighting strategy will be implemented for the Development which follows the latest best practice guidance on lighting installations to minimise lighting emissions and pollution on the surrounding landscape and on the night-time skies. The new planting proposed as part of the GI will absorb some of the light spill created by the built development.

17.5.9 Collectively, these proposals provide an opportunity to implement a strong framework of GI across the Site area, creating both biodiversity and recreational enhancements overall. Ecological requirements, including any specific mitigation measures, will also be accommodated as part of the proposals. Adopting a landscape-led approach has afforded a logical layout for the development, maximising visual containment of the built elements as well as enabling opportunities for a strong 'sense of place' to be created.

17.5.10 A GI Strategy document accompanies the application and provides general principles that will inform applications for the approval of reserved matters. Detailed design and

implementation of the GI strategy will be agreed with the LPA for each development phase to ensure that the proposed mitigation and enhancement measures are delivered and managed effectively.

GI Strategy Policy/Guidance Compliance

- 17.5.11 The Development responds to National and Local Plan Policy outlined above and at Appendix 17.1, being informed by and sympathetic to the distinctive landscape character, protecting existing features, promoting biodiversity, creating new multi-functional GI assets to contribute to the strategic green infrastructure network and adhering to place making principles. This is embodied within the proposals set out above.
- 17.5.12 Enhancements will be in accordance with the Hertfordshire GI Strategy, SADC GI Plan and the HGC GI Strategy. The Development of the Site has potential to assist in the delivery of NCA 110 SEOs 1, 3 and 4 as well as the landscape strategies for the county LCAs; 'Revel End Plateau', 'Upper Ver Valley' and 'Buncefield Plateau', Broad Location H1 and North Hemel Parcels E, F and G. New tree, shrub and hedgerow species associated with the GI proposals will also be appropriate to these identified character and assessment areas.

Landscape and SANG Management

- 17.5.13 Once established, the GI will be appropriately managed and maintained in perpetuity to ensure the original design intention and long-term amenity and ecological value is upheld. This is expected to be achieved through the implementation of a Landscape and Ecological Management Plan (LEMP) which will be agreed with the SADC via a planning condition and carried out by a Residents Estate Management Company or Trust. The LEMP will include a separate SANG Mitigation and Management Plan (SMMP) to specifically cover the SANG and will be agreed with Natural England.
- 17.5.14 At this stage, and to set out an overarching structure of what these documents are expected to contain, an Outline LEMP (OLEMP), with an Outline SMMP (OSMMP) appended, has been prepared and is included at Appendix 17.5.

17.6 Assessment of Effects - Construction

- 17.6.1 A full Landscape Effects Table and Visual Effects Table are included at Appendix 17.3 and 17.4 respectively, which provide a detailed assessment of effects on the landscape and visual resources at the construction stage. A summary of the assessed effects is provided in this section; however, this should be read in conjunction with the tables for further, more detailed information.
- 17.6.2 The iterative design approach has resulted in the scheme design and layout taking full account of baseline surveys and assessment and addresses landscape and visual issues, including measures to avoid, reduce or remediate potentially significant adverse effects that arise from the Development. This has ensured that the extent and scale of the potential adverse effects upon the landscape and visual resource is minimised.

Construction Phase

- 17.6.3 The construction period will be phased. The construction programme and phasing of the Development will be subject to market demand, although, for assessment purposes it was assumed to be complete and fully occupied by 2041 (an indicative programme of

approximately 13 years). It is possible that the construction programme may be longer or shorter as delivery will depend on market conditions. Some construction operations will be comparatively temporary in nature such as the accesses from the B487 and Holtsmere End Lane but the construction phases of the development will be over the short and long term.

- 17.6.4 To ensure appropriate mitigation is provided during the construction phases, all works will be carried out in accordance with best practice procedures to minimise impacts upon and protect landscape character and visual amenity. This will be set out within the detailed CEMP which will provide the outline methodology for the proposed construction of the Development, including information on phasing as well as consideration of residential amenity and pre-construction operational requirements, responsibilities and environmental opportunities, including the protection of trees and environmental controls.

Landscape Effects

- 17.6.5 During this overall period, some short-medium term reversible adverse effects upon the landscape will occur. Anticipated effects during the construction phase will primarily be caused by:
- Enabling works and clearance and set up of compound area(s).
 - Works to the existing highway including the provision of two new accesses into the Site from the B487 Hemel Hempstead Road and Holtsmere End Lane;
 - Erection of tree protection fencing around retained woodland, trees and hedgerows as required by the CEMP;
 - Earthworks and level changes within the western part of the Site i.e. built development area;
 - Creation of SuDS;
 - Creation of spoil heaps to temporarily store topsoil within the Site;
 - Building works; and
 - Construction traffic, including cranes, HGVs and staff cars travelling to and from the Site.
- 17.6.6 The landscape effects during construction are assessed as being of a transient nature and will not be permanent. Some existing vegetation will be removed to facilitate the new accesses and internal road infrastructure although compensatory planting will be provided. All retained woodland, trees and hedgerows will be protected throughout the construction period.
- 17.6.7 Inevitably there will be some disruption to the Site landscape and its immediate environs during the construction phase of works; however, it will be localised to the Site and limited in extent; the Site landscape and immediate context is assessed as being of medium susceptibility to change and of medium landscape value with the Development resulting in a high-medium magnitude of change.
- 17.6.8 Effects upon the landscape during the construction phase with consideration of the mitigation included will be direct and are assessed as **Major/ Moderate Adverse** upon H1: North Hemel Hempstead, Parcel F: Revel End Slopes and the Site and immediate context and will be significant. Whilst there will be a level of harm - as with any development of this

scale upon a green field site - this will be restricted to a localised area. Effects upon the wider landscape are not considered to be significant.

- 17.6.9 The CEMP will include details of the erection of protective fencing in accordance with 'BS5837: 2012 – Trees in relation to design, demolition and construction – Recommendations' in order to protect existing woodland, trees and hedges. The CEMP is likely to result in a slight decrease in adverse landscape effects upon the Site's features; however, this is not considered to be sufficient enough to alter the threshold of the judgements of landscape effects during the construction period.
- 17.6.10 Localised changes to the Site landform will be necessary and temporary spoil heaps will be created, a limited number of individual trees and short sections of hedgerows will be removed, and areas of open grassland will be lost to built development. Overall, therefore, construction effects upon the Site landscape features are assessed as **Moderate – Minor – Negligible Adverse**. These effects are localised and will not be significant.

Visual Effects

- 17.6.11 Given the progressive nature of the phased construction process, the potential visual effects arising as a result, will vary throughout this period of works. Construction activities such as plant movement will be visible at times from receptors closest to the Site, although the extent will be dependent upon proximity to the Site and orientation of views. Some receptors with limited views of the Site are more likely to experience confined views or glimpses of a specific construction activity.
- 17.6.12 During the construction phase, some short–medium term reversible adverse effects upon the local visual resource will occur. The majority of these will be resultant views of large construction vehicles and machinery used to build the Development. All construction works will be carried out in full accordance with best practice procedures outlined within the CEMP to minimise and protect, as far as practicable, potentially adverse effects upon the local visual resource.
- 17.6.13 Effects upon the following receptors are judged to be significant:
- Users of PRoW Redbourn 011 (receptor B4: high/ medium sensitivity, high/ medium magnitude of change), effects are assessed as **Major Adverse**.
 - Residents close to the northern Site boundary (Holtsmere End, Holtsmere Manor) and Woodend Cottages to the south (receptors A4, A8: high/ medium sensitivity, high/ medium magnitude of change), effects are assessed as **Major/ Moderate Adverse**.
 - Users of PRoW – the Nickey Line/ Hertfordshire Way, PRoW crossing the Site (Redbourn 010 and 011), to the south (Redbourn 013) and west (Great Gaddesden 048) (receptors B1, B3, B6ii, B11: high/ medium sensitivity, high/ medium magnitude of change), effects are assessed as **Major/ Moderate Adverse**.
 - Users of Little Revel End (lane) (receptor C3: medium sensitivity, high/ medium magnitude of change), effects are assessed as **Major/ Moderate Adverse**.
- 17.6.14 The construction effects for the above receptors includes consideration of the mitigation outlined within the Outline CEMP. Although these effects are considered 'significant' they are localised, being contained to the Site and close to its perimeter. Receptors with reduced or limited visibility will experience a lesser magnitude of change, therefore construction

effects for these receptors are not considered to be significant. The landform combined with intervening woodland, roadside and field boundary vegetation, as well as tree belts associated with the Site, will prevent views of the construction activities from within the wider landscape.

- 17.6.15 The CEMP will include further detail of the location of site compounds as well as any site hoarding to screen activities and reduce visual effects as much as practicable. Again, these measures are likely to reduce visual effects slightly, however due to the scale of the Site and the presence of some sensitive receptors in close proximity, they will not reduce to a sufficient degree to alter the threshold of the judgements of visual effects during the construction period.

Additional Mitigation, Monitoring and Residual Effects

- 17.6.16 No further mitigation is proposed beyond that set out in the Outline CEMP, details of which would be agreed with SADC prior to construction. Further design matters will include details of proposed landform and levels.

17.7 Assessment of Effects - Completed Development

- 17.7.1 A full Landscape Effects Table and Visual Effects Table is included at Appendix 17.3 and 17.4 respectively, which provide the detailed assessment of effects on the landscape and visual resource at completion (full Development constructed with mitigation implemented) and at Year 15 (full Development constructed and occupied with 15 years planting growth). The residual operational effects assessment considers the Development 15 years after completion and takes into account the growth and management of the proposed and conserved planting and habitats over this time following compliance with the Outline LEMP. A summary of the assessed effects is provided below; however, this should be read in conjunction with the tables for further, more detailed information.
- 17.7.2 The iterative design approach has resulted in the scheme design and layout taking full account of baseline surveys and assessment and addresses landscape and visual issues, including measures to avoid, reduce or remediate potentially significant adverse effects that arise from the Development. This has ensured that the extent and scale of the potential adverse effects upon the landscape and visual resource is minimised. Importantly, once established, the proposed GI will reduce any resulting visual effects in the longer term as acknowledged by the North Hemel Landscape Assessment (2024), '*...the recommended comprehensive landscape strategy of tree planting, including new areas of woodland, tree belts and new and enhanced hedgerow structure...would increasingly reduce adverse landscape and visual effects over time. This would include the potential effects on the setting to the Chilterns National Landscape (AONB)*'.

Landscape Effects

National Landscape

- 17.7.3 The closest boundary of the Chilterns NL is located c.800m north-west of the northern Site boundary.
- 17.7.4 Owing to the local landform and substantial intervening vegetation, any intervisibility with the NL is limited with minimal available views from the north-west (PRoWs 'Flamstead 041' – FPCR LVA-VET Viewpoint 16) c.1.65km from the Site boundary. Such views will be

towards the eastern part of the Site only, where the Community Park is proposed, will be a relatively small component of a wide panorama and distant. No clear views of the proposed built development within the western part of the Site are anticipated.

- 17.7.5 The North Hemel Landscape Assessment (2024) refers to the setting of the NL in the context of the Assessment Parcels covering and adjacent to the Site, stating that:

‘...it is envisaged that any development within this Assessment Parcel would be restricted to open space or SANG, thereby limiting adverse effects on the AONB...Woodland and hedgerows, and the sense of tranquillity within the AONB, which contribute to the special qualities of the designated landscape, would be unaltered.’ (Parcel E: Gaddesden Lane Southern Slopes – north-eastern section of the Site.)

‘The area has a limited relationship to the AONB, primarily due to the local ridge line between Hay Wood and Pancake Wood to the north...It is envisaged that development of the parcel west of the pylons would not have a noticeable adverse effect on the general southern setting of the AONB.’ (Parcel F: Revel End Slopes – majority of the Site.)

‘The Assessment parcel is relatively distant from the AONB, already contains low density development and with no significant development envisaged, there would be no adverse effect on the wider setting to the AONB.’ (Parcel G: Upper Veal Valley - adjacent to south-eastern edge of the Site.)

- 17.7.6 The Assessment also states that the process, *‘has enabled establishment of a potential development extent and landscape strategy, which aims to limit adverse effects on landscape character, landscape features and views, to an acceptable level for the scale of development envisaged, and over time would enhance landscape structure of the area in keeping with the character of the nearby Chilterns National Landscape (AONB)’*.
- 17.7.7 It acknowledges that, *‘...the recommended comprehensive landscape strategy of tree planting, including new areas of woodland, tree belts and new and enhanced hedgerow structure...would increasingly reduce adverse landscape and visual effects over time. This would include the potential effects on the setting to the Chilterns National Landscape (AONB)’*.
- 17.7.8 Given the national designation status of the receptor, sensitivity is assessed as high and the magnitude of change is judged to be negligible at completion, resulting in a **Neutral** landscape effect upon the NL and its setting and is not significant. The long-term magnitude of change remains negligible once planting is established, and the resulting effect also remains **Neutral**. Overall, the long-term effect upon the Chilterns NL and its setting will be permanent, irreversible, indirect and unavoidable and will not be significant.

National Character

- 17.7.9 The Site forms a small part of the extensive NCA 110: ‘Chilterns’ reflecting some key characteristics and being influenced by the adjacent B487 Hemel Hempstead Road highway infrastructure as well as Holtsmere End Lane. Surrounding farmland, adjacent farmsteads and properties are also key influences, and, to a lesser degree, the urban edge of Hemel. The Development will retain and enhance site features to create a robust green infrastructure framework encompassing significant green space and recreational opportunities as well as minimising the effects of the built development as far as practicable

in line with SEOs 1, 3 and 4 for the NCA. Intervisibility with the NCA is limited with minimal available views from the north-west (PRoWs 'Flamstead 041' – *FPCR LVA-VET Viewpoint 16*) c.1.65km from the Site perimeter. The majority of the NCA will be unaffected by the Development.

- 17.7.10 The Development will not alter the key characteristics of the NCA as a whole and has potential to bring benefits to this modest part of the overall area. Given the overall scale of the receptor, sensitivity is assessed as medium and the magnitude of change is judged to be negligible at completion resulting in a **Negligible Adverse** landscape effect upon the NCA and is not significant. The long-term magnitude of change remains negligible once planting is established, and the resulting effect also remains **Negligible Adverse**. Overall, the long-term effect upon national character will be permanent, irreversible, indirect and unavoidable and will not be significant.

County Character

- 17.7.11 At a county level, the northern, north-eastern/ western and central parts of the Site lie within LCA 95: Revel End Plateau which is a landscape characterised in part by its arable farmland, woodland, isolated farmsteads and urban fringe location. The western, southern and eastern parts of the Site lie within LCA 96: Upper Ver Valley which is a landscape characterised by its open arable farmland across an undulating landform of valley slopes. The Site itself exhibits some key characteristics of the LCAs which are also observed within the immediate and surrounding context. The Site is influenced by the B487 Hemel Hempstead Road, Holtsmere End Lane, pylons and power lines crossing the Site and local landscape, adjacent farmsteads and properties as well as surrounding farmland to the north and east and, to a lesser degree, the urban edge of Hemel Hempstead.
- 17.7.12 The Development will deliver generous GI to complement the existing retained tree belts, hedgerows and individual trees. This will include new native structure planting to the Site perimeter, along the PRoW and hedgerow network and within the proposed Community Park/ SANG. Together this will reinforce and strengthen the overall landscape character of the Site in line with the guidelines and recommendations for the LCA – the overall strategies for which are to '**Improve and Conserve**' (LCA 95) and '**Conserve and Strengthen**' (LCA 96).
- 17.7.13 Owing to landform, perimeter mature tree belts and woodland planting, intervisibility with LCA 95 is restricted to the north, north-east and north-west (Holtsmere End Lane, PRoW 'Redbourn 010' and PRoW immediately west of the Site – *FPCR LVA-VET Viewpoints 2D, 2E, 4A, 4B, 14, 15*) ranging from adjacent to c.600m from the Site perimeter) with minimal visibility from public vantage points further north (PRoWs 'Flamstead 040, 041' – *FPCR LVA-VET Viewpoints 10A, 10B, 16*) c.980-1.65km from the Site perimeter. Similarly, intervisibility with LCA 96 is restricted to the south, south-west and east (Holtsmere End Lane, Hemel Hempstead Road, the Nickey Line and PRoW 'Redbourn 009' – *FPCR LVA-VET Viewpoints 1A-1C, 2A, 2B, 6, 12*) adjacent – c.100m from the Site perimeter.
- 17.7.14 LCA 94: Buncefield Plateau lies further south and south-east of the Site, separated from it by the Upper Ver Valley LCA. Intervisibility with the Site is limited to the higher ground south of Woodend Farm and east of the M1 where some views are available (PRoWs 'Redbourn 012, 013' – *FPCR LVA-VET Viewpoints 11, 13A*) – c.700-900m from the Site perimeter).

- 17.7.15 Sensitivity is assessed as medium while the magnitude of change is judged to be medium (LCAs 95, 96) and medium/ low (LCA 94) at completion (Year 1) with landscape effects assessed as **Moderate Adverse** (LCAs 95 and 96) and **Moderate/ Minor Adverse** (LCA 94) and will not be significant. Once planting is established (Year 15), the long-term magnitude of change reduces to low resulting in **Minor Adverse** effects upon LCAs 95, 96 and 94.
- 17.7.16 Overall, the long-term effects upon county landscape character will be permanent, irreversible, direct (LCAs 95 and 96) indirect (LCA 94) and unavoidable and will not be significant. Effects upon the landscape will be limited, having potential to strengthen it within the immediate context of the Site and bring forward some beneficial effects in the longer term.

District/ Local Character

- 17.7.17 At a local level, the Site is covered by Broad Location H1. The Development will deliver the 'Site Specific Measures' for the Broad Location H1 through its considered layout in terms of land uses and visibility within the surrounding landscape, including potential views from the Chilterns NL. Generous GI will be introduced for the Development, based upon the existing retained green framework, to include new native structure planting and a Community Park / SANG which encompasses the eastern part of the Site affording an extensive landscape buffer for the built development which is contained to the western part of the Site.
- 17.7.18 Sensitivity is assessed as medium while the magnitude of change is judged to be high/ medium at completion (Year 1) with the landscape effect assessed as **Major/ Moderate Adverse** which is significant. Once planting is established, the long-term (Year 15) magnitude of change reduces to medium resulting in a **Moderate Adverse** effect upon Broad Location H1. This takes into account the benefits of the GI proposals which include planting and habitat creation bringing positive benefits to local landscape character. Overall, the long-term effect upon the area will be permanent, irreversible, direct and unavoidable and will not be significant. While the Development will have an adverse effect upon H1 it will also strengthen the local landscape, bringing forward some beneficial effects in the longer term.
- 17.7.19 The majority of the Site lies within Parcel F: Revel End Slopes, and a relatively small section at the Site's north-eastern edge lies within Parcel E: Gaddesden Lane Southern Slopes as defined in the North Hemel Landscape Assessment. The Development has a well-considered layout and will deliver substantial GI comprising new native structure planting, including tree belts along the north/ north-eastern perimeter of the Parcels as well as within the east of Parcel F and at the western edge of Parcel E, open space in the form of an extensive Community Park/ SANG and connected green corridors throughout the built development area. Any potential minimal views from the Chilterns NL will be towards the GI, perimeter structure planting and Community Park/ SANG in the east of the Parcel. Proposed built development is wholly within Parcel F, save for part of the road widening along Hemel Hempstead Road to facilitate the new Site accesses on the B487 which lies just outside of the North Hemel Landscape Assessment study area. Parcel G: Upper Veal Valley lies adjacent to the south-eastern edge of the Site.
- 17.7.20 Sensitivity is assessed as medium (Parcels E, F, G) while the magnitude of change is judged to be medium/ low (E), high/ medium (F) and low/ negligible (G) at completion (Year 1) with landscape effects assessed as **Moderate/ Minor Adverse** (Parcel E) and not

significant, **Major/ Moderate Adverse** (Parcel F) which is a significant effect - and **Minor/ Negligible Adverse** (Parcel G) again, not significant.

- 17.7.21 Taking into account the benefits of the GI proposals, the long-term magnitude of change reduces to low (E), medium (F), and negligible (G) resulting in **Minor Adverse** (E), **Moderate Adverse** (F) and **Negligible Adverse** (G) effects upon the individual Parcels. Overall, the long-term (Year 15) effects upon the individual Parcels will be permanent, irreversible, direct and unavoidable and will not be significant. While the Development will have an adverse effect, it will also strengthen the local landscape, bringing forward some beneficial effects in the longer term.
- 17.7.22 The North Hemel Landscape Assessment (2024) refers to visual effects in the context of Assessment Parcel F, stating that, '*...the extent of development...should avoid weakening the separate identities of Hemel Hempstead and Redbourn by limiting landscape and visual effects to 'Moderate' adverse, through detailed design development, including a robust mitigation strategy*' as indicated on the Land Use and Green Infrastructure Parameter Plan (Figure 5.1).

The Site and Immediate Context

- 17.7.23 The Site is not covered by a national or local level landscape quality designation. Based on field work, the area within which the Development will be experienced is not extensive, is well contained within the wider landscape resulting in a relatively limited visual envelope overall. The Development will be located within the wider residential context of Hemel Hempstead, being close to the existing urban edge of Woodhall Farm. It will be contained by mature tree belts to the north and west and by landform and overlapping vegetation within the local and wider landscape.
- 17.7.24 A total of 55.25ha, or 52% of the Site area is proposed as GI combining existing retained features, including native tree belts, individual trees and hedgerows, with areas of new public open space (POS) – to include an extensive Community Park/ SANG – which will create an enhanced 'soft' interface with the existing perimeter of the Site as well as sensitive treatment to the existing farmsteads and residential properties bordering and close to the Site. There will be landscape improvement and enhancement through new landscape planting, extensive areas of meadow grassland and SuDS features which will be planted to maximise their ecological value and knit into the Site landscape. The existing pond will be appropriately managed to enhance its contribution to the Site landscape within the new Community Park/ SANG. Existing PRoW of way will be incorporated within the POS and green corridors, supplemented with new recreational pathways to maintain and enhance direct links to the B487 Hemel Hempstead Road, Holtsmere End Lane, Hemel Hempstead and the surrounding countryside.
- 17.7.25 The character across the Site will change however, the new Site accesses on the B487, housing, primary school and local centre, located within the west of the Site, will not be out of character with its immediate urban context of Hemel Hempstead. The Site character will be strengthened through the proposed GI which will help to ensure the successful assimilation of the new built development within the local landscape. While it is considered that the Development will have an adverse effect upon the landscape character of the Site and its immediate context, it has potential to strengthen it and bring forward some beneficial effects in the longer term. The Site and its immediate context are assessed as being of medium susceptibility to change and of medium landscape value resulting in medium

sensitivity overall. A high/ medium magnitude of change is anticipated for the Site and its immediate context at completion with landscape effects assessed as **Major/ Moderate Adverse** which is significant.

- 17.7.26 Based on a well-planned layout and a strategy that seeks to minimise the level of adverse effects through conservation and enhancement, it is assessed that the Site can absorb change without resulting in substantive long-term landscape harm. Existing landscape features will be retained as far as practicable and incorporated into a comprehensive GI framework which will afford new planting and features for both recreation and wildlife within the Site and local landscape. Whilst the setting of retained features will inevitably be different, i.e. they will be located within or closer to new built development rather than open fields, they will nonetheless continue to function as wildlife corridors located within appropriate landscape buffers or areas of greenspace to enable their protection in the long term and to provide an appropriate 'stand-off' from surrounding buildings. Existing vegetation on the Site will be strengthened by additional enhancement and landscape habitats which will provide long term benefits. The Community Park/ SANG will deliver a substantial recreation resource and benefits for landscape character to include the planting of woodland hedges and trees.
- 17.7.27 Once the new structure planting, trees and hedgerows are established, the long-term magnitude of change reduces to medium resulting in a **Moderate Adverse** permanent, irreversible, direct and unavoidable landscape effect which will not be significant. Overall, it is considered that the proposals will not be wholly uncharacteristic within local views as they will be seen in the context of the edge of Hemel Hempstead from some vantage points.
- 17.7.28 Whilst the Development will result in the permanent and irreversible loss of open farmland and grassland to built development, the Site is considered to be of relatively limited overall value in landscape terms with the fields being commonplace elements within the localised landscape. Importantly, the essence of the Site and immediate landscape – i.e. key characteristics – will be retained, enhanced and reinforced through the GI proposed as part of the Development.

Landscape Features

Landform

- 17.7.29 Changes across the proposed built development area will be necessary to create the building plateaus (refer to Heights Strategy Plan), these will be limited to the western part of the Site. There will also be localised changes to facilitate the attenuation ponds however these will be sympathetically designed and planted to knit into the existing landscape and, although large, will not be adverse features, particularly once the grassland and planting have established. No discernible changes are envisaged across the remaining Site area to the east, i.e. beyond the proposed built development extent – this will remain and form part of the GI proposals including a new Community Park/ SANG for the Development.
- 17.7.30 The proposed changes to the Site levels will be sensitive to the existing landform and character of the Site and its immediate context, working with the existing contours and features to minimise level differences and achieve a natural appearance that is reflective of and sympathetic to the surroundings. Sensitivity is assessed as medium, and the magnitude of change is considered to be medium at completion resulting in a **Moderate Adverse** landscape effect which is not significant. The long-term magnitude of change remains

medium with the effect remaining as **Moderate Adverse** which will be permanent, irreversible, direct and unavoidable and will not be significant.

Woodland, Trees, Hedgerows and Vegetation

- 17.7.31 Mature tree belts and hedgerows with trees occur within the Site and partially define it. Most of the individual trees are assessed as Category A or B, the tree belt along the western edge is assessed as Category A and B, tree belts within the Site are assessed as Category A and the majority of hedgerows are assessed as Category B. No veteran trees have been recorded. A total of 29 hedgerows are assessed as Habitats of Principal Importance, two are classed as Important under the Hedgerow Regulations and nine are species rich.
- 17.7.32 The Development will result in the removal of limited trees and sections of hedgerow to create the new Site accesses on the B487 and road infrastructure, all retained vegetation will be protected and supplemented with new planting as part of the scheme. Strategic landscape areas will include native trees, hedges and grassland along the southern edge, to provide a strong gateway and ensure an attractive green corridor with the B487 Hemel Hempstead Road is established, new planting provides compensatory measures for the hedgerow loss as a result of the new junctions and road design. Perimeter planting is proposed to other parts of the Site providing a 'multi-functional landscape. Native trees, scrub and hedgerow planting, extensive areas of meadow grassland as well as wetland planting associated with the attenuation ponds, are also proposed. Collectively, this will improve the overall age structure and diversity of vegetation and wildlife habitats within the Site having potential to provide localised beneficial effects overall in the longer term. Sensitivity is assessed as medium, and the magnitude of change is considered to be low at completion resulting in a **Minor Adverse** landscape effect which is not significant. The long-term magnitude of change reduces to low/ negligible with the effect becoming **Minor Adverse/ Negligible Beneficial** which will be permanent, irreversible, direct and unavoidable and will not be significant.
- 17.7.33 Furthermore, with reference to Parcel F: Revel End Slopes, which covers the majority of the Site, the North Hemel Landscape Assessment (2024) states that, '*new planting has the potential to offset the loss of existing landscape features and reduce the visual effects of the proposals, particularly from the wider landscape*'.

Water Features and Watercourses

- 17.7.34 The pond within the Site, south of Great Revel End Farm, will remain in its existing form and be sensitively integrated within the proposed Community Park/ SANG to maintain and maximise its ecological value as well as providing a recreational asset for the Development. The proposed attenuation ponds and swales will be designed to promote ecology, providing both landscape and biodiversity value, further benefitting the Site and local landscape. Sensitivity is assessed as medium and the magnitude of change is considered to be negligible at completion resulting in a **Negligible Adverse** landscape effect which is not significant. The long-term magnitude of change remains negligible with a **Negligible Beneficial** effect which will be permanent, irreversible, direct and unavoidable and will not be significant.

Visual Effects

Settlements and Residential Properties

- 17.7.35 It was not possible to obtain photographs from residential properties as these are private views. However, reasoned assumptions on visibility have been made based upon the fieldwork analysis. In some instances, photographs have been taken from nearby public vantage points and used to provide a general illustration of the visual context that is likely to be experienced by these receptors. Overall, visual effects upon residents will be extremely localised and predominantly limited to relatively few individual properties within and adjacent, or close to the Site boundaries.
- 17.7.36 Little Revel End Farm – Existing mature perimeter vegetation around the farmstead boundary as well as garden planting restricts visibility. Any potential views of the Development will be limited to the rooflines of housing and some glimpsed filtered views through vegetation at the eastern edge of the proposed built development in the western part of the Site – and the Community Park/ SANG in the east, although new structure planting proposed immediately east of the farm will prevent any long term views in this direction. The proposed sports pitches will be contained by existing hedgerows along Little Revel End (lane) and further south. Residents are judged to be of high/ medium sensitivity, and the magnitude of change is assessed as medium at completion with **Moderate Adverse** visual effects which are not significant. The magnitude of change reduces to medium/ low in the long-term resulting in **Moderate/ Minor Adverse** visual effects which will be permanent, irreversible, direct and unavoidable and will not be significant.
- 17.7.37 Great Revel End Farm – Existing mature vegetation along the western boundary of the farmstead restricts visibility. Any potential views of the Development will be limited to the rooflines and some glimpsed filtered views through vegetation of housing at the eastern edge of the proposed built development in the western part of the Site – and the Community Park/ SANG in the east, although new structure planting proposed immediately south/ south-east of the farm will prevent and restrict any long term views of the proposed development's built elements. Residents are judged to be of high/ medium sensitivity, and the magnitude of change is assessed as medium at completion with **Moderate Adverse** visual effects which are not significant. The magnitude of change reduces to medium/ low in the long-term resulting in **Moderate/ Minor Adverse** visual effects which will be permanent, irreversible, direct and unavoidable and will not be significant.
- 17.7.38 North Barn – Existing mature tree belts and hedgerows within the Site area, including around Little Revel End Farm, will filter and soften available views. Long-term views will predominantly be of the Community Park/ SANG with parts of the new built development (housing, care facility) potentially visible beyond it. New structure planting within the Community Park/ SANG, together with existing vegetation, will heavily filter and soften any views of the new buildings once established. Any views will be in the context of the existing pylons and overhead power lines crossing the Site and surrounding landscape. Residents are judged to be of high/ medium sensitivity, and the magnitude of change is assessed as medium/ low at completion with **Moderate/ Minor Adverse** visual effects which are not significant. The magnitude of change reduces to low in the long-term resulting in **Minor Adverse** visual effects which will be permanent, irreversible, direct and unavoidable and will not be significant.
- 17.7.39 Holtsmere End, Holtsmere Manor – There is potential for views of the STC junction as well as upper sections and rooflines of the new buildings however, structure planting proposed

along the Site perimeter will strengthen the filtering effects of the existing hedgerow along the northern Site boundary to further filter views and soften the appearance of the new built development in the longer term. Residents are judged to be of high/ medium sensitivity, and the magnitude of change is assessed as high/ medium at completion with **Major/ Moderate Adverse** visual effects which are significant. The magnitude of change reduces to medium in the long-term resulting in **Moderate Adverse** visual effects which will be permanent, irreversible, direct and unavoidable and will not be significant.

- 17.7.40 Holtsmere End Farm, The Holt – Existing mature garden planting, existing buildings and mature vegetation along Holtsmere End Lane and the northern Site boundary restrict visibility. Any potential views of the Development will be limited to the rooflines of built development in the west only and will be heavily filtered by existing vegetation with new structure planting proposed along the northern Site boundary ultimately filtering and softening views of the built form. Residents are judged to be of high/ medium sensitivity, and the magnitude of change is assessed as low at completion with **Minor Adverse** visual effects which are not significant. The magnitude of change reduces to negligible in the long-term resulting in **Negligible Adverse** visual effects which will be permanent, irreversible, direct and unavoidable and will not be significant.
- 17.7.41 Properties at the north-eastern edge of Hemel at Woodhall Farm (north and east of Shenley Road) – The mature tree belt along either side of Holtsmere End Lane, together with vegetation on the edge of Woodhall Farm, heavily restricts and obscures views of the Site, however occasional views may be experienced for some residents depending upon property orientation and window aspect. There is potential for some close-range views of the completed Development. Views will be filtered and softened by intervening mature vegetation. Built development is set back from the edge of Holtsmere End Lane and its mature tree belt. New structural landscaping along the western Site boundary will reinforce the filtering effects of the existing vegetation, further softening views of the built development. Any potential views will be in the context of the existing properties at the edge of Hemel. Residents are judged to be of high/ medium sensitivity, and the magnitude of change is assessed as medium at completion with **Moderate Adverse** visual effects which are not significant. The magnitude of change reduces to medium/ low in the long-term resulting in **Moderate/ Minor Adverse** visual effects which will be permanent, irreversible, direct and unavoidable and will not be significant.
- 17.7.42 Woodend Farm – Existing mature garden planting enclosing the farm, and vegetation within the Site restricts visibility. Mature tree cover beside the Nickey Line also obscures and restricts views of the Site and the landscape to the north however occasional views may be experienced depending upon property orientation and window aspect. There is potential for limited views of the completed Development. Long-term close-range views will predominantly be of the new Site accesses on the B487, built development (housing) in the south-west and the Community Park/ SANG including sports pitches. New landscape planting along the B487 Hemel Hempstead Road, together with intervening vegetation within the landscape will filter and soften views of the new buildings once established. Any views will be in the context of the existing pylons and overhead power lines crossing the Site and surrounding landscape. Residents are judged to be of high/ medium sensitivity, and the magnitude of change is assessed as medium at completion with **Moderate Adverse** visual effects which are not significant. The magnitude of change reduces to medium/ low in the long-term resulting in **Moderate/ Minor Adverse** visual effects which will be permanent, irreversible, direct and unavoidable and will not be significant.

- 17.7.43 Woodend Cottages – Existing mature garden planting enclosing the cottages, and vegetation within and around the Site, to include the hedgerows and intermittent trees beside the B487 Hemel Hempstead Road, restricts visibility to some degree, however views may be experienced depending upon property orientation and window aspect. Given the receptors' proximity to the Site there is potential for close range views of the completed Development. Long-term views will predominantly be of the new Site accesses on the B487, built development (housing) in the south-west and the Community Park/ SANG including sports pitches. New landscape planting along the B487 Hemel Hempstead Road will, once established and maturing, filter and soften views of the built development, reducing effects in the longer term. Any views will be in the context of the existing pylons and overhead power lines crossing the Site and surrounding landscape. Residents are judged to be of high/ medium sensitivity, and the magnitude of change is assessed as high/ medium at completion with **Major/ Moderate Adverse** visual effects which are significant. The magnitude of change reduces to medium in the long-term resulting in **Moderate Adverse** visual effects which will be permanent, irreversible, direct and unavoidable and will not be significant.
- 17.7.44 Properties adjacent to Hemel Hempstead Road (The Meadows/ Belvedere/ The Hame) – Existing mature garden planting enclosing the properties and vegetation within the Site restricts visibility, however occasional views may be experienced depending upon property orientation and window aspect. There is potential for minimal views of the completed Development – the Community Park/ SANG in the eastern part of the Site and the upper sections/ rooflines of the proposed built development in the west. New structural landscaping within the Community Park/ SANG will reinforce the filtering effects of the existing vegetation, further limiting any available views in the longer term. Any potential views of the new elements and Site accesses will be in the context of the B487 Hemel Hempstead Road corridor. Residents are judged to be of high/ medium sensitivity, and it is assessed that there will be a negligible magnitude of change resulting in **Negligible Adverse** visual effects at completion and in the long-term which will be permanent, irreversible, direct and unavoidable and will not be significant.
- 17.7.45 Aubrey Lane – Existing mature garden planting enclosing the properties and vegetation within the Site restricts visibility, however occasional views may be experienced depending upon property orientation and window aspect. There is potential for minimal views of the completed Development – the Community Park/ SANG in the eastern part of the Site and the upper sections/ rooflines of the proposed built development in the west. New structural landscaping within the Community Park/ SANG will reinforce the filtering effects of the existing vegetation, further limiting any available views in the longer term. Any potential views of the new elements and Site accesses will be in the context of the B487 Hemel Hempstead Road corridor. Residents are judged to be of high/ medium sensitivity, and it is assessed that there will be a negligible magnitude of change resulting in **Negligible Adverse** visual effects at completion and in the long-term which will be permanent, irreversible, direct and unavoidable and will not be significant.
- 17.7.46 Corner Farm – no views of the Development are anticipated from the farm owing to landform and intervening vegetation including Hay Wood. This viewpoint also demonstrates there are no views from the southern edge of the Chilterns NL. Residents are judged to be of medium sensitivity, and it is assessed that there will be no magnitude of change resulting in **No Visual Effects** at completion or in the long-term.

Public Rights of Way Users (PRoW)

- 17.7.47 The Site is crossed by three PRoW: in the north, north-east and east of the Site. These routes connect to the wider network and countryside as well as providing links into Hemel Hempstead.
- 17.7.48 Nickey Line/ Hertfordshire Way – Mature vegetation along the former railway line prevents visibility from much of the route which is also ‘in-cutting’ and further prevents views. VP12 is therefore not representative of the overall route and potential wider views are limited to occasional gaps in the vegetation. Close range views of the completed Development will be experienced, where there are occasional gaps in vegetation. Long-term views will predominantly be of the new Site accesses on the B487, built development (housing) in the south-west and the Community Park/ SANG including sports pitches. New landscape planting along the B487 Hemel Hempstead Road will filter and soften any views of the new built development; For much of its length within the context of the Site, views out from the Nickey Line are prevented and restricted by the corridor’s landform character, and more generally established vegetation, such that impacts and effects for receptors will be over a comparatively short duration where there are occasional breaks in tree cover (VP12). Any views will be in the context of the existing pylons and overhead power lines crossing the Site and surrounding landscape. Users of the PRoW are judged to be of high/ medium sensitivity, and the magnitude of change is assessed as high/ medium at completion with **Major/ Moderate Adverse** visual effects which are significant. The magnitude of change reduces to medium in the long-term resulting in **Moderate Adverse** visual effects which will be permanent, irreversible, direct and unavoidable and will not be significant.
- 17.7.49 Redbourn 009 – Mid-range views of the completed Development will be experienced. Existing mature tree belts and hedgerows within the Site area, including around Little Revel End Farm, will filter and soften available views. Long-term views will predominantly be of the Community Park/ SANG with the new built development (housing, care facility) potentially visible beyond it. Once established and maturing, new structure planting within the Community Park/ SANG will heavily filter and soften any views of the new buildings. Any views will be in the context of the existing pylons and overhead power lines crossing the Site and surrounding landscape. Where the route passes through the Site it will be contained within the Community Park/ SANG. Users of the PRoW are judged to be of high/ medium sensitivity, and the magnitude of change is assessed as medium at completion with **Moderate Adverse** visual effects which are not significant. The magnitude of change reduces to medium/ low in the long-term resulting in **Moderate/ Minor Adverse** visual effects which will be permanent, irreversible, direct and unavoidable and will not be significant.
- 17.7.50 Redbourn 010 – Close and mid-range views of the completed development will be experienced, though this will be restricted to the open gap along a section of the route south of Great Revel Farm. Elsewhere, mature established hedgerows and trees beside the route will filter and obscure views. Long-term views will be of the new built development (housing) in the north-west and centre (housing, primary school), which will be softened and filtered by new tree planting along the PRoW route and within the open space in the north-east/ east, as well as by new structural planting along the north-eastern Site boundary once established, and the Community Park/ SANG in the east. Some views will be in the context of the existing pylons and overhead power lines crossing the Site and surrounding landscape. Where the route passes through the Site it will be located and contained within the Community Park/ SANG, with users having views of the landscape habitats and the park. Significant effects are restricted in extent to a short section of the PRoW only (4C),

where there is a gap in the hedgerow structure and where there are open close-range views. Users of the PRoW are judged to be of high/ medium sensitivity, and the magnitude of change is assessed as high/ medium at completion with **Major/ Moderate Adverse** visual effects which are significant. The magnitude of change reduces to medium in the long-term resulting in **Moderate Adverse** visual effects which will be permanent, irreversible, direct and unavoidable and will not be significant.

- 17.7.51 Redbourn 011 – Close and mid-range views of the completed Development will be experienced. Long-term views will be limited to the new housing in the north-west, which will be softened and filtered by new tree planting along the PRoW route and within the open space in the north-east/ east once established, as well as allotment gardens and SuDS within the POS. Any views will be in the context of the existing pylons and overhead power lines crossing the Site and surrounding landscape. The majority of the route will pass through residential development parcels and there will be a high magnitude of change for these users as views of open arable fields will be replaced by views of new housing, streets and green space. It is considered that in the longer term, once the landscape structure of trees, hedges and green space along the route has established and is maturing, it will create a pleasant walking route such that levels of adverse effects will reduce however effects upon receptors is judged to be significant at all stages. Users of the PRoW are judged to be of high/ medium sensitivity, and the magnitude of change is assessed as high at completion with **Major Adverse** visual effects which are significant. The magnitude of change reduces to high/ medium in the long-term resulting in **Major/ Moderate Adverse** visual effects which will be permanent, irreversible, direct and unavoidable and will be significant.
- 17.7.52 Redbourn 012 – Mature vegetation and distance restrict visibility from the PRoW. Any potential views of the Development are not anticipated to be clearly discernible and will be limited in extent to rooflines only which will ultimately be heavily filtered by new structure planting proposed within the Community Park/ SANG. Views will be intermittent in nature given the containment created by hedges and trees alongside the route which limits visibility across the landscape to the north. Any views will also be in the context of the M1 corridor and the activity upon it – which draws the eye – as well as the existing pylons and overhead power lines crossing the Site and surrounding landscape. Users of the PRoW are judged to be of high/ medium sensitivity, and the magnitude of change is assessed as low at completion with **Minor Adverse** visual effects which are not significant. The magnitude of change reduces to negligible in the long-term resulting in **Negligible Adverse** visual effects which will be permanent, irreversible, direct and unavoidable and will not be significant.
- 17.7.53 Redbourn 013 (south) – Extent of visibility will vary depending upon location on the PRoW. More distant views will primarily be of the Community Park/ SANG in the eastern part of the Site. The eastern edge of the proposed built development will also be visible although heavily filtered by intervening vegetation, which includes mature tree cover along the Nickey Line. New structure planting proposed within green corridors crossing the built development area will further assist in filtering views in the longer term. Users of the PRoW are judged to be of high/ medium sensitivity, and it is assessed that there will be a low magnitude of change resulting in **Minor Adverse** visual effects at completion and in the long-term which will be permanent, irreversible, direct and unavoidable and will not be significant.
- 17.7.54 Redbourn 013 (north) – Extent of visibility will vary depending upon location on the PRoW. This is a comparatively short section of the PRoW between the Nickey Line and the B487 Hemel Hempstead Road. Close range views of the completed Development will be experienced. Long-term views will predominantly be of the new Site accesses on the B487,

built development (housing) in the south-west and the Community Park/ SANG including sports pitches. New landscape planting along the B487 Hemel Hempstead Road will filter and soften views of the new buildings once established. Any views will be in the context of the existing pylons and overhead power lines crossing the Site and surrounding landscape. Users of the PRoW are judged to be of high/ medium sensitivity, and the magnitude of change is assessed as high/ medium at completion with **Major/ Moderate Adverse** visual effects which are significant. The magnitude of change reduces to medium in the long-term resulting in **Moderate Adverse** visual effects which will be permanent, irreversible, direct and unavoidable and will not be significant.

- 17.7.55 Flamstead 040 – mature vegetation and distance restrict visibility from the PRoW. Any potential views of the Development are not anticipated to be clearly discernible and will be limited to distant views of rooflines only which will ultimately be heavily filtered by new structure planting proposed along the northern Site boundary. Any views will be in the context of the existing pylons and overhead power lines crossing the landscape. Users of the PRoW are judged to be of high/ medium sensitivity, and the magnitude of change is assessed as negligible at completion with **Negligible Adverse** visual effects which are not significant. The magnitude of change remains negligible in the long-term resulting in **Neutral** visual effects which will be permanent, irreversible, direct and unavoidable and will not be significant.
- 17.7.56 Flamstead 041 – Mature vegetation and distance restrict visibility from the PRoW which is located on slightly elevated land in the Chilterns NL. Views of the Development will be prevented by the intervening screening effects of landform and woodland. There will be some glimpsed filtered views of parts of the Community Park/ SANG observed over some distance, forming a minor component within the wider views. New structure planting and tree cover within the Community Park/ SANG will be visible. At the outset, and in the longer term, there will be no fundamental change in views such that effects are judged to be neutral. Users of the PRoW are judged to be of high/ medium sensitivity, and it is assessed that there will be a negligible magnitude of change resulting in **Neutral** visual effects at completion and in the long-term which will be permanent, irreversible, direct and unavoidable and will not be significant.
- 17.7.57 Hemel Hempstead 128 (bridleway) – Visibility is mostly prevented by the mature vegetation along the PRoW however there are some occasional breaks in the route which allow views towards the Site. (NB. the viewpoint is not representative of the PRoW itself, which is located immediately adjacent, behind the tree belt). There will be some occasional close and mid-range views of the completed Development as users reach Holtsmere End Lane. Views of the new built development (housing, primary school, care facility) within the western part of the Site will be experienced owing to the localised landform. Once established, new structure planting along the Site perimeter will strengthen the filtering effects of the existing mature tree belt along Holtsmere End Lane to further filter views and soften the appearance of the new built development in the longer term with visibility anticipated to be limited to the upper sections and rooflines of buildings only. Views of the Development will be limited to occasional views from the route, and primarily where the route meets Holtsmere End Lane. Users of the PRoW are judged to be of high/ medium sensitivity, and the magnitude of change is assessed as medium/ low at completion with **Moderate/ Minor Adverse** visual effects which are not significant. The magnitude of change reduces to low in the long-term resulting in **Minor Adverse** visual effects which will be permanent, irreversible, direct and unavoidable and will not be significant.

- 17.7.58 Great Gaddesden 047 (bridleway) – No views of the Development are anticipated from the PRoW owing to landform and intervening vegetation. Users of the PRoW are judged to be of high/ medium sensitivity, and it is assessed that there will be no magnitude of change resulting in **No Visual Effects** at completion or in the long-term.
- 17.7.59 Great Gaddesden 048 – The extent of visibility will vary along the PRoW. There will be close and mid-range views of the completed Development as users reach the Site close to Holtsmere End Lane (see VP15). Views of the new housing at the north-western corner of the Site, at the location of the proposed STC junction on Holtsmere End Lane, are anticipated in the long-term owing to the necessary break in the boundary tree belt. Elsewhere, new structure planting along the Site perimeter will, once established, strengthen the filtering effects of the existing mature tree belt along Holtsmere End Lane to further filter views and soften the appearance of the new built development in the longer term. Significant effects will be from the short, elevated section of the PRoW closest to Holtsmere End Lane only. It is judged that the level of adverse effect will reduce in the longer term. Users of the PRoW are judged to be of high/ medium sensitivity, and the magnitude of change is assessed as high/ medium at completion with **Major/ Moderate Adverse** visual effects which are significant. The magnitude of change reduces to medium in the long-term resulting in **Moderate Adverse** visual effects which will be permanent, irreversible, direct and unavoidable and will not be significant.
- 17.7.60 Great Gaddesden UCR3 (byway) – Existing buildings and mature vegetation restrict visibility from the PRoW. Any potential views of the Development will be limited to the rooflines of built development in the west only and will be heavily filtered by existing vegetation with new structure planting proposed along the northern Site boundary ultimately preventing visibility. Users of the PRoW are judged to be of medium sensitivity, and the magnitude of change is assessed as low at completion with **Minor Adverse** visual effects which are not significant. The magnitude of change reduces to negligible in the long-term resulting in **Negligible Adverse** visual effects which will be permanent, irreversible, direct and unavoidable and will not be significant.

Road Users

- 17.7.61 Hemel Hempstead Road (B487) – The extent of visibility varies along the road with views only available when users are in proximity and are passing the southern and south-eastern edge of the Site (1B, 1C). There will be close range views of the completed Development, particularly the new Site accesses on the B487. New landscaping of hedgerows and trees along the road corridor will filter views of the built development in the long term once established. Views of the Development will be in the context of the road corridor together with pylons and overhead power lines crossing the Site and surrounding landscape. Users of the road are judged to be of medium/ low sensitivity, and the magnitude of change is assessed as high at completion with **Moderate Adverse** visual effects which are not significant. The magnitude of change reduces to medium/ low in the long-term resulting in **Moderate/ Minor Adverse** visual effects which will be permanent, irreversible, direct and unavoidable and will not be significant.
- 17.7.62 Holtsmere End Lane – The extent of visibility varies along the lane. For the most part, the mature tree belt alongside the lane channel views but, given the proximity of the Site, close range views will be available when directly passing the western and northern edges and where intermittent gaps occur in the tree belt. Currently, the lane is not considered to be a widely used route, mostly serving as an access to properties along Little Revel End (lane) or within Holtsmere hamlet located off the lane. Existing views include filtered visibility of

the residential edge of Woodhall Farm. There will be close range views of the completed Development including the Site accesses on the B487, STC junction and built development. New landscape planting along the Site perimeter will strengthen the filtering effects of the existing mature tree belt and hedgerow along the lane to further filter views and soften the appearance of the new built development in the longer term. Open space proposed in the east of the Site extends to Holtsmere End Lane north of the Site and will provide a wider landscape buffer from this section of the lane and further east. When travelling along the lane north of the Site, the Development will be seen in the context of existing residential properties as well as the existing pylons and overhead power lines crossing the Site and surrounding landscape. When travelling along the lane west of the Site, views will be in the context of the eastern edge of Woodhall Farm (Hemel Hempstead) which can be glimpsed in places through mature vegetation. Holtsmere End Lane will form part of the HGC Green Loop – the Development will essentially retain the character of a tree-lined lane with new built elements set back from the route, similar in extent to the existing built edge at Woodhall Farm. Currently, the baseline assessment is that the lane is primarily used by vehicle users of lesser sensitivity. When the lane becomes part of the HGC Green Loop (on the assumption that this is on completion (Year 1), users will be pedestrians, cyclists and equestrians resulting in an increase in their sensitivity to high/ medium, and the magnitude of change is assessed as high/ medium at completion with **Moderate Adverse** visual effects which are not significant. The magnitude of change reduces to medium in the long-term resulting in **Moderate/ Minor Adverse** visual effects which will be permanent, irreversible, direct and unavoidable and will not be significant.

- 17.7.63 Little Revel End (lane) – Close range views will be available above the lane's hedgerow and where intermittent gaps occur with it. Importantly, it is not a widely used route, mostly serving as an access to the farms located off the lane. Given its location users will experience close range views of the completed Development. Existing mature tree belts and hedgerows within the Site area to the north and south of the lane will be strengthened with new structure planting to increase their filtering effects and to soften views of the Development. When travelling east, views of the built development within the western part of the Site will be experienced, together with potential views of the Community Park/ SANG proposed in the eastern part of the Site. When travelling west, there will be views of the built development beyond the Community Park/ SANG. Views will be in the context of the existing pylons and overhead power lines crossing the Site and surrounding landscape. Whilst there will a marked change in the landscape either side of the route (i.e. from arable fields to built development) and breaks in the hedgerows to allow for primary infrastructure and potential footpath/ cycle connections into the Development, much of the lane's hedgerow network is retained and it will be located within a green corridor to create a pleasant active travel route. The hedgerow and the green corridor will include new hedgerow and tree planting. Users of the lane are judged to be of medium sensitivity, and the magnitude of change is assessed as medium at completion with **Major/ Moderate Adverse** visual effects which are significant. The magnitude of change remains medium in the long-term resulting in **Moderate Adverse** visual effects which will be permanent, irreversible, direct and unavoidable and will not be significant.
- 17.7.64 Gaddesden Lane – No views of the Development are anticipated from the lane owing to landform and intervening vegetation including Hay Wood. Users of the lane are judged to be of medium sensitivity, and it is assessed that there will be no magnitude of change resulting in **No Visual Effects** at completion or in the long-term.

Additional Mitigation, Monitoring and Residual Effects

- 17.7.65 No further mitigation is proposed beyond that set out under Embedded Mitigation, although details of the proposed landform, GI and lighting would be subject to approval with SADC at reserved matters. The residual effects are therefore as set out above. This takes into the account the management regimes set out within the final LEMP and SMMP.

17.8 Cumulative Effects

- 17.8.1 As explained above, all cumulative schemes have been considered. Those that have been judged to be of relevance are Schemes H2, 1, 2, B3 and Hm01 outlined in Table 17.2 which are assessed below. It is important to note that the Development has been designed to reduce landscape and visual impacts through the provision of structure planting along its perimeter, where required, and green corridors between built development parcels. Tree planting will be incorporated along the primary road and within open space as well as new tree and hedgerow planting along minor roads where feasible.

Scheme H2 – East Hemel Hempstead (North)

- 17.8.2 Cumulative landscape and visual effects have been considered for the Development along with the 'H2 East Hemel Hempstead (North)' scheme for up to 1,600 new homes..

Construction

Assessment

- 17.8.3 East Hemel Hempstead (North) – Scheme H2 – is located immediately south/ south-east of the Site between Hemel Hempstead Road, the eastern edge of Hemel and the M1. The northern/ north-eastern part of Scheme H2 also falls within LCA 96: Upper Ver Valley and there is some inter-visibility with the Site from; Woodend Cottages (receptor A8), the Nickey Line/ Hertfordshire Way (receptor B1), PRoW Redbourn 013 (receptor B6ii) and the B487 Hemel Hempstead Road (receptor C1). It is considered that Scheme H2 and the Development will very much be seen in the context of one another, with Scheme H2 ultimately preventing some views of the Development. While there may be a slight increase in effect upon landscape character, it is judged that the assessment level of **Moderate Adverse** (not significant) remains, as although there will be an increase in built development it will be relatively modest as an overall proportion of the LCA, and the affected part of the LCA is separated from the wider area by the M1 corridor.
- 17.8.4 The southern and eastern parts of Scheme H2 fall within LCA 94: Buncefield Plateau and there is limited inter-visibility with the Site from PRoW Redbourn 013 (receptor B6i) although it is considered that Scheme H2 will ultimately prevent views of the Development. It is judged that the effects upon the LCA will increase slightly to **Moderate Adverse** (not significant) given the increase in built development within it.
- 17.8.5 Scheme H2 will sit within the urban edge context adjacent to residential and industrial development and is anticipated to prevent some views of the Development. Given this, and the relatively limited visual envelope of the Site, it is judged that effects upon local views remain as assessed – **Major/ Moderate Adverse** (significant – receptors A8, B1, B6ii) and **Moderate Adverse** (not significant – receptor C1).

Mitigation, Monitoring and Residual Effects

- 17.8.6 No mitigation is required; effects are anticipated to remain as above.

Completed Development

Assessment

- 17.8.7 Operational effects upon LCAs 96: Upper Ver Valley and 94: Buncefield Plateau are considered to increase slightly, becoming **Moderate/ Minor Adverse** (not significant) in the longer term.
- 17.8.8 Effects upon some local views, where there is potential for receptors to experience views of both the Development and Scheme H2, are also anticipated to increase, becoming **Major/ Moderate Adverse** (significant – receptors A8, B1, B6ii) and **Moderate Adverse** (not significant – receptor C1) in the longer term. The visual effect upon receptor B6i remains **Minor Adverse** (not significant) as assessed since the scheme will likely prevent views of the Development.

Mitigation, Monitoring and Residual Effects

- 17.8.9 No mitigation is required; residual effects are anticipated to remain as above.

Scheme 1 – 5/2016/2845 – Land Between Three Cherry Trees Lane and Cherry Tree Lane, Hemel Hempstead

- 17.8.10 Cumulative landscape and visual effects have been considered for the Development along with the 'Phase 2 Spencers Park, Phase 2 West' – Scheme 1 – for up to 600 new homes, primary school, local centre, B1, B2, B8 employment together with associated infrastructure and landscaping.

Construction

Assessment

- 17.8.11 The Cherry Trees Lane scheme is located south/ south-west of the Site at the north-eastern edge of Hemel. While the northern part of Scheme 1 also falls within LCA 96: Upper Ver Valley, there is no inter-visibility with the Site owing to a combination of landform and the intervening settlement edge. Scheme 1 will sit within the urban edge context adjacent to residential and industrial development. Given this, and the relatively limited visual envelope of the Site, it is judged that no cumulative construction effects will occur on either the landscape or visual resource as a result of the Development.

Mitigation, Monitoring and Residual Effects

- 17.8.12 No mitigation is required; no effects are anticipated.

Completed Development

Assessment

- 17.8.13 It is judged that no cumulative operational effects will occur on either the landscape or visual resource as a result of the Development.

Mitigation, Monitoring and Residual Effects

17.8.14 No mitigation is required; no residual effects are anticipated.

Scheme 2 – 5/2021/3631 – Land At Gaddesden Lane, Redbourn

17.8.15 Cumulative landscape and visual effects have been considered for the Development along with the 'Land at Gaddesden Road' – Scheme 2 – of up to 300 new homes together with associated infrastructure and landscaping.

Construction

Assessment

17.8.16 The Gaddesden Lane scheme is located north-east of the Site between Redbourn and the M1. While Scheme 2 also falls within LCA 95: Revel End Plateau, there is no inter-visibility with the Site owing to a combination of landform, the M1 corridor which is partly in-cutting as it passes Scheme 2, and intervening vegetation. Scheme 2 will sit within the village edge context adjacent to residential development and the M1. Given this, and the relatively limited visual envelope of the Site, it is judged that no cumulative construction effects will occur on either the landscape or visual resource as a result of the Development.

Mitigation, Monitoring and Residual Effects

17.8.17 No mitigation is required; no effects are anticipated.

Completed Development

Assessment

17.8.18 It is judged that no cumulative operational effects will occur on either the landscape or visual resource as a result of the Development.

Mitigation, Monitoring and Residual Effects

17.8.19 No mitigation is required; no residual effects are anticipated.

Scheme B3 – West Redbourn

17.8.20 Cumulative landscape and visual effects have been considered for the Development along with the 'B3 West Redbourn' – Scheme 4 – of up to 545 new homes and primary school together with associated infrastructure and landscaping.

Construction

Assessment

17.8.21 The West Redbourn scheme is located north-east of the Site between Redbourn and the M1. While Scheme 4 also falls within LCA 95: Revel End Plateau, there is no inter-visibility with the Site owing to a combination of landform, the M1 corridor which is partly in-cutting as it passes Scheme 4, and intervening vegetation. Scheme 4 will sit within the village edge context adjacent to residential development and the M1. Given this, and the relatively limited visual envelope of the Site, it is judged that no cumulative construction effects will occur on either the landscape or visual resource as a result of the Development.

Mitigation, Monitoring and Residual Effects

- 17.8.22 No mitigation is required; no effects are anticipated.

Completed Development

Assessment

- 17.8.23 It is judged that no cumulative operational effects will occur on either the landscape or visual resource as a result of the Development.

Mitigation, Monitoring and Residual Effects

- 17.8.24 No mitigation is required; no residual effects are anticipated.

Scheme Hm01 – North Hemel Hempstead Growth Area

- 17.8.25 Cumulative landscape and visual effects have been considered for the Development along with the 'Hm01 North Hemel Hempstead Growth Area' for up to 5,000 new homes, four primary schools, a secondary school and 8No. gypsy and traveller pitches together with associated infrastructure and landscaping.

Construction

Assessment

- 17.8.26 The North Hemel Growth Area – Scheme Hm01 – is located immediately north/ north-west of the Site between the northern edge of Hemel and Gaddesden Lane, extending westwards. The eastern part of Scheme Hm01 also falls within LCA 95: Revel End Plateau and there is some inter-visibility with the Site from; Holtsmere End, Holtsmere Manor (receptor A4), PRow Flamstead 040 (receptor B7), PRow Flamstead 041 (receptor B8), bridleway Hemel Hempstead 128 (receptor B9), PRow Great Gaddesden 048 (receptor B11) and Holtsmere End Lane (receptor C2). It is considered that Scheme Hm01 and the Development will very much be seen in the context of one another. While there will be an increase in effect upon landscape character, it is judged that the assessment level of **Moderate Adverse** (not significant) remains, albeit at the upper end of the scale, as although there will be an increase in built development it will be relatively modest as an overall proportion of the LCA.
- 17.8.27 Scheme Hm01 will sit within the urban edge context adjacent to residential development and is anticipated to prevent some views of the Development. Given this, and the relatively limited visual envelope of the Site, it is judged that effects upon local views remain as assessed – **Major/ Moderate Adverse** (significant – receptors A4, B11), **Moderate Adverse** (not significant – receptor C2), **Moderate/ Minor Adverse** (not significant – receptor B9), **Negligible Adverse** (not significant – receptor B7) and **Neutral** (not significant – receptor B8).

Mitigation, Monitoring and Residual Effects

- 17.8.28 No mitigation is required; effects are anticipated to remain as above.

Completed Development

Assessment

- 17.8.29 Operational effects upon LCA 95: Revel End Plateau are considered to increase slightly, becoming **Moderate/ Minor Adverse** (not significant) in the longer term.
- 17.8.30 Effects upon local views are also anticipated to increase slightly for some receptors, where there is potential to experience views of both the Development and Scheme Hm01, becoming **Major/ Moderate Adverse** (significant – receptors A4, B11) and **Moderate Adverse** (not significant – receptor C2) in the longer term. The visual effect upon receptor B9 remains **Minor Adverse** (not significant) as assessed since the scheme will likely prevent views of the Development.
- 17.8.31 Assuming a carefully considered landscape mitigation strategy forms part of the Hm01 proposals, to include sensitive landscaping between the built development edge and receptors A4 and B11, the level of cumulative effect upon these receptors – assessed as significant – is likely to reduce.
- 17.8.32 While there is potential for an increase in level of effect upon views from the north (receptors B7, B8) given the proximity of Scheme Hm01, this will be dependent upon the layout which should be designed to minimise visual effects upon views from the Chilterns NL.

Mitigation, Monitoring and Residual Effects

- 17.8.33 No mitigation is required; residual effects are anticipated to remain as above.

17.9 Summary

- 17.9.1 A summary of the residual effects is provided in Table 17.3 below.

Table 17.3: Summary of Residual Effects (*includes significant effects only – refer to Appendix 17.3 and Appendix 17.4 for full assessment of Landscape and Visual Effects respectively*)

Impact	Receptor (Sensitivity)	Magnitude of Impact (scale, size of degree of landscape change)	Additional Mitigation and Monitoring	Residual Effect
Construction Stage				
Landscape Effects				
Construction works, traffic movement, temporary spoil heaps/ fencing, tree/ hedgerow removal to facilitate road infrastructure	H1: North Hemel Hempstead Parcel F: Revel End Slopes Site and Immediate Context (Medium)	High/ Medium	None	Major/ Moderate Adverse (significant) temporary ⁷ , short/ medium term, at a local level
Visual Effects				
Construction activity – views of primary road infrastructure, building construction, external works, landscaping – i.e. SuDS, allotments – site fencing/ hoarding	B4: Redbourn 011 (High/ Medium)	High	None	Major Adverse (significant) temporary, short/ medium term, at a local level
Construction activity – including views of the Site accesses on the B487, STC junction, primary road infrastructure, building construction, external works, landscaping – i.e.	A4: Holtsmere End, Holtsmere Manor A8: Woodend Cottages B1: Nickey Line/ Hertfordshire Way B3: Redbourn 010 B6ii: Redbourn 013	High/ Medium	None	Major/ Moderate Adverse (significant) temporary, short/ medium term, at a local level

⁷ Some construction operations will be comparatively temporary in nature such as the accesses from the B487 and Holtsmere End Lane but the construction phases of the development will be over the short and long term.

Impact	Receptor (Sensitivity)	Magnitude of Impact (scale, size of degree of landscape change)	Additional Mitigation and Monitoring	Residual Effect
Community Park/ SANG, sports pitches, SuDS – site fencing/ hoarding	B11: Great Gaddesden 048 (High/ Medium) C3: Little Revel End (Medium)			

Completed Development

Landscape Effects

Loss of green fields, relaced with built development and associated GI	H1: North Hemel Hempstead Parcel F: Revel End Slopes Site and Immediate Context (Medium)	High/ Medium (Yr 1) Medium (Yr 15)	None	Major/ Moderate Adverse (Yr 1) (significant) Moderate Adverse (Yr 15) (not significant) permanent, long term, at a local level
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Visual Effects

Development in place – views of housing, allotments, SuDS, landscape planting	B4: Redbourn 011 (High/ Medium)	High (Yr 1) High/ Medium (Yr 15)	None	Major Adverse (Yr 1) (significant) Major/ Moderate Adverse (Yr 15) (significant) permanent, long term, at a local level
Development in place – including views of Site accesses on the B487, STC junction, primary road, housing, primary school, care facility,	A4: Holtsmere End, Holtsmere Manor A8: Woodend Cottages B1: Nickey Line/ Hertfordshire Way B3: Redbourn 010	High/ Medium (Yr 1) Medium (Yr 15)	None	Major/ Moderate Adverse (Yr 1) (significant) Moderate Adverse (Yr 15) (not significant)

Impact	Receptor (Sensitivity)	Magnitude of Impact (scale, size of degree of landscape change)	Additional Mitigation and Monitoring	Residual Effect
Community Park/ SANG, sports pitches, landscape planting	B6ii: Redbourn 013 B11: Great Gaddesden 048 (High/ Medium) C3: Little Revel End (Medium)			permanent, long term, at a local level

Cumulative Assessment

H2: Construction (Visual Effects)

Loss of green fields, relaced with built development and associated GI	A8: Woodend Cottages B1: Nickey Line/ Hertfordshire Way B6ii: Redbourn 013 (High/ Medium)	High/ Medium	None	Major/ Moderate Adverse (Yr 15) (significant) temporary, short/ medium term, at a local level
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H2: Completed Development (Visual Effects)

Development in place – views of built development	A8: Woodend Cottages B1: Nickey Line/ Hertfordshire Way B6ii: Redbourn 013 (High/ Medium)	High/ Medium	None	Major/ Moderate Adverse (Yr 15) (significant) permanent, long term, at a local level
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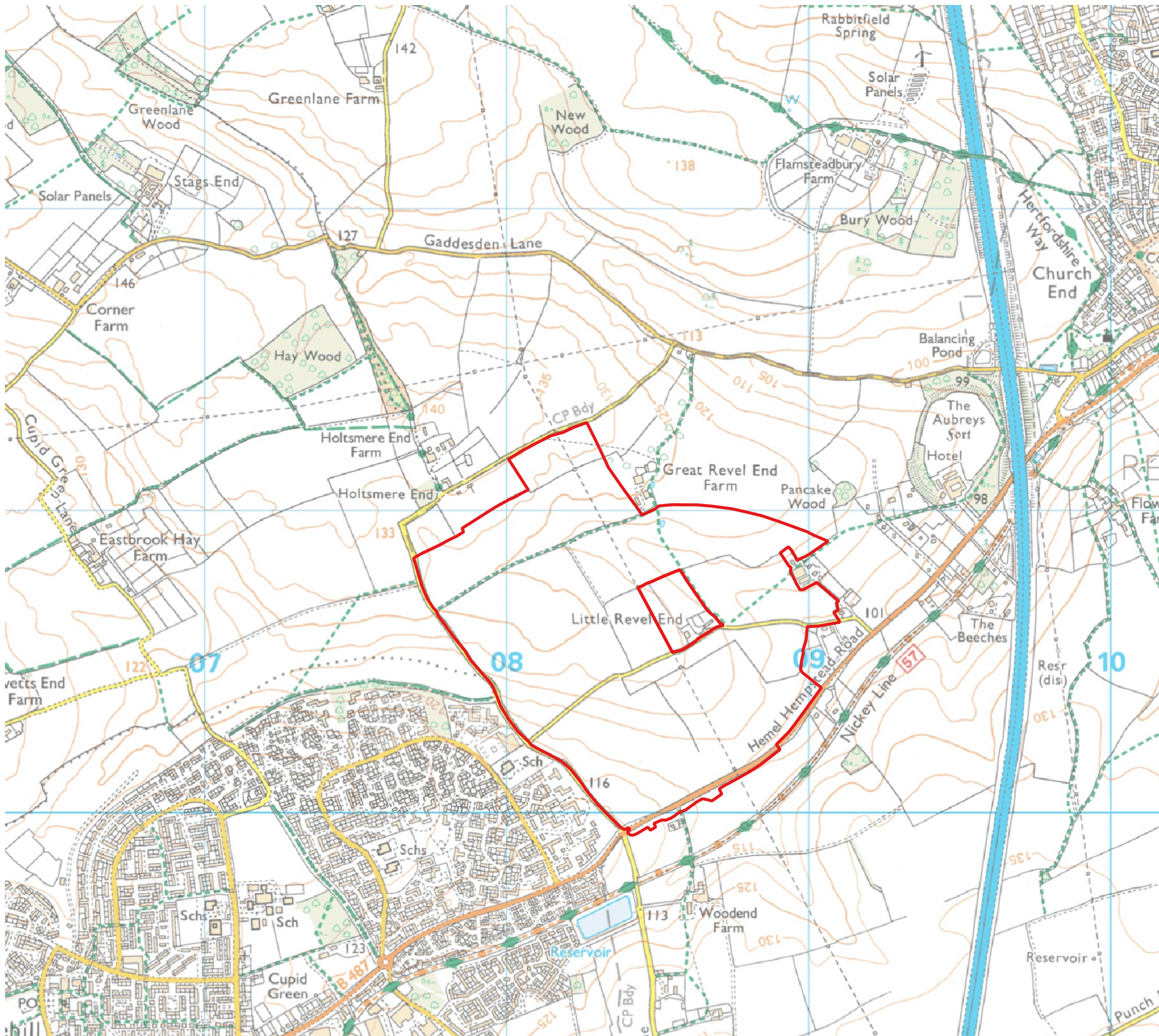
Hm01: Construction (Visual Effects)

Loss of green fields, relaced with built development and associated GI	A4: Holtsmere End, Holtsmere Manor B11: Great Gaddesden 048 (High/ Medium)	High/ Medium	None	Major/ Moderate Adverse (Yr 15) (significant) temporary, short/ medium term, at a local level
---	---	--------------	------	--

Impact	Receptor (Sensitivity)	Magnitude of Impact (scale, size of degree of landscape change)	Additional Mitigation and Monitoring	Residual Effect
<i>Hm01: Completed Development (Visual Effects)</i>				
Development in place – views of built development	A4: Holtsmere End, Holtsmere Manor B11: Great Gaddesden 048 (High/ Medium)	High/ Medium	None	Major/ Moderate Adverse (Yr 15) (significant) permanent, long term, at a local level

References

- ¹ Ministry of Housing, Communities and Local Government (December 2024) *National Planning Policy Framework (NPPF)*
- ² St Albans City and District Council (2024) *Draft Local Plan 2041 - Regulation 19 Publication September 2024*
- ³ Redbourn Parish Council Redbourn *Neighbourhood Plan 2020-2038*
- ⁴ Ministry of Housing, Communities and Local Government, Ministry of Housing, Communities and Local Government (2018-2021) and Department for Levelling Up, Housing and Communities (2024) *National Planning Practice Guidance (NPPG)*
- ⁵ Landscape Institute, Institute of Environmental Management and Assessment (2013) *Guidelines for Landscape and Visual Impact Assessment, GLVIA3*
- ⁶ Landscape Institute (2021) *TGN 02/21 Assessing landscape value outside of national designations*
- ⁷ Landscape Institute (2024) *TGN 2024-01 Notes and Clarifications on Aspects of Guidelines for Landscape and Visual Impact Assessment (GLVIA3)*
- ⁸ Chilterns Conservation Board (2025) *Chilterns National Landscape Management Plan 2025-2030*
- ⁹ Land Use Consultants (2022) *Hertfordshire Green Infrastructure Strategy*
- ¹⁰ Land Use Consultants (2011) *St Albans District Green Infrastructure Plan*
- ¹¹ CBA, Buro Happold, Corylus (2024) *Hemel Garden Communities Green Infrastructure Strategy*
- ¹² Landscape Institute (2019) *TGN 06/19 Visual representation of development proposals*
- ¹³ Natural England (2025) *NCA Profile 110: Chilterns*
- ¹⁴ The Landscape Partnership (2000-2005) *Hertfordshire Landscape Character Area Statements (2000-2005) St Albans District*
- ¹⁵ St Albans City and District Council, (2024) *St Albans Local Plan 2041, Broad Locations – Landscape + Visual Appraisal*
- ¹⁶ Hankinson Duckett Associates (2024) *North Hemel Landscape Assessment*



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KEY



date 18/11/25
drwn/chkd
MW / EAF

client
Pigeon and Bloor Homes
project

Hemel Hempstead

title **SITE LOCATION** scale 1:12,500 @ A3

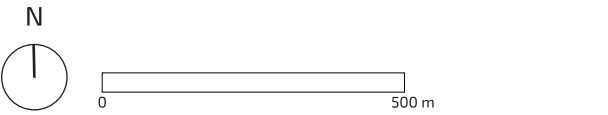
number **FIGURE 17.1** rev **A**

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KEY

- Site Boundary
- Public Rights of Way
- Bridleway
- Footpath
- Unclassified Road

date	drwn/chkd
18/11/25	MW / EAF

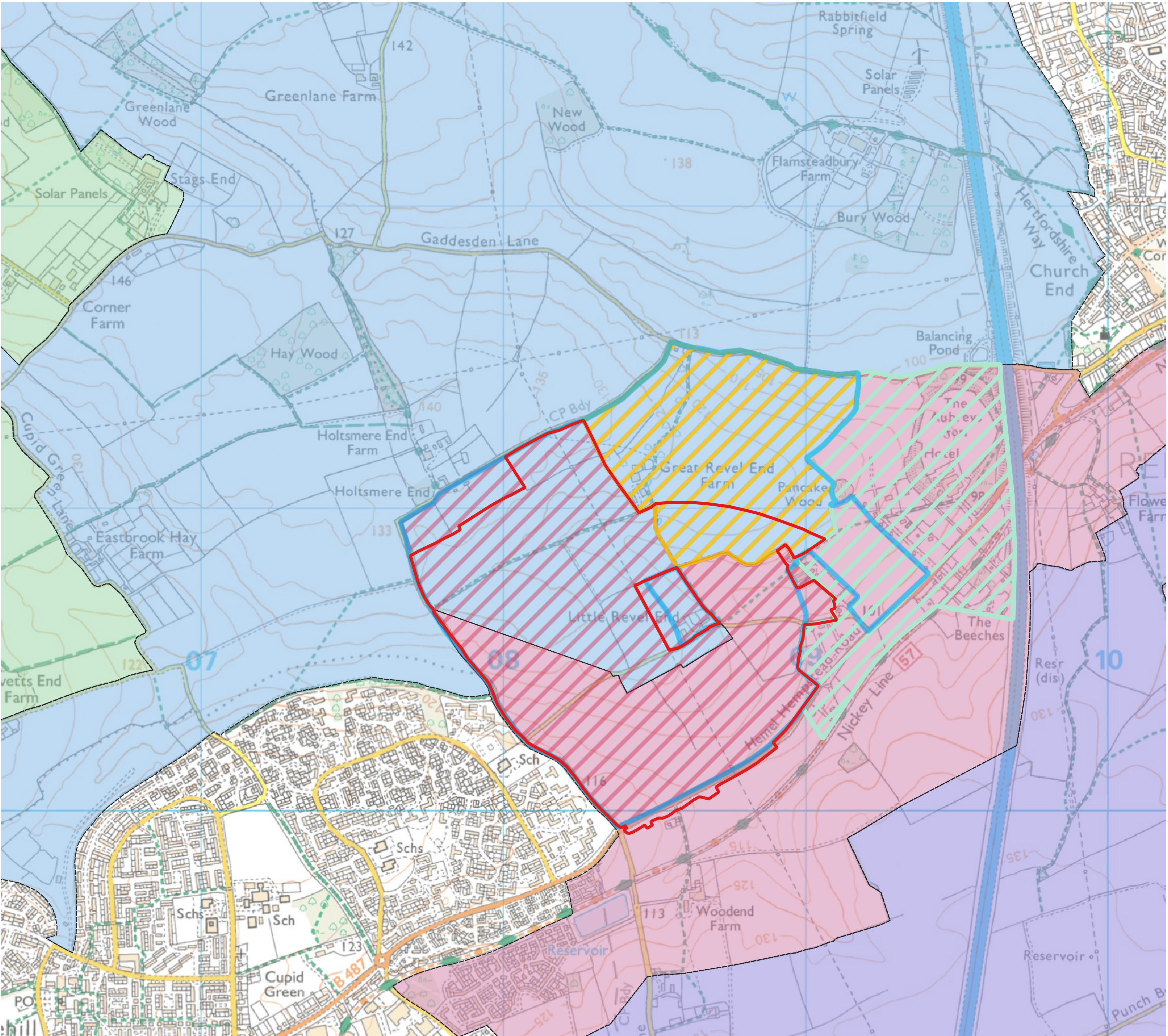
client
Pigeon and Bloor Homes
project

Hemel Hempstead

title	scale
AERIAL PHOTOGRAPH	1:12,500 @ A3

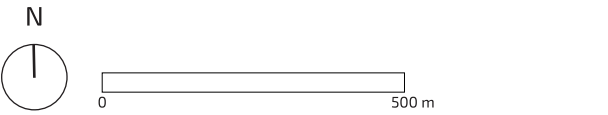
number	rev
FIGURE 17.2	A

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KEY

Site Boundary

National Character Area 110: Chilterns

Hertfordshire Landscape Character Area Statements (2000-2005) St Albans District:

- 094 Buncefield Plateau
- 095 Revel End Plateau
- 096 Upper Ver Valley
- 124 Gaddesden Row

St Albans Local Plan 2041, Broad Locations - Landscape + Visual Appraisal (2024):

- H1 - North Hemel Hempstead, AL3 7AU

North Hemel Landscape Assessment (2024):

- LCA E - Gaddesden Lane Southern Slopes
- LCA F - Revel End Slopes
- LCA G - Upper Vea Valley

date 18/11/25 drwn/chkd MW / EAF

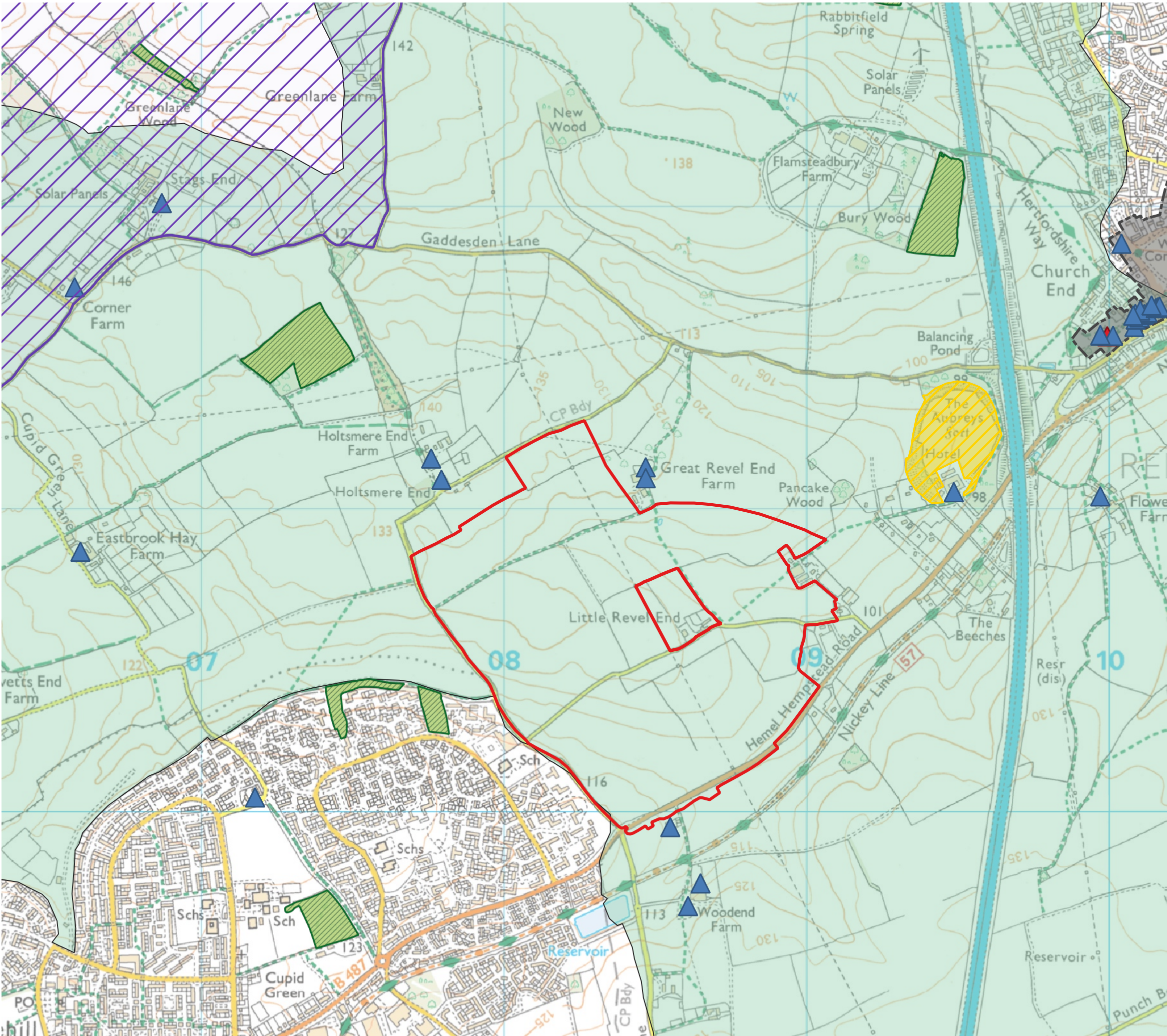
client **Pigeon and Bloor Homes**

project

Hemel Hempstead

title **LANDSCAPE CHARACTER AREA** scale 1:12,500 @ A3

number **FIGURE 17.3** rev **A**



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- KEY
- Site Boundary
 - Ancient Woodland
 - Chilterns National Landscape (NL)
 - Redbourn Conservation Area
 - Scheduled Monument - The Aubreys (Plateau Fort)
 - Green Belt (London Area)
- Listed Buildings
- Grade I*
 - Grade II*

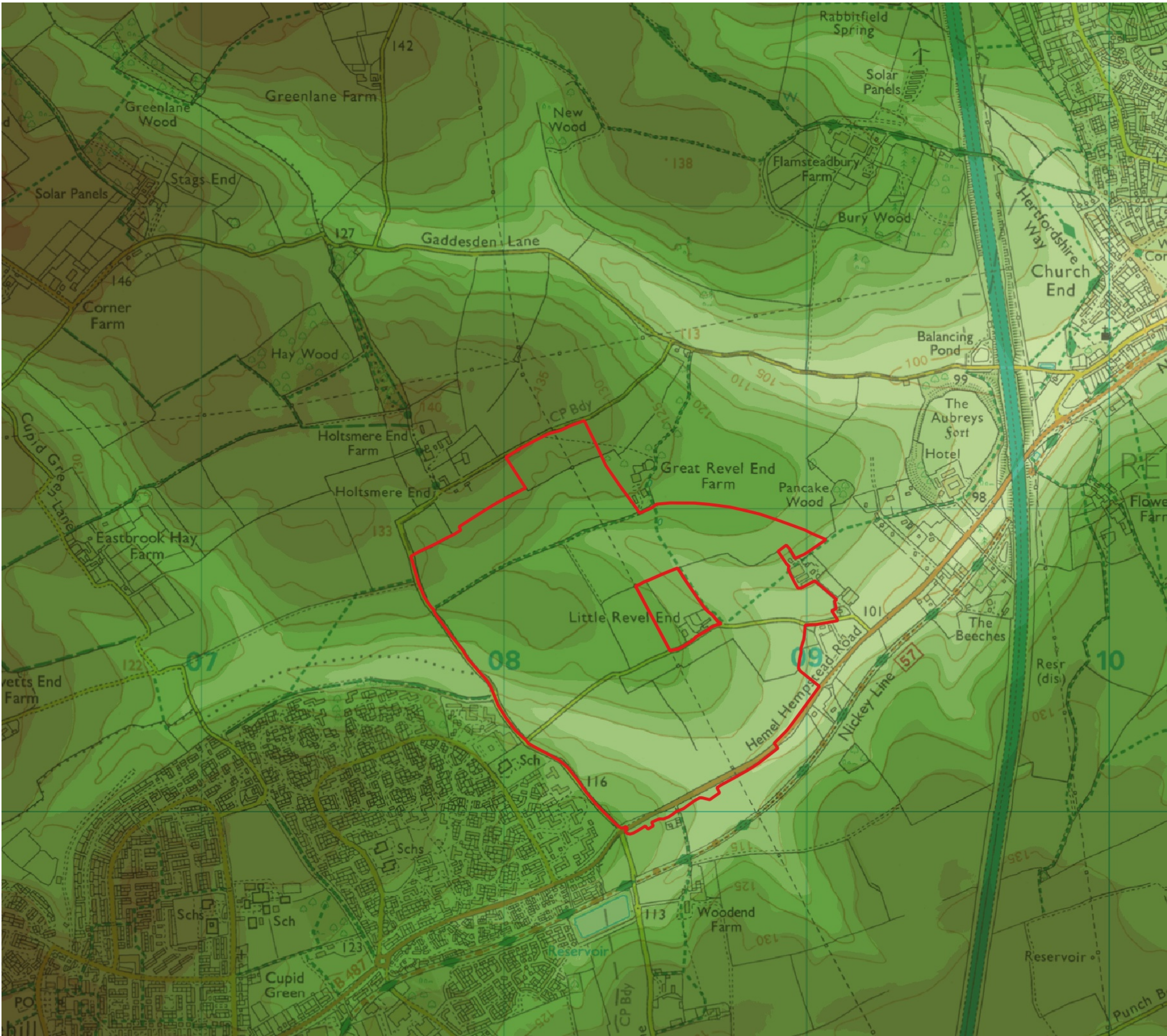
date 18/11/25
drwn/chkd MW / EAF

client
Pigeon and Bloor Homes
project
Hemel Hempstead

title
DESIGNATIONS
scale 1:12,500 @ A3

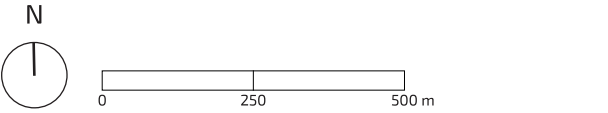
number
FIGURE 17.4
rev
A

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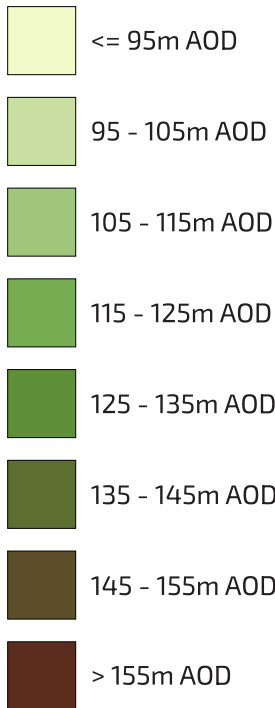
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Site Boundary

Topography



date 18/11/25 drwn/chkd MW / EAF

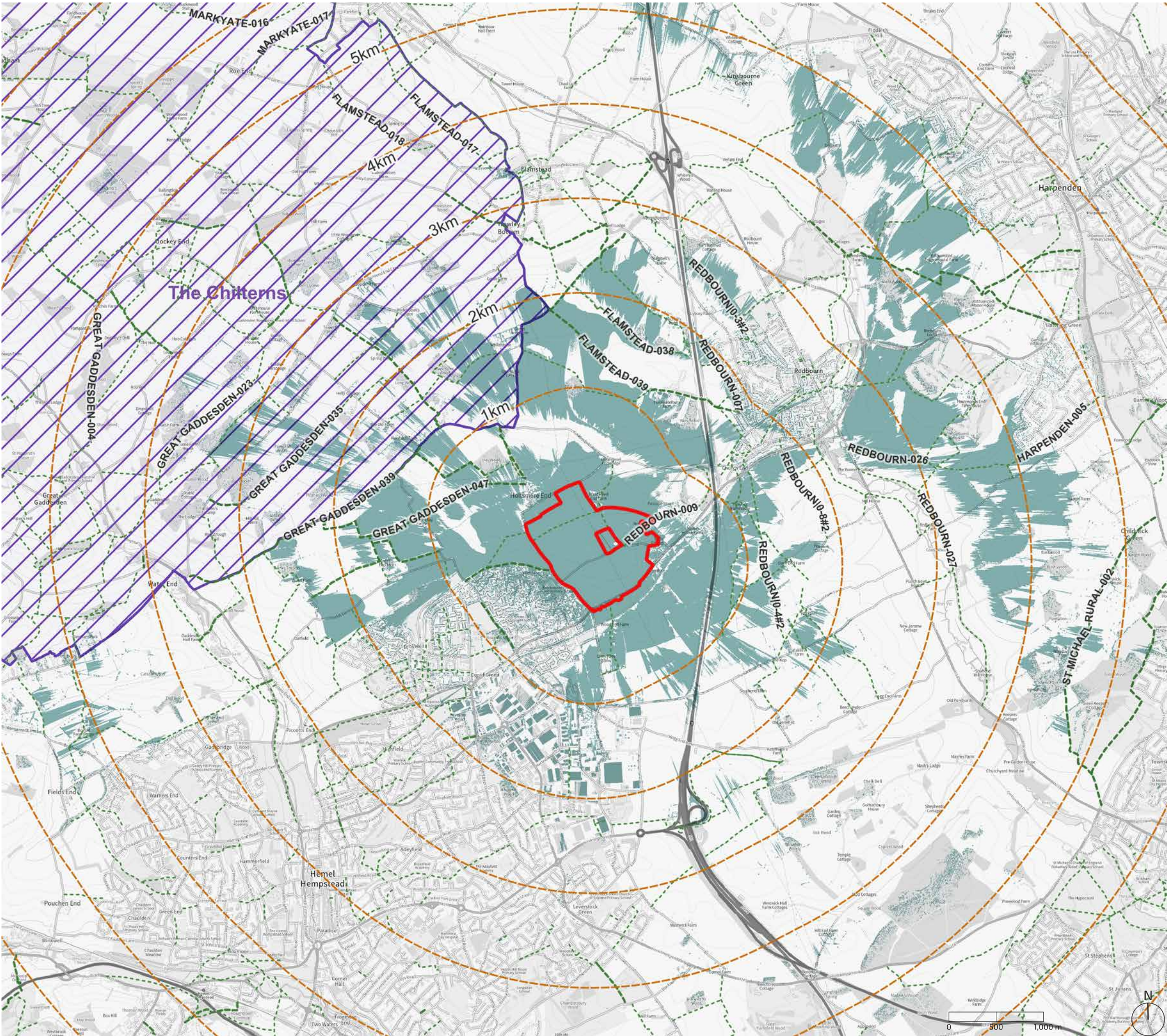
client Pigeon and Bloor Homes

project Hemel Hempstead

title TOPOGRAPHY scale 1:12,500 @ A3

number FIGURE 17.5 rev A

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-  Site Boundary
-  Distance from Site Boundary
-  Zone of Theoretical Visibility (ZTV)

Notes:

A ZTV is a digitally produced plan showing areas of land within where development may theoretically be visible. The ZTV takes into account screening effects of landform, significant vegetation, and built form. The ZTV does not taken into account containment/screening created by the Proposed Development's landscape mitigation (ie structural landscape planting).

Site surveys and fieldwork provide a more accurate assessment of visibility of the Site and the expected views (full, partial, glimpsed) of the Proposed Development during the construction stage, on full completion (year 1), and in the longer term (year 15) after completion.

The ZTV is based upon a maximum height of 12m high buildings. 1.5m level increase in ground level has been added.

The ZTV is based on the Heights Strategy Plan contained in the ES.

The surrounding context is modelled using LIDAR Composite First Return DSM (Digital Surface Model) 2022 - 2m published by the Department for Environment Food and Rural Affairs (DEFRA). The first return DSM includes heights of objects, such as buildings and vegetation, as well as the terrain surface where the first or only return was the ground.

date 19/11/25 drwn/chkd HT/BC

client Pigeon and Bloor Homes
project

Hemel Hempstead

title ZONE OF THEORETICAL VISIBILITY (ZTV) scale 1:40,000 @ A3

number FIGURE 17.6 rev -