# ARUP

# **Sevenoaks District Council**

# Landscape and visual evidence for the Sevenoaks Local Plan 2040

Main report – Final Reference: 304016-00/Final 02| 15 November 2024



This report takes into account the particular instructions and requirements of our client. It is not intended for and should not be relied upon by any third party and no responsibility is undertaken to any third party. Job number 304016-00

Ove Arup & Partners Limited

8 Fitzroy Street London W1T 4BJ United Kingdom

arup.com

# Contents

1.	Executive summary	1
2.	Introduction	2
2.1	Context	3
2.2	Approach	6
3.	Site assessments	8
3.1	Cumulative assessment for Option 1 sites	8
4.	Options assessment	11

# Appendices

Appendix A – Site assessments	A-1
Appendix B – Methodology	B-1
Appendix C – Document and data review	C-2

# 1. Executive summary

Sevenoaks District Council (SDC) is working on a new Local Plan which will address the period through to 2040 (Local Plan 2040). SDC commissioned Arup to prepare landscape and visual evidence to assist in the preparation of future plan-making.

This study provides a comparative assessment of three options being considered to deliver new housing: Option 1 (residential development within nine sites on the edge of Sevenoaks, Westerham and West Kingsdown), Option 2 (a standalone mixed use settlement at Pedham Place) and Option 3 (a combined approach of options 1 and 2). All sites are within the green belt and the Kent Downs National Landscape.

Through assessing each of the 10 sites, this study provides an indication of the likely sensitivity and potential effect of development with respect to landscape and views. It should be noted that the landscape and visual impact of any development proposals will depend on site specific and design quality details, which would need to be assessed individually and in detail as part of a comprehensive landscape and visual impact assessment (LVIA) to accompany any planning application.

All Option 1 sites are located on the edges of settlements, and the Option 2 site is adjacent to a settlement. Furthermore, the perceptual qualities of all sites are already affected by intrusion from major roads to some extent. However, this study has found that there would be potential significant effects on landscape and views for all three options. All of the options considered would directly affect the Kent Downs National Landscape and its setting. There would also be cumulative effects if all of the Option 1 sites were to be developed.

There is potential for some degree of mitigation within all of the sites that could reduce effects. For some of the sites there is also potential to reduce the site area to avoid development in the most sensitive parts. However, whilst this would reduce effects, it would also reduce the numbers of houses able to be accommodated which may affect viability of the sites.

Overall, Option 2 (the Pedham Place site) would be more able to accommodate development of the type proposed due to its land use, character, context and larger size. This site offers more opportunity for incorporating more extensive mitigation, and there are also more opportunities to provide benefits to landscape and visual amenity, and more potential to provide enhancements that may further the purposes of the National Landscape, both on and off-site, as well as compensatory mitigation and benefits for local communities.

In line with national policy, exceptional circumstances would need to be demonstrated to justify harm on the National Landscape and how this would be minimised through the planning and design process.

# 2. Introduction

Sevenoaks District Council (SDC) is working on a new Local Plan which will address the period through to 2040 (Local Plan 2040). SDC commissioned Arup to prepare landscape and visual evidence to assist in its plan-making following its second Regulation18 consultation (2023/24). However, during this period the Government has consulted on amendments to the National Planning Policy Framework (NPPF) (30<sup>th</sup> July – 24<sup>th</sup> September 2024). Whilst the consultation continues to provide National Landscapes with high levels of protection, it presents some wide-ranging potential changes which will need to be incorporated into SDC's new Local Plan. This study will form part of the evidence base to help inform future plan-making.

Sevenoaks lies approximately 34km from central London, within the green belt. The quality and value of the landscape is reflected through the designation of approximately 60% of the district as National Landscape (previously Area of Outstanding Natural Beauty): the Kent Downs in the north of the District and the High Weald in the south. It is regarded as an attractive place to live; its proximity to the capital and its connections to the motorway network have helped it grow from a population of approximately 40,000 in 1900 to over 120,000 today. Much of the post-war expansion was focused in and around the market town of Sevenoaks, but there are many other smaller settlements which contribute to its character and identity. The green belt and National Landscape designations cover the majority of the district, leaving little room for growth. This has made meeting the exceptional demand for new housing very difficult, particularly outside of the urban centres, and the Council has faced several speculative planning applications to develop out into the surrounding countryside.

SDC has carried out two Regulation 18 consultations on Local Plan 2040. The first consultation (2022/23) looked to optimise development in existing settlements and urban areas, including through the use of brownfield land, mixed use development and higher density development. However, this did not go far enough to meet the identified housing need. The second consultation (2023/24) looked at the wider district and proposed sites for allocation within the green belt and the Kent Downs National Landscape. Therefore 'baseline sites' were identified, which include sites located within the settlements, in addition to sites within the green belt adjacent to higher tier settlements. The second Regulation 18 consulted on three options:

- Option 1 baseline sites plus nine smaller sites on the edge of Sevenoaks, Westerham and West Kingsdown, all of which fall in both the green belt and National Landscape;
- Option 2 baseline sites plus one large stand-alone settlement at Pedham Place near Swanley/Eynsford/Farningham, which also falls in both the green belt and National Landscape; and
- Option 3 a combined approach of both the above options.

An additional site west of Sevenoaks at Brittains Lane was subject to a speculative planning application. This site was the subject of a public inquiry, won by SDC. This site is not assessed as part of this study, but the Inspector's report has been used as background information.

This study provides a comparative assessment of Option 1 and Option 2, providing a more detailed and sitespecific analysis to help the Council decide how sustainable development can be achieved. It considers the extent to which the special qualities of the Kent Downs National Landscape are reflected in each of the 10 sites, and the effects of potential development in these locations, building on the existing evidence. It also considers whether any potential mitigation may reduce or avoid harm on the landscape and National Landscape, and highlights opportunities to conserve and enhance the Kent Downs National Landscape in accordance with the statutory purpose of National Landscapes to conserve and enhance natural beauty. The study has considered potential cumulative effects on the setting of the Kent Downs for Option 1 and Option 3.

Through assessing each of the 10 sites, this study provides an indication of the likely sensitivity and potential effect of development with respect to landscape and views. It should be noted that the landscape and visual impact of any development proposals will depend on site specific and design quality details, which would need to be assessed individually and in detail as part of a comprehensive landscape and visual impact assessment (LVIA) to accompany a planning application. The potential allocation sites are illustrated in **Figure 001** and **Figure 002**.

Site reference	Site address	Urban/Green belt	Use	No. of units
		Sevenoaks Urban Area (Option 1 sites)		
HO28	Land between Back Lane and the A21, Bessels Green	Green belt and National Landscape	НО	183
HO29	Brittains Lane, Kippington, Sevenoaks	Green belt and National Landscape	НО	300
MX13	Land at Moat Farm, off Horndean Road, Chipstead	Green belt and National Landscape	MX	70
		Westerham (Option 1 sites)	·	·
HO30	Land south of Farley Lane, Westerham	Green belt and National Landscape	НО	10
HO31	Land east of Croydon Road (Southern parcel), Westerham)	Green belt and National Landscape	НО	82
HO32	Land east of Croydon Road (Northern parcel), Westerham	Green belt and National Landscape	НО	76
MX14	Land at Wolfe Westerham, 190 London Road, Westerham)	Green belt and National Landscape	MX	10
		West Kingsdown (Option 1 sites)		
НО33	Land at Mill Farm, West Kingsdown	Green belt and National Landscape	НО	115
HO34	Land at Millfield Road, West Kingsdown	Green belt and National Landscape	НО	30
		Standalone settlement (Option 2 site)		
MX15	Pedham Place, London Road, Swanley	Green belt and National Landscape	MX	2,500

#### Table 2-1 Extract from SDC draft policy ST2 Housing and mixed use site allocations

# 2.1 Context

#### 2.1.1 Kent Downs National Landscape

The Kent Downs National Landscape was designated in 1968 to recognise its nationally important quality and character. Lying almost entirely within the county of Kent and covering around 23% of the total land area of the county, it rises to an altitude of 250m above ordnance datum (AOD) at its highest point at Toy's Hill south of Sevenoaks and is crossed in three places by river valleys including the Darent.

The Kent Downs are the eastern half of the North Downs ridge of chalk stretching from Farnham in Surrey to the English Channel - the western half of the chalk ridge lies within the adjacent Surrey Hills National Landscape. The North Downs, along with part of the Greensand Ridge and Lympne Escarpment, form the Kent Downs National Landscape.

The rich landscape of the Kent Downs is made up of landscape components with special characteristics and qualities which are defined in the Kent Downs AONB Management  $Plan^1$  and listed in **Table 4-2** in **Appendix B** – **Methodology.** When the Kent Downs was confirmed as an AONB, the core aspects for its designation was described as follows:

"The scarp slope and dry valleys of the Kent Downs are the main target for designation, particularly where they retain a downland character, that woodlands are highly valued throughout the designated area and particularly on the scarp slope and dry valley sides, and that other qualities of note are views from the escarpment, pastoral scenery, parklands, villages, churches and castles."<sup>2</sup>

The character of the Kent Downs is described in the Kent Downs Landscape Character Assessment<sup>3</sup>. The character areas relevant to the study are: the Greensand Ridge (to the south); the Darent Valley; and the West Kent Downs (to the north). These are described in further detail below. The town of Sevenoaks is inset within the Kent Downs National Landscape, but the designation washes over smaller settlements including Westerham, Brasted, Farningham, Shoreham and Eynsford. Sevenoaks lies at the western end of the Kent Downs National Landscape.

#### Greensand Ridge

The Greensand Ridge around Sevenoaks in the south rises in a steep, tree-covered south-facing scarp. Its gentler north-facing dip-slope is scored by a series of deeply cut valleys and has long views across to the chalk scarp on the far side of the Darent Valley and Kemsing Vale.

Historically the Greensand Ridge was sparsely settled owing to its relatively poor-quality soils, and the area remained dense forest interspersed with occasional summer pastures until the 10<sup>th</sup> and 11<sup>th</sup> centuries. Today, the dominant characteristics of the landscape are still the thick woodland and heathy commons. Woodlands enclose the landscape, and there is much ecological value in the widespread acid woodland and grasslands. Larger fields are often edged by thick strips of mature trees or dark walls of woodland. Between the woodland and commons are pockets of farmland, some of which are historic assarts (fields cleared from woodland in the medieval period) with irregular-shaped fields. The wider landscape is home to several parkland estates including Squerryes Court and Knole Park.

Settlement is within a low-density linear pattern along the edges of the commons. Lanes are narrow and winding, and often sunken. The present A25 follows an old, important route along the northern edge of the greensand. Sevenoaks town is located on the north-facing slope of the Greensand Ridge. The use of vernacular materials (ragstone, brick and hung tile) in historic settlements gives a sense of place and time-depth.

#### Darent Valley

The chalk stream of the Darent flows east from Westerham through the wide clay vale between the chalk and greensand ridges to the north and south. There is a rich history and surviving heritage of habitation of the Darent Valley, with Roman remains including at Lullingstone Roman Villa and castles at Lullingstone and Eynsford. The peaceful, rural character of the river valley today belies a busier and more industrial past, including watermills, the remnants of which are seen today in converted mill-houses and occasional ditches.

Old routeways such as the North Downs Way and the Pilgrims' Way follow the ridges and base of the scarp along the valley side, with historic droveways linking the valley floor with higher pastures. Many of the lanes are sunken and lined with trees and hedgerows.

Long views can be experienced within the valley, and there are also panoramic views across the valleys from the adjacent scarps. Away from major roads, it is possible to experience a sense of tranquillity.

<sup>&</sup>lt;sup>1</sup> Kent Downs Area of Outstanding Natural Beauty Management Plan 2021-2026

<sup>&</sup>lt;sup>2</sup> Countryside Commission, Kent Downs Designation Report, 1984

<sup>&</sup>lt;sup>3</sup> Kent Downs AONB Landscape Character Assessment Update 2020, revised 2023

The Darent Valley is popular for recreation, and contains several visitor attractions including Lullingstone Roman Villa, Lullingstone Country Park, Lullingstone Castle and gardens, Eynsford Castle and attractive villages such as Westerham and Eynsford. Villages, historically functioning as coaching stops, retain cores with distinctive character set along the route of what is now the A25.

#### West Kent Downs

This is a well-wooded area, which creates an enclosed and often intimate landscape and provides a backdrop for the rolling landform, the network of small country lanes, scattered settlements and valley pastures.

Suburbanisation from ribbon development around Knatts Valley and East Hill and the disparate range of fences, gateways, sheds and ornamental conifer trees gives an urban-edge feel to some of the area. Nevertheless, historic and ancient landscape patterns remain dominant elements in the wider countryside.

### 2.1.2 Legislation and national policy

The National Parks and Access to the Countryside Act 1949 legislated for the designation of AONBs and National Parks. Their purpose was to be similar – to conserve and enhance natural beauty. The government commissioned a review of National Parks and AONBs in 2018, which culminated in a series of recommendations to strengthen the protections of these areas. This included rebranding AONBs as National Landscapes, although AONB remains the legal definition. The Levelling Up and Regeneration Act, which received royal assent in November 2023, strengthened the duties on relevant authorities such that they must now seek to further the purpose of National Landscapes in conserving and enhancing these areas.

The National Planning Policy Framework (NPPF)<sup>4</sup> and the government's Planning Practice Guidance (PPG)<sup>5</sup> place great importance on the conservation of nationally designated landscapes.

- Paragraph 20 of the NPPF requires development plans to include strategic policies which set out an overall strategy for the pattern, scale and design quality of places, including with specific reference to the conservation and enhancement of the natural, built and historic environment.
- Paragraph 80 goes further by requiring planning policies and decisions to contribute to and enhance the natural and local environment, including by protecting and enhancing valued landscapes and recognising the intrinsic character and beauty of the countryside.
- Chapter 15 of the NPPF 'Conserving and enhancing the natural environment', paragraph 180 a) states that "*Planning policies and decisions should contribute to and enhance the natural and local environment by: a) protecting and enhancing valued landscapes...*"
- The principle of "valued landscape" in England is supported by NPPF paragraph 180, which requires that planning policies and decisions should contribute to and enhance the natural and local environment by, inter alia, (a) "protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan)".
- With respect to landscapes with statutory status, paragraph 182 states:

"Great weight should be given to conserving and enhancing landscape and scenic beauty in National Parks, the Broads and Areas of Outstanding Natural Beauty which have the highest status of protection in relation to these issues. The conservation and enhancement of wildlife and cultural heritage are also important considerations in these areas, and should be given great weight in National Parks and the Broads. The scale and extent of development within all these designated areas should be limited, while development within their setting should be sensitively located and designed to avoid or minimise adverse impacts on the designated areas."

<sup>&</sup>lt;sup>4</sup> National Planning Policy Framework, December 2023

<sup>&</sup>lt;sup>5</sup> Planning practice guidance – Natural environment – Landscape, 2019

• Paragraph 183 states:

"When considering applications for development within National Parks, the Broads and Areas of Outstanding Natural Beauty, permission should be refused for major development<sup>6</sup> other than in exceptional circumstances, and where it can be demonstrated that the development is in the public interest. Consideration of such applications should include an assessment of:

*a)* the need for the development, including in terms of any national considerations, and the impact of permitting it, or refusing it, upon the local economy;

*b)* the cost of, and scope for, developing outside the designated area, or meeting the need for it in some other way; and

*c)* any detrimental effect on the environment, the landscape and recreational opportunities, and the extent to which that could be moderated."

This study is contributing to the understanding of item c) above with respect to the potential detrimental effects on the landscape and the extent to which that could be moderated.

The government has proposed revisions to the NPPF in a draft document published on 30 July 2024 and which is currently out for consultation. The changes to the NPPF do not propose any substantial amendments to the policy position or protection for National Landscapes.

# 2.2 Approach

The purpose of this study is to understand the sensitivity of the option sites in more detail and the potential landscape and visual effects of development within them. Section 1 of the Guidelines for Landscape and Visual Impact Assessment, 3<sup>rd</sup> Edition (GLVIA3)<sup>7</sup> recognises that landscape and visual impact assessment (LVIA) can be applied formally or informally and at different scales. It is typically carried out in support of development proposals, and for outline consent it is generally applied to development proposals with defined parameters, including the height and mass of buildings and details of the proposed landscape and public realm with reference to design codes. GLVIA3 is also clear that the principles of LVIA can be applied as part of plan-making, for example through Strategic Environmental Assessment (SEA) in support of development plans. It acknowledges that assessment as part of SEA will be more strategic and generic, as there is no clearly specified project to be assessed.

The scope of this assessment requires a hybrid approach which considers potential effects of hypothetical developments on specific sites, both individually and together, and a more strategic consideration of the potential effects on the Kent Downs National Landscape to support the plan-making process and to allow SDC to differentiate between different growth options and sites.

A bespoke methodology has therefore been developed for this study, which is detailed in **Appendix B** – **Methodology.** It follows the key stages below:

- Desk study and data review understand the context and existing landscape and visual evidence;
- **Define development parameters** describe a hypothetical development scenario to understand the scale of development anticipated and to form a consistent understanding of potential impacts;
- Field survey understand the character of each site, particularly the perceptual qualities;
- Site assessments analyse the landscape and visual baseline of each site, the potential for mitigation and the site's ability to accommodate development;
- **Cumulative assessment** explore the potential cumulative impacts of development on all of the Option 1 sites;

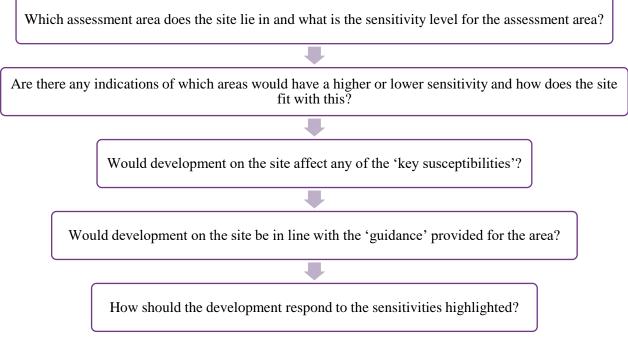
<sup>&</sup>lt;sup>6</sup> "For the purposes of paragraphs 182 and 183, whether a proposal is 'major development' is a matter for the decision maker, taking into account its nature, scale and setting, and whether it could have a significant adverse impact on the purposes for which the area has been designated or defined."

<sup>&</sup>lt;sup>7</sup> Landscape Institute and Institute of Environmental Management & Assessment (IEMA), Guidelines for Landscape and Visual Impact Assessment, 3rd Edition, 2013 (GLVIA3)

• **Options assessment** – provide an overall recommendation on Option 1 or Option 2 based on the findings of the assessments.

#### Sevenoaks Landscape Sensitivity Assessment

There is already a wealth of landscape evidence for Sevenoaks, and this study draws on the existing evidence as much as possible. The Sevenoaks Landscape Sensitivity Assessment<sup>8</sup> provides a character area overview of comparative landscape sensitivity around the key settlements of the district. It provides context for more detailed studies of individual sites, an overall indication of relative landscape sensitivity of different areas and guidance about what sort of locations might be appropriate for development. The following questions are set out in section 1.4 of the Sevenoaks Landscape Sensitivity Assessment in relation to how to assess specific sites:



1 'How to assess specific sites' - replicated from the Sevenoaks Landscape Sensitivity Assessment

These questions are answered in relation to each site through the analysis within each site assessment, alongside consideration of potential mitigation, the likely geographical extent of effects and how effects may affect people's views and visual amenity.

<sup>&</sup>lt;sup>8</sup> Sevenoaks Landscape Sensitivity Assessment, May 2017

# 3. Site assessments

Each site has been assessed separately in line with the method. A map showing the locations of all the sites is provided in **Figure 001 Site Location Overview** and the detailed site assessments are provided in **Appendix** A - Site assessments. A summary of the findings for each site is provided in **Table 3-1**.

Site code / settlement	Site name	Potential significance of effects	Potential significance of effects with additional mitigation (n/a indicates additional mitigation would not reduce significance of effects)
HO28 (Sevenoaks)	Land between Back Lane and the A21, Bessels Green	High	Medium
HO29 (Sevenoaks)	Brittains Lane, Kippington, Sevenoaks	High	Low-medium
MX13 (Sevenoaks)	Land at Moat Farm, off Homedean Road, Chipstead	Medium	n/a
HO30 (Westerham)	Land south of Farley Lane, Westerham	Medium-high	Low-medium
HO31 (Westerham)	Land east of Croydon Road (southern parcel), Westerham	Medium	n/a
HO32 (Westerham)	Land east of Croydon Road (northern parcel), Westerham	Medium	n/a
MX14 (Westerham)	Land at Wolfe Westerham, 190 London Road, Westerham	Low-medium	n/a
HO33 (West Kingsdown)	Land at Mill Farm, West Kingsdown	Medium	n/a
HO34 (West Kingsdown)	Land at Millfield Road, West Kingsdown	Low-medium	n/a
MX15	Pedham Place, London Road, Swanley	High	Low-medium

Table 3-1 Summary findings for site assessments

## 3.1 Cumulative assessment for Option 1 sites

Cumulative effects may result from the combination or interaction of all, or some of, the potential Option 1 developments together. There may be cumulative effects on landscape character, the special qualities of the Kent Downs National Landscape, or on views and visual amenity which would be over and above the effects resulting from each development individually. The types of cumulative effects may include:

- Cumulative effects of construction, including construction vehicles, hoardings and construction activities on the character and visual amenity within the wider landscape, on roads, including rural lanes, and on the special qualities of the National Landscape. Whilst the construction programmes of each individual development may not necessarily overlap and the construction effects for each development site would be temporary, there may nevertheless be sequential effects relating to the presence of machinery and activity in and around the National Landscape over an extended timescale.
- Effects related to site access, which would often necessitate removal of existing vegetation including trees or hedgerows; an effect which would be multiplied over multiple sites.

- Effects on landscape character related to multiple developments affecting the same or multiple character areas.
- Effects on the special qualities and purpose of the Kent Downs National Landscape and its setting.
- Effects on views and visual amenity of people seeing more than one development from a particular location or in sequential views.

### 3.1.1 Cumulative effects of Option 1 sites

The cumulative effects of the Option 1 sites are considered below in relation to the Kent Downs National Landscape character areas.

#### LCA 4a: Chevening (formerly West Darent), Darent Valley

Sites MX13, HO30, HO31, HO32 and MX14 fall within the Darent Valley character area, and the effects on the character of this area may therefore be cumulative. Major road corridors including the M25 already affect the physical pattern and perceptual qualities of the landscape in the Darent Valley. However, siting further developments in proximity to these transport corridors could be perceived as reducing the existing landscape buffer to these corridors, intensifying the urban influences and disruption to the rural character, further diminishing the relative tranquility. This effect is particular to the Darent Valley, where the landscape is flatter, and roads may not be concealed by cuttings, landform and dense woodland buffers. Whilst it may be considered preferable to locate development within these less tranquil areas, there are nevertheless potential effects which should be considered cumulatively.

For the sites on the edge of Westerham the combined ZTV (**Figure 003**) indicates that there may be visibility of potential development on all sites from the high point on Hosey Hill, the public right of way near Squerrys Court (within the grade II Registered Park and Garden), and potentially from some local roads and the Pilgrim's Way promoted route. These locations are all over 1km from the sites and within the views, new development would be seen in the context of existing development within Westerham. However, there is nevertheless potential for significant cumulative visual effects given the sensitivity of the visual receptors in these locations.

Within the village of Westerham, the cumulative impact of sites HO30, HO31 and HO32 would add to the size of Westerham, potentially affecting the relationship between the village and the surrounding landscape, and there may therefore be negative effects related to the increase in traffic and activity within the village.

#### LCA 5a: Westerham Greensand, Sevenoaks Greensand Ridge

There are two sites (HO28 and HO29) within the Greensand Ridge, both on the edge of Sevenoaks. However, both sites include areas of higher ground which, if developed, would be likely to result in significant effects on the character of the Greensand Ridge. Whilst the sites are relatively enclosed by woodland, their location on the edge of Sevenoaks means that they are likely to be valued by the local community for their openness and access for recreation and amenity, in addition to making a contribution to the Kent Downs National Landscape and its setting.

For the sites on the edge of Sevenoaks, the combined ZTV (**Figure 004**) indicates that there are some locations where there may be intervisibility of potential development on two of the sites (MX13 and HO28), but few locations where all three sites would be visible (MX13, HO28 and HO29). Cumulative visual effects would be concentrated on public rights of way west of the A21 which are already affected by views of development.

Within Sevenoaks, development of the three sites would result in filling in of land between the edge of the settlement and woodlands and major roads. However, the proximity of existing larger and more extensive modern development means that smaller developments would have a relatively lower effect on the character of the wider town.

#### LCA 1a: Kingsdown, West Kent Downs

The two sites on the edge of West Kingsdown (HO33 and HO34) in addition to the baseline site HO27 adjacent to HO33 are within the West Kent Downs. Site HO34, which is at the opposite end of the settlement, is very enclosed and within a different character area identified in the Sevenoaks Landscape

Character Assessment. Whilst there may be some cumulative effects related to construction, cumulative effects on landscape character would be unlikely to be significant. Site HO33 and the adjacent baseline site HO27 are both at the eastern end of West Kingsdown and south of the A20 London Road. Together they would represent a moderate increase in the size of the settlement and would extend development south of the A20. There would also be a cumulative increase in the extent and perception of urban development extending into the wider landscape.

For the sites on the edge of West Kingsdown the combined ZTV (**Figure 005**) indicates that there are very few locations where there may be intervisibility of potential development on the two of the sites (HO33 and HO34), and therefore it is not anticipated that there would be significant cumulative effects on views and visual amenity. There is, however, the potential for significant cumulative effects on views from the baseline site and site HO33, which would depend on the specific design of developments proposed on the site. Significant visual effects would be likely to be relatively contained in extent.

Within West Kingsdown, due to the separation of the two sites, and the relatively small size of HO34, the cumulative effects on the character of the settlement are considered unlikely to be significant.

### 3.1.2 Cumulative effects of Option 1 sites on the Kent Downs National Landscape

All of the Option 1 sites lie entirely within the Kent Downs National Landscape, with the exception of HO29 which lies partly within the National Landscape and partly within its setting. The National Landscape washes over the settlement of Westerham, the settlement of Sevenoaks is inset from it, and the settlement of West Kingsdown is excluded from it. Therefore, the sites adjacent to Westerham are all completely surrounded by the National Landscape designation, whilst the other sites are on the edge of the designation.

The sites are all located on the edges of existing settlements and therefore development within the sites would represent a physical and perceptual extension to an existing settlement. There is already precedent for development within the National Landscape in existing settlements such as Westerham, Brasted and Sunridge.

Development of the type, size and scale outlined by the design parameters at nine different but proximate locations within the National Landscape, would result in cumulative effects on the special qualities of the National Landscape within the district. The effects would be spread out to some extent, although the incremental encroachment of development into the countryside would be perceptible, representing a gradual erosion of the landscape setting of settlements and the integrity of the National Landscape. Whilst difficult to quantify the level of potential cumulative effect, the high value of the receptor and the perceptible degree of change, means it is considered likely to be significant.

The site assessments identify effects on the special qualities of the Kent Downs National Landscape, including on scenic quality, biodiversity, trees and woodland, farmland character, heritage value, soils and resources, naturalistic qualities and sense of relative tranquillity. Whilst on a site by site basis the effects would be relatively contained, cumulatively they would be slightly more important with respect to the statutory purpose to protect and enhance natural beauty of the landscape.

There is potential for mitigation to reduce the significance of effects on the special qualities, but for most sites it is considered that significant effects would remain. There are also some limited opportunities for enhancements with respect to the legal duty on SDC to seek to further the statutory purpose of the designated landscape. This could include, for example, measures such as off-site biodiversity enhancements, off-site landscape management, improvements to public rights of way, management of the River Darent and reducing the effects of existing detractors such as motorways or major roads through management or restoration of tree planting.

# 4. Options assessment

This section sets out a comparison of Option 1 (the nine sites on the edge of Sevenoaks, Westerham and West Kingsdown), Option 2 (the Pedham Place site) and Option 3 (a combined approach of options 1 and 2) based on the individual site assessments and the cumulative assessment of Option 1 sites.

#### **Option** 1

Option 1 comprises smaller sites, where effects would be more contained, but effects would be more spread out across the National Landscape. All sites are located on the edges of settlements, and the perceptual qualities of all sites are already affected by intrusion from major roads to some extent. The extent to which effects would extend beyond the site boundaries would vary depending on aspects such as the topography and exposure, the extent and density of existing vegetation and the proximity and integration with existing settlement.

Each site has its own sensitivities, and effects on landscape character, the special qualities of the National Landscape, and views, would differ depending on the particular characteristics of each site. When considered in combination, there are potentially a range of effects which could be significant if all of the sites were to be developed. These include:

- Effects on the setting of, or gateway into, settlements, for example where development would increase density next to urban edges which are currently well-integrated or where existing urban edges become gradually dispersed towards the wider landscape.
- Development on higher or undulating land, resulting in effects on landform and/or views.
- Effects on the wider character of the landscape including its rural and naturalistic qualities, and in some cases relative tranquillity, through a gradual encroachment into the countryside.
- Direct impacts on rural lanes and effects on their rural character.
- Effects on the setting of heritage assets.
- Effects on views and visual amenity, particularly for local communities, residents and users of public rights of way, through introducing new development into views where development may not already exist, intensifying views of development in combination with existing urban features, or where new development would be partially visible above trees or other features.
- Obscuring longer distance views of the National Landscape.
- Effects on the special qualities of the Kent Downs National Landscape, including views and vistas, biodiversity, trees and woodland, farmland character, heritage value, soils and resources, naturalistic qualities and sense of relative tranquillity.
- Cumulative effects relating to site access, which often necessitates removal of trees/hedgerows; an effect which would be multiplied over successive sites.
- Cumulative effects in combination with existing urban features such as roads, where the open land currently helps to buffer and integrate the road into the landscape, and where development could intensify the urbanising effects of the road.

There are opportunities for mitigation within all of the sites which would help to reduce effects to an extent, including tree planting and avoiding particularly sensitive features. Furthermore, for some of the sites, there is potential for additional mitigation in the form of a reduction in site area to avoid development in the most sensitive areas. However, whilst this would reduce effects, it would also reduce the numbers of houses able to be accommodated which may affect viability of the sites.

#### **Option 2**

Option 2 would see larger scale effects contained within one specific area. For the Pedham Place site the access from the north is existing and therefore need not result in any additional effects on landscape or

views. Whilst the site is not located directly on the edge of a settlement, it is adjacent to the south-east of Swanley, separated from it by the substantial and busy M25 motorway. The perceptual qualities of the site are negatively affected by the close proximity of the M25, M20 and A20 and electricity pylons, and it is a previously developed site where the landform has already been substantially modified and built upon.

Development may result in the following effects on landscape and views:

- Changes to the rural characteristics of the site and potentially the wider landscape.
- Loss of recreational value of the golf course.
- Changes to long views across the Darent Valley although views of development may be able to be screened, views would change to woodland, reflecting the woodland mitigation.
- Effects on the setting and sense of separation between Swanley and Farningham.

Due to its larger size, there is more opportunity for incorporating substantially larger areas and more diverse environmental mitigation and enhancement measures. If development was substantially set back from the southern and eastern parts of the site, and with extensive woodland planting on these ridges, this would be likely to reduce effects on views from the Darent Valley. Wooded ridgelines are a characteristic of the wider landscape, and therefore extensive woodland planting on the slopes and ridges could help to not only reduce effects on landscape and views but could help to restore a key landscape characteristic as well as providing biodiversity and other environmental benefits.

There would also more opportunities to provide benefits to landscape and visual amenity, and more potential to provide enhancements that may further the purposes of the National Landscape, both on and off-site, as well as compensatory mitigation and benefits for local communities.

### **Option 3**

Option 3 would result in the most significant effects, being a combination of options 1 and 2. However, there could be opportunity to incorporate some of the Option 1 sites with the least significant effects, in combination with a reduced development scenario for Option 2. The Option 1 sites or parts of sites which could be considered as part of this option include the following:

- HO29 with the additional mitigation identified.
- HO30 with the additional mitigation identified.
- MX14.
- HO34.

## Conclusion and recommendation

All sites reflect the landscape character of the wider character area in which they sit, and all sites contribute to the special qualities of the Kent Downs National Landscape to some extent. Development undertaken in line with the design parameters for all sites would result in a complete and substantial change in the physical pattern and character at the site level, given they are all currently either entirely or predominantly undeveloped greenfield sites. It is therefore likely that without mitigation there would be significant effects on landscape and views for both Options 1 and 2 and therefore also Option 3, affecting the statutory purpose of the National Landscape to conserve and enhance natural beauty.

There is potential for some degree of mitigation within all of the sites in both options 1 and 2 that could lower the significance of effects. Furthermore, there is potential for additional mitigation to reduce the site area for some of the sites in order to avoid development in the most sensitive areas. However, whilst this would reduce effects, it would also reduce the numbers of houses able to be accommodated which may affect viability of the sites or leave Option 3 as the only alternative.

Overall, it is considered that Option 2 would be likely to cause the least harm to the Kent Downs National Landscape compared to the other two options. Mitigation could more effectively minimise potential significant effects in the case of Option 2, the Pedham Place site. This is due to its larger size, providing more opportunity for incorporating more meaningful mitigation. There are also more opportunities to

provide benefits to landscape and visual amenity, and more potential to provide enhancements that may further the purposes of the National Landscape, both on and off-site, as well as compensatory mitigation and benefits for local communities.

If the Pedham Place site (MX15) is allocated, it is important that the design of the development follows a landscape-led approach which is informed by a comprehensive LVIA as part of the iterative design process. A masterplan and design code should be developed independently of development to ensure that adverse effects on the National Landscape are minimised and opportunities to further the purpose of the designation are maximised. The guidance within the site assessment for Pedham Place (MX15) should be developed further.

# Appendix A – Site assessments

See separate document.

# Appendix B – Methodology

This appendix sets out the detailed methodology for the study. A summary of the methodology is provided in **Section 2.2 Approach.** 

## B.1.1 Guidance

This study has been informed by the following guidance:

- Landscape Institute and Institute of Environmental Management and Assessment (IEMA), Guidelines for Landscape and Visual Impact Assessment, 3<sup>rd</sup> Edition, 2013 (GLVIA3)
- Landscape Institute, Notes and clarifications on aspects of Guidelines for Landscape and Visual Impact Assessment Third Edition (GLVIA), 2024
- Landscape Institute Technical Guidance Note (LI TGN) 02/21: Assessing landscape value outside national designations, 2021.
- Natural England, Guidance for assessing landscapes for designation as National Park or AONB in England, 2021
- Natural England, An approach to landscape sensitivity assessment to inform spatial planning and management, 2019
- Ministry of Housing, Communities and Local Government, National Design Guide, 2019

### B.1.2 Document and data review

The first stage of the study comprises developing an understanding of context set out within published documents and data. The key documents reviewed are set out in - **Document and data review**, alongside a brief summary as to how they have informed the study.

# B.1.3 Development parameters

In the absence of detailed proposals for each site, the scope of the study is intentionally high-level. The study assesses a hypothetical development scenario within each site against a standard set of development parameters and principles. These comprise a high-level set of assumptions as described below:

- Predominantly two to three storey residential dwellings with a maximum height of 10m to the top of the roofline.
- For the Pedham site a mix of uses has been assumed in line with the existing proposed masterplan (see image below) with a maximum building height of 12m.
- Maximum building heights have been assumed to represent a reasonable worst-case scenario, but in reality, would not be designed or built to the maximum heights across the whole of the site.
- Net density of 30-60 dwellings per hectare (dph) in accordance with emerging Local Plan policy H7.
- Appropriate dispersal of massing, including lower densities at the edges (30 dph) with boundaries to the green belt and wider countryside, and higher densities (up to 60 dph) towards the centres.
- Development would be of a sufficiently high quality to be considered well-designed places in accordance with the ten characteristics set out in the National Design Guide.

The common development parameters enable each site to be assessed separately in a consistent way.

Any future development within the sites would be designed for the site-specific context in line with the National Design Guide's ten characteristics of well-designed places and would be subject to more detailed and comprehensive landscape and visual impact assessment.



2 Indicative concept masterplan for Pedham Place - TPM Landscape Ltd, 2019, updated 2024

# B.1.4 Field survey

The landscape character and qualities of each of the sites and their sensitivity to the development parameters were tested through field survey and recorded on a survey form. Site visits were undertaken in August 2024 by Chartered Landscape Architects from public vantage points, rights of way and public highways within and in the vicinity of the study area.

## B.1.5 Site assessments

The assessment of each site follows a structured process which draws upon the existing landscape evidence in published character assessments and the Sevenoaks Landscape Sensitivity Study, 2017. Each site has been assessed separately and the results are presented in **Appendix A** – **Site assessments**. The structure of the site assessments is explained below in the order each section appears in the pro forma.

#### B.1.5.1 Context

The context section provides an overview of the site and a summary of its character, the key designations, constraints and its relationship to the Kent Downs National Landscape. It also identifies the sensitivity assessment area defined in the Sevenoaks Landscape Sensitivity Study which the site lies in, and the sensitivity rating given in that study for that area.

Table 4-1 shows the environmental designations, landscape features and areas considered for each site. The GIS data and data sources used for the study are provided in Appendix C – Document and data.

Environmental data type	Environmental data - description
Environmental designations within 100m	National Landscape
	Ancient woodland
	Tree preservation order
	Biodiversity opportunity area
	Site of Special Scientific Interest (SSSI)
	Kent Wildlife Trust reserve
	Local wildlife site
	Local nature reserve
	Roadside nature reserve
	Scheduled Monument
	Conservation area
	Registered Parks & Garden
	Listed building
	Archaeological notification area
	Kent compendium historic parks and gardens
	Flood zone 3
Other relevant planning considerations	Adopted allocation
within 100m	Baseline site
	Public right of way and cycle paths
	Town centres areas of change
	Urban confines
	Brownfield
	Registered common land
	Green belt
	Country parks
	Open space allocation
Landscape character	Kent Downs landscape character area
	Sevenoaks residential character area
	Sevenoaks landscape character area
Landscape sensitivity	Sevenoaks landscape sensitivity assessment area and sensitivity level

**Table 4-1 Environmental context** 

## B.1.5.2 Landscape sensitivity

The section on landscape sensitivity explores the aspects related to the existing physical features and the character, qualities and attributes of the site. These are evaluated through key characteristics, the value attached to the landscape, susceptibility to change, the contribution of the site to the Kent Downs National Landscape and existing detractors. There may be some overlap between these elements, and unnecessary repetition is avoided where possible.

Paragraph 2.5 of the Sevenoaks Landscape Sensitivity Study, 2017 notes that "the term 'sensitivity' in this study is equivalent to term 'susceptibility' as defined in the Landscape Institute and IEMA's 'Guidelines for Landscape and Visual Impact Assessment' (Third Edition)."

Natural England's subsequent Approach to landscape sensitivity assessment, 2019, states that "within the context of spatial planning and land management, landscape susceptibility is the degree to which a defined landscape and its associated visual qualities and attributes might respond to the specific development type / development scenario or other change without undue negative effects on landscape character and the visual resource."

Therefore, to be consistent with the latest best practice guidance, the term susceptibility has been used where the Sevenoaks Landscape Sensitivity Study, 2017, refers to sensitivity. Sensitivity is an overall judgment

when considering the value attached to the landscape and the susceptibility of the landscape to change, together.

#### Key characteristics

These are based on the bullet points set out in the Sevenoaks Landscape Character Assessment<sup>9</sup> for the relevant Landscape Character Area (LCA), supplemented with information as relevant from the Kent Downs AONB Landscape Character Assessment<sup>10</sup>, other published documents and information from field survey.

#### Key susceptibilities relevant to the site

The Sevenoaks Landscape Sensitivity Assessment was first reviewed to understand whether any areas were given higher or lower ratings, and how the site fits with this. Secondly, the key susceptibilities were noted. These are the features or attributes of the landscape which may be susceptible to change when considering the potential impact of the development parameters.

For consistency with the existing landscape evidence base, the list of key susceptibilities is based on the 'key susceptibilities' in the Sevenoaks Landscape Sensitivity Assessment. Other aspects related to the key characteristics have also been drawn out.

#### Key valued features and characteristics relevant to the site

This draws on information from published landscape character assessments and the Sevenoaks Landscape Sensitivity Assessment, environmental features noted within the context section, and field survey. In considering the valued landscape features and characteristics related to the site, the following aspects fed in as relevant, based on Natural England's approach to sensitivity assessment<sup>11</sup>:

- Designations;
- Character and sense of place;
- Valued attributes, such as topography, perceptual qualities, cultural and historic features and associations, biodiversity, National Landscape special qualities (although the special qualities of the Kent Downs National Landscape are described separately in the following section);
- Community values;
- Recreational value;
- Intrinsic value.

#### Contribution to the Kent Downs National Landscape

All of the sites within this study are located within the Kent Downs National Landscape. Paragraph A4.2.5 of LI TGN 02/21 states that "where a landscape has a statutory status, such as a National Park or AONB, it is self-evident that it is a valued landscape" in the context of NPPF (2023) paragraph 180.

Paragraph 5.2.4 of GLVIA3 states that:

"desk study of relevant documents will often, although not always, provide information concerning the basis for designation. But sometimes, at the more local scale of an LVIA study area, it is possible that the landscape value of that specific area may be different from that suggested by the formal designation. Fieldwork should help to establish how the criteria for designation are expressed, or not, in the particular area in question. At the same time it should be recognised that every part of a designated area contributes to the whole in some way and care must be taken if considering areas in isolation."

The Kent Downs National Landscape was designated in 1968 and detailed evidence which describes how its boundaries were defined is lacking. This assessment draws upon a report published by the Countryside

<sup>&</sup>lt;sup>9</sup> Sevenoaks Landscape Character Assessment (January 2017)

<sup>&</sup>lt;sup>10</sup> Kent Downs Landscape Character Assessment, 2020

<sup>&</sup>lt;sup>11</sup> Natural England, An approach to landscape sensitivity assessment - to inform spatial planning and management, 2019

Commission in 1984, which details the chronology of the designation and on the Kent Downs AONB Management Plan, which explains its special qualities. These special qualities are specific to the National Landscape and underpin its designation.

This assessment seeks to understand the extent to which the site reflects the special qualities of the Kent Downs National Landscape. **Table 4-2** sets out the special qualities of the Kent Downs National Landscape and has been used to make a qualitative assessment of the extent to which each of the qualities is reflected in each site. A high-level conclusion has then been made which highlights the contribution of the site to the Kent Downs National Landscape, and the extent to which the site adds to, enhances or has a role in the setting of the Kent Downs National Landscape.

Special components, characteristics and qualities of the Kent Downs National Landscape	Relevant information/ data
Dramatic landform and views: Impressive south-facing steep slopes (scarps) of chalk and greensand; scalloped and hidden dry valleys, especially valued where they have a downland character; expansive plateaux; broad, steep-sided river valleys, and the dramatic, wild and iconic white cliffs and foreshore. Breath-taking, long-distance panoramas are offered, often across open countryside, estuaries and the sea from the scarp, cliffs and plateaux. The dip slope dry valleys and river valleys provide more intimate and enclosed vistas.	<ul> <li>Contours on OS base maps.</li> <li>Field survey.</li> </ul>
Biodiversity-rich habitats:	Landscape character
Habitats found in the Kent Downs include chalk grassland and chalk scrub; woodlands (ancient woodland, veteran trees and wood pasture), traditional orchards and cobnut platts, chalk cliffs and the foreshore, chalk streams and wet pasture, ponds and spring lines; heath and acid grassland. Hedgerows and trees outside woodlands are key features of the landscape and serve an important wildlife function along with networks of linear features of shaws, flower-rich field margins and road verges.	<ul> <li>assessments and landscape sensitivity assessment.</li> <li>Datasets on priority habitats and ecological designations.</li> </ul>
Farmed landscape:	Landscape character
A long-established tradition of mixed farming has helped create and maintain the natural beauty of the Kent Downs. The pastoral scenery is a particularly valued part of the landscape. Farming covers around 64% of the AONB. Disconnected 'ribbons' of permanent grassland (shaves) are found along the steep scarp, valley sides, and on less-productive land having been created by grazing. Locally concentrated areas of orchards, cobnut plats (nut orchards), hop gardens other horticultural production are also present, their regular striate form can enhance the rise and fall of the land, increasingly widespread vineyards add to this ordered character.	assessments and landscape sensitivity assessment. • Natural England 'Living England Habitat Map' • Google Earth. • Field survey.
Woodland and trees:	• Datasets on ancient
Broadleaf and mixed woodland cover around 23% of the Kent Downs and frame the upper slopes of the scarp, dry valleys and plateaux tops. Almost 70% of the woodlands are ancient woodland meaning they have been continuously present at least since at least 1600; they support nationally important woodland plant and animal species. Large areas of sweet chestnut coppice are present throughout the Downs. Woodland is a much-valued component of the landscape, the sights, changing colours, smells and sounds adding to the perceptual qualities of the landscape.	<ul> <li>woodland.</li> <li>Woodland priority habitat layers.</li> <li>Google Earth.</li> <li>Field survey.</li> </ul>
Individual, hedgerow, fine and ancient trees outside woodlands are a most important characteristic and sometimes dramatic element of the landscape.	
A rich legacy of historic and cultural heritage:	Landscape character
In the original designation the characteristic villages, churches and castles are particularly noted and the historic settlement pattern remains an important distinctive component of the AONB. There are the remains of Neolithic megalithic monuments, Bronze Age barrows, Iron Age hill-forts, Roman villas, roads and towns, medieval villages and hamlets focused on their churches, post-medieval stately homes with their parks and gardens and historic defence structures from Norman times to the twentieth century.	<ul> <li>assessments and landscape sensitivity assessment.</li> <li>Datasets on historic statutory and non- statutory</li> </ul>
Fields of varying shapes and sizes and ancient wood-banks and hedges, set within networks of droveways and sunken lanes have produced a rich historic mosaic, which is the rural landscape of today. Architectural distinctiveness is ever present in the scattered villages and farmsteads and oast houses, barns and other characteristic agricultural buildings, farmsteads, churches and historic country houses. The diverse range of local materials used, which includes flint, chalk, ragstone, timber, brick and peg tile, contributes to the character, colour, tone and texture of the countryside.	designations.

Sevenoaks District Council

304016-00/Final | 02 | 15 November 2024 | Ove Arup & Partners Limited

Special components, characteristics and qualities of the Kent Downs National Landscape	Relevant information/ data
The AONB landscape has long been an inspiration to artists, scientists and leaders, from Shakespeare to Samuel Palmer, Darwin to Churchill and Turner to Moore; it was Toys Hill, in the Kent Downs, 'that inspired Octavia Hill to found the National Trust'. Today contemporary and more diverse publics are drawing their own inspiration from this extraordinary place.	
<b>The Heritage Coasts:</b> The White Cliffs form part of our national identity and display internationally important geological exposures, they form a soaring land and seascape of vast horizons of sea and sky extending westwards to the subtle crumbling Greensand and Clay cliffs of Folkestone. The wildlife of the Heritage Coasts is internationally important, the clifftops consisting of nationally important chalk grassland and scrub, the cliff-faces supporting important breeding sea bird colonies including Fulmars, Rock Pipits, Lesser-black backed Gulls and the only Kent population of Kittiwakes. Seabirds wheeling high in the sky connect the sea and sky	This criterion is not relevant to the study as none of the sites are close to the coast, so is not considered within the study.
<b>Geology and natural resources:</b> The imposing landform and special characteristics of the Kent Downs is underpinned by its geology. This is also the basis for the considerable natural capital and natural resources which benefit society. These include the soils which support an important farming sector and can sequester carbon; soil represents an important biodiversity resource in its own right. The water and the water resources which support rivers teeming with wildlife and offering enchanting landscapes. Hidden below the chalk is a significant aquifer providing 75% of Kent's drinking water and feeding the much-valued chalk streams of the Downs.	<ul> <li>Landscape character assessments and landscape sensitivity assessment.</li> <li>Presence of SSSIs or reference to other geological features of interest.</li> <li>Datasets on chalk rivers.</li> <li>Datasets on agricultural land classification.</li> </ul>
<b>Tranquillity and remoteness:</b> Surprisingly tranquil and remote countryside – offering dark night skies, space, beauty and peace. Simply seeing a natural landscape, hearing birdsong, seeing and hearing the sea, watching stars at night or 'bathing' in woodland are important perceptual qualities	<ul> <li>CPRE light pollution and dark skies interactive map.</li> <li>Google Earth - noting any large-scale development/ infrastructure</li> <li>Field survey.</li> </ul>
Summary of the extent to which the site reflects the special qualities of the National Landscape	Qualitative assessment of all the factors listed above.

Table 4-2 Contribution to the Kent Downs National Landscape

#### Existing detractors

Any detracting elements or characteristics have been noted, which may form the basis for future design guidance or opportunities for enhancement. These have been taken from published studies and from observations on site.

#### B.1.5.3 Visual amenity

#### Extent of potential visibility

The extent of potential visibility of development within the parameters on each site was assessed with reference to a Zone of theoretical visibility (ZTV) map. A ZTV is a computer-generated map showing areas of landscape within which the Proposed Development would either be screened or would be theoretically visible. ZTVs do not indicate how much of the Proposed Development will be visible and do not take account of distance or the acuity of the eye to be able to resolve details. The ZTV gives an indication of the areas from which there may be views, taking into account the influence of existing screening features such as trees and buildings. Fieldwork surveys have shown that other vegetation not modelled into the ZTV, for example along field boundaries and in private gardens, further reduces the extent of visibility indicated on the ZTVs. The methodology for producing the ZTV is provided below.

### Methodology for production of the ZTV

A zone of theoretical visibility (ZTV) is a map showing areas of land within which a development may be theoretically visible. ZTVs do not indicate how much of a proposed development will be visible. ZTVs have been modelled using the 'Viewshed' tool in ESRI ArcGIS Pro Software. ZTVs were prepared using LiDAR elevation data that includes models of existing buildings and woodland. This provides some understanding of the potential screening or filtering of views of the potential developments.

The data used for this viewshed was:

- Lidar Composite 1m DTM 2022
- Lidar Composite 1m DSM First Return 2022
- OS Buildings
- OS Woodland

An assumed viewing height of 1.6 m above ground level has been used to simulate the eye level of a person. Moreover, an error margin of 0.5m was taken into consideration. For the creation of the point datasets covering the sites a 50m grid was created; and a 100m grid for site MX15 due to the larger size of the site. A 10m elevation was added to the ground elevation of each point to represent a potential building height of 10m, or 12m for site MX15. Finally, the grid points overlapping with buildings and woodland were removed to avoid misleading results.

#### Key views

'Key views' are considered to be views from those locations where the most 'sensitive' people would be likely to experience relatively close-distance views of potential development.

#### Residents, local communities and people using the landscape for recreation

In accordance with GLVIA3, visual receptors (i.e. people) are most sensitive where their occupation or activity means that their attention is likely to be focussed on the landscape.

The most sensitive visual receptors are therefore people in existing residential properties, local communities and people using open spaces, promoted routes or public rights of way for recreation. A distance of up to 500m is considered appropriate to understand the areas where relatively close-distance views could be experienced. Whilst there is potential for people to experience more distant views of any future development, it is not within the scope of this assessment to identify all possible effects, and such views have therefore been scoped out, unless they are from key viewpoints, as described below. However, where there are potential views from promoted routes within 3km, these have been noted.

#### Key strategic views

Views from particularly important viewpoints have also been considered, up to 3km from the site. These include views represented by viewpoint symbols on the OS map and specific views identified in the published studies including the landscape character assessments and sensitivity study, or specific views noted in planning policy as being valued.

#### B.1.5.4 Potential effects and mitigation

Whilst the full range of impacts cannot be defined at this stage because the potential development is hypothetical, the development scenarios have allowed a judgement to be made on whether development would be likely to affect the key susceptibilities and valued features or characteristics associated with the site.

Consideration has also been given to the potential for mitigation where there are opportunities for development to avoid valued or susceptible features within the site, drawing on the guidance provided for the area(s) in the Sevenoaks Landscape Sensitivity Study. Opportunities for minimising residual effects with well-designed and sensitively considered mitigation are considered, as well as opportunities to restore or compensate for affected landscape features and characteristics.

#### B.1.5.5 Drawing conclusions

Each site assessment concludes by drawing together the considerations on landscape and visual character and sensitivity and the potential for mitigation. Consideration has been given to how development in line with the development parameters, with adequate mitigation integrated, may affect the key susceptibilities and valued features or characteristics associated with the site. This includes consideration of the contribution of the site to the Kent Downs National Landscape and how development within the site could affect its special qualities and statutory purpose.

Paragraph 1.15 of GLVIA3 recognises that terminology can be complex and potentially confusing, particularly in the use of the words 'impact' and 'effect' in LVIA within Environmental Impact Assessment and Strategic Environmental Assessment. The guidance distinguishes between the 'impact', defined as the action being taken, and the 'effect', defined as the change resulting from that action.

This assessment is intended to provide evidence to support the plan-making process and does not constitute a full LVIA for each site, which would be expected to be provided by an applicant with a planning application. The impacts cannot be defined in detail at this stage, because the detailed proposals are not known. Instead, this section of the assessment combines judgements on the sensitivity of the landscape and visual amenity with mitigation as a broader consideration of likely effects by considering the development parameters.

An overall judgement considers the potential level of landscape and visual effects, taking into consideration the opportunity for mitigation. Where part of a site is found to be more able to accommodate development, then constraints may be identified which would remove the more sensitive part of the site from development and another judgement on the significance of effects has been given. The judgements are based on the criteria in **Table 4-3**.

Criteria	Description		
	Development on the site in line with the development parameters has the potential to result in no significant effects on the character of the wider landscape, the special qualities of the Kent Downs National Landscape, or the views and visual amenity of people living, visiting and enjoying the local area; e.g.		
	• development would be unlikely to change the key characteristics e.g. development fits with landform, land cover patterns and settlement pattern; and/or		
	• the landscape may not contribute to the special qualities of the Kent Downs National Landscape, or contribute only to a very small degree; and/or		
Low	• there are few valued features or key susceptibilities within the site, or development could be located within the site whilst avoiding impacts on valued features and key susceptibilities; and/or		
	<ul> <li>site may be enclosed/visually contained/heavily screened or has a low degree of visibility from surrounding landscapes, particularly the Kent Downs National Landscape; and/or</li> </ul>		
	• there are few residential properties / recreational routes or sites nearby or few/ no strategic views from where potential development is likely to be visible; and/or		
	• effects on views would be likely to affect only very small numbers of people / receptors; and/or		
	• effects can be fully mitigated or mitigation / restoration could improve landscape character or restore degraded elements, or result in improved views.		
	Development on the site in line with the development parameters has the potential to result in some significant negative effects on the character of the wider landscape, the special qualities of the Kent Downs National Landscape, or the views and visual amenity of people living, visiting and enjoying the local area; e.g.		
	• development may slightly change the key characteristics e.g. development is at variance with landform, land cover patterns and settlement pattern; and/or		
Medium	• there may be changes in views from recreational routes or sites, or residential properties with views of the site; or likely to affect a medium number of people / receptors; and/or		
	• the site is partially screened, semi-enclosed or has some enclosed and some open areas. It is likely to have some inter-visibility with surrounding landscapes, perhaps including small parts of the Kent Downs National Landscape; and/or		
	• some effects likely to be mitigated,		
	Development on the site in line with the development parameters has the potential to result in substantial significant negative effects on the character of the wider landscape, the special qualities of the Kent Downs National Landscape, or the views and visual amenity of people living, visiting and enjoying the local area; e.g.		
	• development would be likely to change the key characteristics e.g. development is totally at variance with landform, land cover patterns and settlement pattern; and/or		
	• the landscape may contribute to the special qualities of the Kent Downs National Landscape; and/or		
High	• there are valued features and key susceptibilities within the site, and development is unlikely to be able to avoid impacts on valued features and key susceptibilities; and/or		
-	• the site may be very open and exposed, or has a high degree of visibility from surrounding landscapes, including the Kent Downs National Landscape; and/or		
	<ul> <li>there are residential properties adjacent to or with direct views of the site, or there is likely to be nearby views from recognised viewpoints on National Trails, well-used footpaths or from visitor attractions; and/or</li> </ul>		
	• effects on views would be likely to affect very large numbers of people / receptors; and/or		
	• it is unlikely that effects can be mitigated without changing landscape character.		

Table 4-3 Conclusion on potential of significant effects - criteria

#### B.1.5.6 Guidance and opportunities

#### Guidance

The guidance section sets out recommendations for how potential development could respond to the sensitivities highlighted. This may include siting or avoiding development in certain parts of the site and considerations for design.

#### Opportunities to further the statutory purposes of the National Landscape

Opportunities to further the statutory purpose of the National Landscape have been described, such as introducing enhancements within the site or the wider area, including opportunities to address or improve the existing detracting elements.

# B.1.6 Limitations

The following limitations underpin the study:

- Access during field survey was only from publicly accessible viewpoints. Some sites were not publicly accessible therefore judgements on aspects such as scenic quality and intervisibility with more distant views were not always possible to completely understand.
- The assessments are undertaken at a relatively high level based on published documents and data, in additional to field survey. The landscape and visual impact of any development proposals will depend on a thorough understanding of the baseline of the site as well as site specific and design quality details, which would need to be assessed individually and in detail as part of a comprehensive LVIA to accompany a planning application.
- The development parameters are provided to give an indication of broad design parameters, but this gives only an indication of possible impacts.
- The ZTVs illustrate potential visibility of development but are based on a broad development parameter across the whole site.
- A selection of visual receptors has been chosen for the purposes of understanding potential visual impacts, based on their proximity to the site, and their sensitivity with regards to whether their attention is likely to be focussed on the landscape. This gives only a high-level indication of potential visual effects which would need to be examined in much greater detail as part of any LVIA.

# Appendix C – Document and data review

# C.1.1 Document review

Г

An initial review of the published landscape evidence provides an understanding of the landscape and visual context of Sevenoaks and assisted in defining the scope of the study. The document review also includes a review of the available landscape and visual assessments undertaken by applicants in relation to some of the sites. The documents reviewed and their relevance to the study is set out in **Table 4-4**.

Published study	Relevance to the study
Countryside Commission, Kent Downs Designation Report, 1984	The report sets out the background to the designation of the AONB, describing the 'scarp face of the section of the North Downs lying in Kent, with its predominantly semi-natural vegetation of rough chalk grassland, scrub and woodland' as the original main target for designation. It describes the process for defining the boundaries within maps to show the location and extent 'only schematically', indicating the boundaries were not drawn precisely. The Greensand Ridge was decided to be included in the AONB by the time the designation was originally agreed.
Natural England, National Character Area profiles, 2024	<ul><li>The following national character areas are relevant to the study:</li><li>NCA 119 North Downs</li><li>NCA 120 Wealden Greensand</li></ul>
Sevenoaks District Character Study, 2022	The Sevenoaks District Character Study is a high-level overview of the character of the district.
Sevenoaks Landscape Character Assessment (Jan 2017)	The Sevenoaks Landscape Character Assessment is a comprehensive assessment of the character of the district and provides a useful evidence base for this study. In particular, the character areas, key characteristics, key susceptibilities/ valued attributes and landscape guidance.
Sevenoaks Landscape Sensitivity Assessment (May 2017)	The Sevenoaks Landscape Sensitivity Assessment was published before the Natural England 'approach to landscape sensitivity assessment' but is broadly consistent with its approach.
Sevenoaks Residential Character Area Assessment SPD, 2012	The Sevenoaks Residential Character Area Assessment is a detailed study of the residential areas around Sevenoaks and is a useful information source for the sites around Sevenoaks. In particular, the references to views and the role of the landscape in the setting of the settlement.
Kent Downs AONB Management Plan 2021- 2026	The Kent Downs AONB Management Plan provides information on the special qualities of the Kent Downs and its importance and is a key evidence base document for this study.
Kent Downs Landscape Character Assessment, 2020	The Kent Downs Landscape Character Assessment is a key evidence base document, setting out the characteristics and valued qualities within the National Landscape. The landscape management recommendations provide a basis for identifying opportunities for enhancement in relation to each of the sites.
Kent Downs AONB Setting Position Statement, 2022	The setting position statement provides a basis for understanding the landscapes which may be important to the setting of the Kent Downs National Landscape.
Kent Historic Landscape Characterisation, 2001	The historic landscape characterisation provides an analysis of the likely time depth of the landscape, particularly in relation to field pattern.
Site promoter's assessments	
Pedham Place Sevenoaks, Kent Downs AONB Landscape & Visual Review, TPM Landscape Ltd, 2019, updated 2024	Reference document setting out some background information on the site and indicating a development concept for the site, as well as setting out some high level potential landscape and visual impacts/considerations. More detailed information would be required were the site to be subject to planning application.
Land off Back Lane, Bessels Green, Sevenoaks: Vision Document, 2024	Reference document setting out some background information on the site and indicating a development concept for the site. More detailed information would be required were the site to be subject to planning application.
Land at Moat Farm, Chipstead: Vision & Delivery Statement, 2024	Reference document setting out some background information on the site and indicating a development concept for the site. More detailed information would be required were the site to be subject to planning application.

Sevenoaks District Council

304016-00/Final | 02 | 15 November 2024 | Ove Arup & Partners Limited

Published study	Relevance to the study	
Land at Brittains Lane, Kippington, Sevenoaks: Vision Document, 2024	Reference document setting out some background information on the site and indicating a development concept for the site. More detailed information would be required were the site to be subject to planning application.	
Relevant planning appeal decisions		
Brittains Lane APP/G2245/W/22/3308246	<ul> <li>The Brittains Lane Inspector's Report notes some key issues with regards to landscape and views which are relevant to some of the sites being considered. A summary of the key landscape and visual issues is provided below.</li> <li>The landscape character and appearance of the appeal site corresponds most readily with the open countryside landscape that unfolds beyond the Sevenoaks settlement</li> </ul>	
	edge, rather than the urban forms within it. Although the settlement edge reaches closer to the appeal site on three sides, its overall landscape character shares striking similarities with, and is complementary to, the adjoining AONB field.	
	• The appeal site provides a wedge of undeveloped land that separates Croft Way and Marlborough Crescent, giving definite sense of transition away from the settlement and introduction to the open countryside that unfolds to the west.	
	• The appeal site is of value to the landscape character and appearance of the locality, and as a part of its setting, it makes small but nonetheless important contribution to maintaining the natural beauty of the AONB.	
	• The characteristics of the appeal site fit with the typical characteristic of the Westerham and Sundridge Parks Farmlands Character Area identified in the Sevenoaks Landscape Character Assessment, 2017.	
	• The appeal site is part of the historic field pattern that surrounds the Montreal Park suburb. It also supports Ancient Woodland, a habitat of ecological interest, and contains natural rolling features as well as the Brad Stream. These elements add to the site's aesthetic value as well as its overall landscape sensitivity, which its relative containment and proximity to nearby housing developments do not diminish.	
	• Whether or not visually prominent from afar, the combination of its landscape features elevate the overall value of the appeal site above that of a pleasant but unremarkable, undesignated field. Rather it is a valued landscape that, paragraph 174 a) of the Framework indicates should be protected and enhanced.	
	• Should the eventual scheme retain more of the existing landform, housing would sit atop the spur and dominate the local landscape including the setting of the AONB. Should a more level site be formed, it would be a dramatic and artificial intervention into the local landscape, completely at odds with the appeal site's authentic, softly undulating greenfield nature.	
	• Irrespective of the final engineered approach, the introduction of up to 70 homes, roads, paths, SuDs17 ponds, play areas, and domestic paraphernalia would significantly erode the attractive natural topography and greenfield character of the appeal site. While buildings and roads do have an influence on wider locality that is within the existing built-up area of Sevenoaks, the proposal would weaken the buffering effect the appeal site has between the settlement edge and the wider rural countryside. The wedge of open countryside that separates Marlborough Crescent and Croft Way housing would become suburbanised.	
	• Notwithstanding the parameters plans show that the proposed development would be set back from the AONB boundary, there would still be an encroachment of housing, roads and domestic infrastructure to within some 20 metres of it. Consequently, the moderating effect the green and open appeal site provides as part of the AONB setting would be weakened. Bearing in mind the size of the AONB, the effect of the appeal scheme on its overall landscape and scenic beauty would be localised.	
	• Conflict therefore arises with CS Policies SP1 and LO8, insofar as they seek to ensure new development responds to the character of the area; give priority to protecting rural character and seek to ensure development is compatible with policies for protecting the AONB; and that seek to conserve and enhance the distinctive character of the AONB and its setting. The proposals would also fail to comply with ADMP Policies EN1, EN4 and EN5, insofar as these require the layout of the proposed development to respect the topography and character of the site and the surrounding area and sensitively incorporate natural features; and give the highest status of protection to the AONB and its setting. The proposed development would not successfully minimise adverse impact on the AONB designated area and would fail to contribute to and enhance the natural and local environment, contrary to paragraphs 174 and 176 of the Framework.	

# C.1.2 Data

Dataset	Source
Flood Map for Planning (Rivers and Sea) - Flood Zone 2	Environment Agency
Flood Map for Planning (Rivers and Sea) - Flood Zone 3	Environment Agency
Listed Buildings	Historic England
Registered Parks and Gardens	Historic England
Scheduled Monuments	Historic England
Areas of outstanding Natural Beauty (AONB)	Natural England
Country Parks	Natural England
Local Nature Reserves	Natural England
Registered Common Land	Natural England
Sites of Special Scientific Interest (SSSI)	Natural England
Chalk Rivers	Natural England
Agricultural Land Classification	Natural England
Living England Habitat Map	Natural England
Ancient Woodland	Natural England
OS Open Zoomstack Buildings	Ordnance Survey
OS Open Zoomstack Woodland	Ordnance Survey
Neighbouring Authority Boundary	Ordnance Survey
Cycle Routes (Generalised)	Sustrans
Lidar Composite 1m DTM 2022	DEFRA survey
Lidar Composite 1m DSM First Return 2022	DEFRA survey
Priority Habitats	Department for Environment, Food and Rural affairs
HLC - Kent Historic Landscape Characterisation areas	Archaeology Data Service
Allocations and Development Management Plan (ADMP)	Sevenoaks District Council
Brownfield Site Register	Sevenoaks District Council
Brownfield Site Register (WGS84)	Sevenoaks District Council
Conservation Areas	Sevenoaks District Council
Countryside Assessment	Sevenoaks District Council
District Boundary	Sevenoaks District Council
Landscape Character Areas	Sevenoaks District Council

Sevenoaks District Council

304016-00/Final | 02 | 15 November 2024 | Ove Arup & Partners Limited

Dataset	Source
Locally Listed Buildings	Sevenoaks District Council
Metropolitan Green Belt	Sevenoaks District Council
Open Space Allocations	Sevenoaks District Council
Parish Boundary	Sevenoaks District Council
Swanley Cycling Link	Sevenoaks District Council
Town and Local Centres	Sevenoaks District Council
Town Centre Areas of Change	Sevenoaks District Council
TPOs	Sevenoaks District Council
Urban Confines	Sevenoaks District Council
Ward Boundary	Sevenoaks District Council
Sevenoaks Residential Character Area Assessment	Sevenoaks District Council
Sevenoaks Landscape Sensitivity Assessment	Sevenoaks District Council
LVIA sites	Sevenoaks District Council
Landscape character areas - Sevenoaks Landscape Character Assessment	Sevenoaks District Council
Archaeological Notification Areas	Kent County Council
Public Rights Of Way (PROW)	Kent County Council
Kent Compendium of Historic Parks and Gardens	Kent Gardens Trust
Biodiversity Opportunity Areas	Kent Nature Partnership
Kent Wildlife Trust Reserves	Kent Wildlife Trust
Local Wildlife Sites	Kent Wildlife Trust
Roadside Nature Reserves	Kent Wildlife Trust
Landscape character areas - the Landscape Assessment of Kent	Kent Downs
Landscape character areas - Kent Downs Landscape Character Assessment	Kent Downs