



Land North of Camer Road, Meopham EIA Scoping Report

Iceni Projects on behalf of
The McManus family

September 2025

Iceni Projects Ltd.

Da Vinci House, 44 Saffron Hill, London, ECN1 8FH

T: 020 3640 8508 **F:** 020 3435 4228 **W:** iceniprojects.com

Document title:	EIA Scoping Opinion Request
Job Number:	I001480
Date:	September 2025
Author / Approval:	BP/MR/JJ

TABLE OF CONTENTS

1. INTRODUCTION	4
2. DESCRIPTION OF THE SITE AND SURROUNDINGS	10
3. PROPOSED DEVELOPMENT	18
4. EIA METHODOLOGY	20
5. SOCIO-ECONOMICS	26
6. TRANSPORT AND ACCESS	34
7. AIR QUALITY	42
8. NOISE AND VIBRATION	46
9. HYDROLOGY, FLOOD RISK AND DRAINAGE	49
10. ARCHAEOLOGY	53
11. ECOLOGY	62
12. LANDSCAPE AND VISUAL IMPACT ASSESSMENT	78
13. CUMULATIVE SCHEMES	83
14. TOPICS TO BE SCOPED OUT OF THE EIA	84

APPENDICES

- A1. SITE LOCATION PLAN
- A2. STRUCTURE OF ES CHAPTER
- A3. VIEWPOINT LOCATION PLAN

1. INTRODUCTION

- 1.1 This report is prepared on behalf of The McManus family (the 'Applicant') to inform a request for an Environmental Impact Assessment (EIA) Scoping Opinion from Gravesham Borough Council ('GBC') in relation to proposals for the redevelopment of Land North of Camer Road, Meopham (the 'Site').
- 1.2 Proposals are being developed for an outline planning application for the redevelopment of the Site, (the 'Proposed Development'), which comprises up to 730 dwellings, a new two-form entry primary school, the provision of Public Open Space including sport and recreation facilities, alongside associated access, landscaping, parking, and infrastructure; with all matters reserved except for access. Descriptions of the Site and the Proposed Development are provided in **Sections 2 and 3** respectively.
- 1.3 EIA is a systematic process that aims to prevent, reduce or offset the significant adverse environmental effects of development proposals and enhance beneficial effects. It ensures that planning decisions are made considering the likely significant environmental effects of the Proposed Development and with engagement from statutory bodies, local and national groups and the public.
- 1.4 This report sets out the findings of an EIA scoping study undertaken by the project team and accompanies a request for a Scoping Opinion submitted to GBC in accordance with Regulation 15 of the Town and Country Planning (Environmental Impact Assessment) Regulations 2017 (as amended) (the 'EIA Regulations'). In line with the EIA Regulations, this report identifies the Site location, the nature and purpose of the Proposed Development (including its location and technical capacity) and the likely significant effects on people and the environment. This report also outlines the proposed approach, methodology and scope of the Environmental Statement (ES). The ES will present an assessment of the likely significant effects of the Proposed Development associated with construction works and once the Proposed Development is completed and operational. The ES will be 'based on' the Scoping Opinion received from GBC.
- 1.5 **Figure 1.1** and **Appendix A1** shows the Site's location and indicative extent of the planning application boundary.

Figure 1.1 Site Boundary



Planning and EIA Context

1.6 The Development Plan for GBC comprises:

- Gravesham Local Plan Core Strategy and Local Plan Policies Map (2014)ⁱ;
- Gravesham Local Plan First Review (1994) – saved policies; and
- Kent County Council Minerals and Waste Local Plan 2024 –30 (2020).

1.7 As set out within GBC's Local Development Scheme (published March 2025), a new Local Plan is currently being prepared, with a Regulation 19 consultation intended to commence in July 2025 and adoption of the Local Plan in December 2026. Regulation 19 consultation has not yet commenced.

1.8 The Proposed Development falls within Category 10(b) of Schedule 2 of the EIA Regulations, which is applicable to '*urban development project*'. The thresholds for such developments that could require an EIA are as follows:

“(i) The development includes more than 1 hectare of urban development which is not dwellinghouse development; or

(ii) the development includes more than 150 dwellings; or

(iii) the overall area of the development exceeds 5 hectares.”

1.9 The Proposed Development exceeds threshold (ii) and (iii) as identified above, as it will include more than 150 dwellings (up to 730 dwellings) and exceeds 5ha of developable land (43.67ha).

1.10 A formal EIA screening opinion has not been requested from GBC. Instead, the Applicant has committed to undertaking an EIA for the Site and submitting an ES with the planning application voluntarily.

1.11 The formal EIA scope will be defined through the scoping process, whereby a Scoping Request (accompanied by this Scoping Report) will be submitted to GBC for their Scoping Opinion to agree the topics to be assessed, and the methodologies to be implemented. Under the EIA Regulations, the ES will be required to be “based on” the Scoping Opinion provided by the GBC and will be prepared by competent experts (see below).

Scoping Summary

- 1.12 The topics scoped in or out of the EIA are based on desk-based research, professional judgement and other information available for the Proposed Development. Below **Table 1.1** outlines a summary of the scoping.

Table 1.1 EIA Scoping Summary

Topic	Construction Phase Effects	Operational Phase Effects	Likely Significant Effects (Pre-Mitigation)	Scoping Status
Socio-Economics	✓ - T	✓ - P	✓	Scoped In
Transport and Access	✓ - T	✓ - P	✓	
Air Quality	✓ - T	✓ - P	✓	
Noise and Vibration	✓ - T	✓ - P	✓	
Hydrology, Flood Risk and Drainage	✓ - T	✓ - P	✓	
Archaeology	✓ - P	×	✓	
Ecology	✓ - P	✓ - P	✓	
Landscape and Visual Impact Assessment (LVIA)	✓ - T	✓ - P	✓	
Built Heritage	×	×	×	Scoped Out
Daylight, Sunlight and Overshadowing	×	×	×	
Wind Microclimate	×	×	×	
Human Health	×	×	×	
Major Accidents and Disasters	×	×	×	
Energy and Sustainability	×	×	×	
Waste	×	×	×	
Ground Conditions and Contamination	×	×	×	

Agricultural Land	×	×	×	
Arboriculture	×	×	×	
Climate Change	×	×	×	

Key: ✓ = Effect / × = No Likely Effects

T = Temporary Effect / P = Permanent Effect

1.13 A summary of the justification for the scoped-out topics are outlined in **Section 14** of this Scoping Report.

Project Team

1.14 In accordance with Regulation 18(5) of the EIA Regulations, this Scoping Report has been prepared by competent experts from the organisations listed in **Table 1.2**. These specialists will also undertake the EIA, and their relevant expertise and qualifications will be stated within each technical chapter of the ES.

1.15 **Table 1.2** also sets out the proposed structure of the ES.

Table 1.2 EIA Team and Topic

	Chapter	Author
Volume I: Main Text		
1	Introduction and EIA Methodology	Iceni Projects
2	Description of Site and Surroundings	
3	Proposed Development, Construction and Description of Alternatives	
4	Socio-Economics	Iceni Projects
5	Transport and Access	The Transportation Company Ltd (TTC-TP)
6	Air Quality	Entran Limited (Ltd)
7	Noise and Vibration	
8	Hydrology, Flood Risk and Drainage	GTA Civils
9	Archaeology	Iceni Projects
10	Ecology	Greenspace Ecology
11	Landscape and Visual Impact Assessment (LVIA)	Iceni Projects
12	Residual Effects, Mitigation and Cumulative Effects	Iceni Projects (with input from the EIA team)

Vol III	Technical Appendices	Various
Vol IV	Non-Technical Summary	Iceni Projects (with input from the EIA team)

- 1.16 Iceni will be the lead editor of the ES and author of certain chapters. Iceni is a member of the ‘Institute of Sustainability and Environmental Professionals’ (ISEP) – formerly the Institute of Environmental Management and Assessment (‘IEMA’) - EIA Quality Mark Scheme¹. This is an accreditation scheme which sets high standards for EIA practice and demonstrates a commitment to excellence in EIA activities.
- 1.17 The EIA coordinators are Practitioner and Associate members of ISEP.
- 1.18 Each environmental topic scoped into the EIA will be structured as set out in **Appendix A2**.

¹ <https://www.isepglobal.org/corporate-programmes/eia-quality-mark/>

2. DESCRIPTION OF THE SITE AND SURROUNDINGS

Site Description and Background

- 2.1 The land within the continuous solid red line in **Figure 1.1** extends to approximately 43.67 hectares (ha) and is wholly located within the GBC administrative boundary.
- 2.2 The Site is located to the east of Hook Green and to the southwest of Sole Street and is bordered by the Chatham Main Line to the north, Camer Road to the southeast, and Northwood Lane to the southwest.
- 2.3 The Site, which sits within the green belt, comprises agricultural land with two (small) areas of woodland located within the centre of the Site. A residential property, with associated small stable block and small pastoral field are located within the western section of the Site. There is a Public Right of Way (PRoW) (NS192) running through the Site connecting the north and southwest boundaries. This PRoW connects Manor Road / Sallows Shaw with Norwood Lane and Wrotham Road (A227).
- 2.4 The key environmental sensitivities of the Site and surrounding area are shown in **Figure 2.1** and **Figure 2.2**.

Surrounding Land Uses

- 2.5 The Site is bound by the following:
- The north of the Site is bound by the Chatham Main Line, the Storage Box Self Storage and Network Rail yard. Sole Street train station (including the Station Approach access road) is located to the immediate northeast corner of the Site. Immediately adjacent to the northeast corner of the Site is *'The Railway Inn and Railway Pétanque Club'* and associated parking. To the north of the Chatham Main Line is mature woodland (designated as priority habitat inventory – deciduous woodland), undeveloped agricultural land and cul-de-sacs of residential dwellings associated with Manor Road, Scratton Fields and Sallows Shaw.
 - The east of the Site is bound by Camer Road. Directly beyond are residential dwellings, Royal Hounds Dog Park and agricultural fields. The south east of the Site is also bound by Camer Road. Beyond are (detached) residential dwellings and Camer Park Country Park. Beyond are agricultural fields interspersed with woodlands, road infrastructure and rural villages. This land (to east and south east) of the Site is located within Kent Downs National Landscape (KDNL).
 - The south west of the Site is bound by Norwood Lane, a small parcel of agricultural land and residential dwellings (with associated gardens and paddocks) located on the northern edge of Norwood Lane. To the south of Norwood Lane is a parcel of undeveloped agricultural land (bounded

by Green Lane, Camer Road and Tradescant Drive), and cul-de-sacs of residential dwellings along with some commercial uses, including Judson's Recreation Ground.

- The west of the Site is bound by residential dwellings associated with Nursery Road and Fairview Gardens and commercial uses along The Railway Sidings, including Meopham Welding Supplies. Directly beyond is cul-de-sacs of residential dwellings and Meopham train station. Beyond Wrotham Road is more residential development and extensive areas of undeveloped agricultural land.

Transport and Accessibility

- 2.6 Existing vehicular access is located off Camer Road. Pedestrians can access the Site via PRow (NS192).
- 2.7 The nearest train station is Sole Street, located on the boundary of the north-east corner of the Site. The second nearest train station is Meopham located approximately 500m² west of the Site. Both stations are operated by southeastern trains and provide services to London Victoria, Rochester, Gillingham, Dover Priory and Ramsgate.
- 2.8 The nearest bus stops are '*The Railway*' stops located on either side of Camer Road, at the north-east corner of the Site. '*Scratton Fields*' bus stops are approximately 270m north east of the Site (either side of Sole Street). Both bus stops are served by routes 311, 416 and 695 and provides services to Gravesend and Meopham. There are several bus stops to west of the Site, along the A227 (Wrotham Road) including '*Station Road*' and '*Norwood Lane*' stops.
- 2.9 As previously mentioned, PRow (NS192) traverses the Site from north to southwest, connecting Manor Road / Sallows Shaw with Norwood Lane and Wrotham Road (A227) There are PRow and bridleways in proximity to the Site, including:
- PRow NS250, to the immediate south of the Site (connecting Camer Road to Tradescant Drive);
 - PRow NS191, to the immediate east of the Site (connects Camer Road/Sole Street to Gold Street).
 - PRow NS308, to the immediate south west of the Site connects Norwood Lane to Tradescant Drive; and
 - Public Bridleway (NS242) / (NS315) to the immediate east of the Site, connecting Camer Road to Henley Street.

² All measurements provided within this report are taken from the closest point on the Site boundary to the closest point of the amenity / facility / designation being discussed.

Environmental Sensitivities

2.10 **Figure 2.2** and **Figure 2.3** shows the key environmental sensitivities on and surrounding the Site.

Built Heritage

2.11 The Site does not include any designated heritage assets though is located within the setting of 18 listed buildings and 1 conservation area as listed below.

2.12 The Site is located northeast of Hook Green Conservation Area.

2.13 The 18 listed buildings within 500m of the Site are:

- Waterditch (Grade II) (List Entry Number: 1039914)
- Nevill House (Grade II) (List Entry Number: 1096350)
- The White House (Grade II) (List Entry Number: 1096349)
- Mulberry House (Grade II) (List Entry Number: 1039911)
- Hook Green Farmhouse (Grade II) (List Entry Number: 1350238)
- The Old Forge The Old Forge Cottage (Grade II) (List Entry Number: 1367140)
- Evenden Farmhouse (Grade II) (List Entry Number: 1096354)
- Camer Green Cottage (Grade II) (List Entry Number: 1372283)
- 9 And 10, Camer Street (Grade II) (List Entry Number: 1096345)
- Somers (Grade II) (List Entry Number: 1350235)
- 5 And 6, Camer Street (Grade II) (List Entry Number: 1096344)
- Bower Cottage (Grade II) (List Entry Number: 1096313)
- Yeomans House (Grade II) (List Entry Number: 1095063)
- Sole Street House (Grade II) (List Entry Number: 1067728)

- Camer House (Grade II) (List Entry Number: 1052357)
- Bailiffs House (Grade II) (List Entry Number: 1052333)
- Building Approximately 30 Metres To West Of Camer House (Grade II) (List Entry Number: 1350234)
- Norwood Farmhouse (Grade II) (List Entry Number: 1039912)

2.14 **Figure 2.1** is an indicative heritage asset map, showing the location of assets in relation to the Site. A 500m study area is shown, as the Heritage Impact Assessment will assess assets within this radius. Further information is provided in Section 14 of this report.

Figure 2.1: Heritage Asset Mapping



Archaeology

2.15 The Site is within an Archaeological Notification Area (ANA). There are no Scheduled Monuments or World Heritage Sites within 1km of the Site. The nearest Scheduled Monument is '*Deserted medieval manorial settlement of Cossington*' located approximately 1.2km north of the Site. Camer Park Country Park, located directly south of the Site is identified as a Historic Park.

-
- 2.16 Further archaeological investigations will be undertaken as part of this planning application to determine archaeological assets within and in proximity to the Site. Further information on the archaeology baseline is provided in **Section 10** of this report.

Air Quality

- 2.17 According to the Air Quality Management Area (AQMA) interactive mapⁱⁱ, the Site is not located within or adjacent to an AQMA. The closest AQMA to the Site is Gravesham A2 AQMA located approximately 2.7km north of the Site.
- 2.18 Given the surrounding land uses comprise roads, such as Camer Road and Norwood Lane, and the Chatham Main Line to the north, the primary source of pollution is likely to be the surrounding road and rail network.

Landscape

- 2.19 As outlined above, PRoW (NS192) intersects the Site. There are also several PRoW's in proximity to the Site.
- 2.20 The Site is bordered by the Kent Downs National Landscape along the east and south-eastern boundary, beyond Camer Road.
- 2.21 The Site falls within North Downs National Character Area (NCA 119)ⁱⁱⁱ, defined by Natural England (NE) as 'a chain of chalk hills extending from the Hog's Back in Surrey and ending dramatically at the internationally renowned White Cliffs of Dover. The settlement pattern is characterised by traditional small, nucleated villages, scattered farms and large houses with timber framing, flint walls and Wealden brick detailing. Twisting sunken lanes, often aligned along ancient drove roads, cut across the scarp and are a feature of much of the dip slope. The Kent Downs and Surrey Hills Areas of Outstanding Natural Beauty designations are testament to the qualities and natural beauty of the area'.
- 2.22 Heritage, listed buildings, Conservation Area and Registered Parks and Gardens are set out above, in the Archaeology and Built Heritage section.

Ecology

Habitats

- 2.23 The Site comprises undeveloped agricultural land, woodland, grassland and hedgerows. In relation to priority habitats and in accordance with GBC Local Plan and Strategy Review^{iv}, the larger cluster of woodland within the Site is designated as Deciduous Woodland. To the immediate south east of the Site, beyond Camer Road are two areas of Traditional Orchards.

Statutory Designations

- 2.24 The nearest designated site of national importance is Shorne and Ashenbank Woods, designated as a Site of Special Scientific Interest (SSSI), located approximately 2km north east of the Site. At distance from the Site is Halling to Trottiscliffe Escarpment (SSSI) located approximately 2.55km east, and Cobham Woods (SSSI) located approximately 2.6km northeast.
- 2.25 The nearest designated site of international importance is North Downs Woodland, designated as a Special Area of Conservation (SACs), located approximately 2.65km south east of the Site.
- 2.26 There are no Local Nature Reserves (LNR) within proximity to the Site.

Non-Statutory Designations

- 2.27 The nearest Local Wildlife Site (LWS) is Nurstead and Cozendon Woods, Nash Street located approximately 1.5km north of the Site.

Agricultural Land

- 2.28 According to the Agricultural Land Classification map (ALC)^v the Site is designated as Grade 2 agricultural land classified as, '*very good quality agricultural land*'.

Arboriculture

- 2.29 There is no Ancient Woodland designations within the Site or within 500m of the Site, the nearest of which (also designated as Priority Habitat Inventory – Deciduous Woodland) is Henley Wood located approximately 700m to the south east of the Site. There are several Ancient Woodland designations within 2km of the Site, including Rabbit Wood located approximately 1.15km south west and Cobhambury Wood located approximately 1.7km east.
- 2.30 According to magic map^{vi}, the larger cluster of trees within the centre of the Site is designated as Priority Habitat Inventory – Deciduous Woodland. Several clusters of woodland within close proximity of the Site are also designated as Priority Habitat Inventory – Deciduous Woodland.
- 2.31 There are no Tree Preservation Orders (TPOs) within or in proximity to the Site.

Flood Risk and Ground Conditions

- 2.32 The Site lies entirely within Flood Zone 1 and therefore has the lowest possibility of fluvial flooding. The vast majority of the Site is at 'very low' risk of surface water flooding, meaning that the Site has less than 0.1% of surface water flooding each year. However, small sections of land within the Site lies within 'high', 'medium' and 'low' risk of surface water flooding.
- 2.33 The Site is located within a Nitrate Vulnerable Zone (NVZ). The majority of the Site, (with the exception of the eastern section of the Site) is located within Zone II and III Source Protection Zone (SPZ).

Figure 2.2: Key Environmental Sensitivities



Figure 2.3: Key Ecology and Arboriculture Environmental Sensitivities



3. PROPOSED DEVELOPMENT

Overview of the Application

- 3.1 The Applicant proposes the comprehensive redevelopment of the Site to create a high-quality neighbourhood extension to Hook Green/ Meopham through an infrastructure-led masterplan.
- 3.2 It is anticipated that an 'outline' planning application will be submitted, with all matters reserved except for access. The design of the Proposed Development has not been finalised, however for the purpose of this EIA Scoping Report is proposed to comprise:
- Construction of up to 730 residential units (Use Class C3);
 - Land reserved for a two-form entry primary school and associated sports pitches (Use Class F1);
 - Substantial areas of public open space throughout the Site, along with recreational features, including play areas, outdoor gyms and sports pitches and play hubs;
 - Implementation of landscape measures, including tree planting will be implemented. Where possible, existing vegetation including the existing areas of woodland within the centre of the Site will be retained;
 - Vehicular access from Camer Road will be retained and enhanced. An emergency vehicular / bus access will also be provided off Camer Road, located at the southern part of the Site. A bus route will be provided between these two access points.
 - The existing PRoW (NS192) that crosses the Site will be retained, and active travel routes will be provided throughout the Site. Access travel points will be provided off Camer Road and Norwood Lane.
- 3.3 Parking (including car, cycle and Electric Vehicle (EV)) will be informed by KCC policy standards and full details on the access and parking arrangements will be provided within the Transport Assessment (TA) submitted as part of the planning application.
- 3.4 The Proposed Development would range in heights and massing. Height and massing have not been finalised but are anticipated that they could come forward within a range of between one and three storeys, with a maximum height of 14m.
- 3.5 The proposals are at an early stage of design and will be developed further with input of technical analysis as part of the EIA process and in consultation with GBC and other stakeholders. Mitigation

measures will be incorporated and designed into the Proposed Development, where possible, to avoid or reduce likely significant adverse effects on the environment and local community.

Construction

- 3.6 An indicative of the likely construction programme and methodology will be provided in the ES once the proposals have been further developed. Timescales and methods are likely to be comparable with other developments of a similar nature and scale. At this point in time, the Applicant estimates the overall construction programme could last approximately six years, with works likely to commence in 2028 subject to planning permission. This may be updated in the ES. Construction of the scheme will be phased, this will be detailed within the Environmental Statement and considered as part of the assessment methodology.
- 3.7 The ES will include measures necessary to mitigate construction effects. The nature of these documents and other measures would be discussed further with GBC through pre-application discussion.

4. EIA METHODOLOGY

Proposed EIA Methodology

- 4.1 The ES will be prepared in accordance with the EIA Regulations and reference will be made to current EIA good practice guidance.
- 4.2 The assessment of likely significant effects in the ES will set out the effects associated with the construction works and once the Proposed Development is completed and operational. The general approach to the EIA process is outlined below, although some assessments may deviate from the general approach owing to methodologies and technical guidance specific to the topic

Consultation and Scoping Opinion

- 4.3 A programme of consultation with key stakeholders will be undertaken with statutory and non-statutory consultees throughout the design and in the lead up to submission of the planning applications. Key stakeholders include GBC, Natural England and the Environment Agency.
- 4.4 In line with the EIA Regulations, the ES will be 'based on' the Scoping Opinion provided by GBC. Each ES technical chapter will set out key points made during the scoping and consultation process between the project team and stakeholders and will clearly explain how these have been addressed by the EIA process.

Table 4.1 Summary of Receptors

Topic	Receptor
Socio-Economics	• Local Labour Market • Local Economy • The local housing market and people requiring housing • Local education facilities at the relevant school catchment area (early years, primary school and secondary school) • Local healthcare facilities in the relevant GP catchment area • Surrounding open spaces, play spaces and sports facilities • Local community facilities • Deprivation
Transport and Access	• Existing Residents • Existing business employees • Highway network • Pedestrians and cyclists
Air Quality	• Human (e.g. existing residential dwellings, schools, hospitals, care homes)

	• Ecological
Noise and Vibration	• Surrounding residential receptors • Existing residential dwellings
Hydrology, Flood Risk and Drainage	• Surface water bodies; • Groundwater resources.
Archaeology	• Pre-historic Remains • Roman Remains • Medieval Remains • Post Medieval Remains
Ecology	• Bramble scrub • Woodland • Hedgerows • Rural Trees • Badger • Bats • Birds • Dormice • Reptiles • Designated sites • Habitats (woodland, scrub, hedgerows and trees) • Protected species: Badger, bats, birds, dormice and reptiles
Landscape and Visual Impact Assessment (LVIA)	• The Site's Character • Landscape elements on the Site: Hedges, Trees, Woodland, Ditches and Land • Kent – Landscape Character Area (LCA) Ash Downs • Kent LCA, Luddesdown: West Kent Downs • Kent Downs National Landscape • Gravesham – LCA Meopham Downs • LLCA defined by applicant within 2km study area • Residential properties along Camer Road, Norwood Lane, Nursery Road and Tradescant Drive • Users of Camer Road, Norwood Lane, Green Lane and Camer Road • Recreational users of PRoW NS250, NS192, NS308, NS242, NS223, NS191 and NS190

Alternatives

- 4.5 In accordance with the EIA Regulations, the ES will provide “a description of the reasonable alternatives.... Relevant to the proposed project and its specific characteristics which have been

considered by the Applicant and an indication of the main reasons for selecting the chosen option, including a comparison of the environmental effects”.

4.6 The ES will describe the reasonable alternatives to the Proposed Development which have been considered by the Applicant, including:

- the ‘do-nothing’ scenario – this will outline the consequences of no Development taking place and the Site remaining in its current form; and
- alternative designs – for example, alternative uses, building layouts, heights and massing, together with the main reasons for selecting the final design, including a comparison of effects.

4.7 Alternative sites have not been considered by the Applicant and as such will not be considered in the ES.

EIA Methodology

Significant Effects and Scope of the EIA

4.8 As highlighted by the UK Government Online Planning Practice Guidance (PPG), when considering the scope of EIA, local planning authorities *“should limit the scope of the assessment to those aspects of the environment that are likely to be significantly affected”*.

4.9 With respect to identifying the likely significant environmental effects associated with the Proposed Development, consideration will be given to potential effects associated with construction works and the Proposed Development once completed and operational. These effects could be both beneficial and adverse and deemed to be ‘significant’ on the basis of:

- the value/importance of the resources and receptors that could be affected;
- the predicted magnitude of environmental change and/or impact experienced by these resources and receptors, accounting for their size, duration and spatial extent;
- the susceptibility or sensitivity of resources/receptors; and
- options for avoiding, reducing, offsetting or compensating for any potentially significant adverse effects and the likely effectiveness of such mitigation measures.

4.10 **Sections 5 to 13** set out those aspects of the environment that are likely to be significantly affected by the Development. Potential effects deemed to be non-significant within topics that are scoped into the ES are also included within these sections. **Section 14** sets out those likely effects on the environment that are unlikely to be significant and therefore the topics that will clearly be scoped out of the relevant chapter of the ES.

Determining the Significance of Effects

- 4.11 Determining the significance of environmental effects is intended to inform decision making. The significance of effects will be determined by specialists with reference to generic assessment criteria or specific criteria for each environmental topic being considered. These criteria will apply a common terminology, classifying whether the effects are major, moderate or minor, as well as, adverse, negligible or beneficial, temporary or permanent, in line with standard practice. In general, likely residual effects reported as moderate or major significance are considered to be 'significant'. Where there is deviation from this owing to specific criteria or guidance relating to an environmental topic, this will be set out in the ES.

Study Area

- 4.12 The study area for each environmental topic will be based on the geographical scope of the potential for significant effects relevant to the topic or the information required to assess the likely significant effects, as well as specific guidance and consultation with stakeholders.

Baseline and Future Baseline Conditions

- 4.13 Baseline environmental conditions need to be established to enable an accurate assessment of potential changes to such conditions that may occur and to assess the likely significant environmental effects of the Development. Understanding baseline conditions is also important for the identification of the most appropriate mitigation which could be employed to reduce any likely significant adverse effects.
- 4.14 Baseline conditions will be taken as the current conditions on the Site. Baseline information will be gathered through desk-based research and Site surveys undertaken in 2025 to define and describe the existing environmental characteristics and receptors for each environmental topic that will be provided within the ES. Where environmental information and data is not available for 2025, it will be necessary to use data which pre-dates 2025. The ES will set out what year the baseline data is sourced from.
- 4.15 In addition to the current baseline conditions, the EIA Regulations require an outline of the likely evolution of the baseline condition without implementation of the Proposed Development, as far as natural changes from the baseline scenario can be assessed with reasonable effort on the basis of the availability of environmental information and scientific knowledge (i.e. future baseline). The future baseline will also take into account climate change, and other developments that will be built out that may affect the Site. The future baseline conditions will be described in each technical chapter of the ES.

Construction Assessment

- 4.16 An indicative construction programme for the Proposed Development will be presented in the ES. This will include all parts of construction including preparation, construction and landscaping works.

-
- 4.17 The ES will outline the main activities associated with the construction works, together with the likely duration of the main activities. Topics which have identified likely significant effects from construction activities are outlined in the sections below. Mitigation measures will be set out in the ES to avoid, reduce or mitigate potential adverse effects.
- 4.18 In line with ISEP Guidance: Implementing the Mitigation Hierarchy from Concept to Construction³, ‘primary’ mitigation is defined as mitigation that is *“inherent part of the project design [which] should be described in the design evolution narrative and included within the project description. For example, reducing the height of a development to reduce visual impact”*. Furthermore, in line with ISEP practice, ‘tertiary’ mitigation is defined as that which *“will be required regardless of any EIA assessment, as it is imposed, for example, as a result of legislative requirements and/or standard sectoral practices. For example, considerate contractor practices that manage activities which have potential nuisance effects”*. As such, the ES will rely on standard practice in the management of the construction works of the Development that will be detailed in the ES. These measures will therefore be taken into account and form the basis of the assessment of likely significant effects. As such, any effects that might have arisen without this mitigation will not be identified as ‘likely effects’, as there should be no potential for them to arise. This should result in a simpler and more proportionate ES. Where such measures have been taken into account this will clearly be identified within the ES.
- 4.19 An interim assessment of construction works, which considers the effects of the Development partway through construction is not proposed, although the assessment will consider the effects of construction on future receptors.

Completed Development Assessment

- 4.20 The likely significant effects of the completed Development will be assessed for the anticipated year of completion (i.e. 2034). The assessment will assume that the Proposed Development is fully completed and occupied and will take into account environmental design that has been embedded into the Proposed Development, prior to the application of additional mitigation and the assessment of residual effects.

Cumulative Effects Assessment

- 4.21 Cumulative effects can occur either when different effects from the Development interact to exacerbate effects on sensitive receptors, or, when the magnitude of an effect is exacerbated by other future neighbouring developments, thus creating a more significant effect, on a receptor.

³ ISEP Guidance: Implementing the Mitigation Hierarchy from Concept to Construction. Available at: <https://www.isepglobal.org/policy-and-practice/impact-assessment/practical-guidance/>

4.22 The potential for cumulative effects to arise will be considered in each technical chapter construction and once the Development is completed and operational.

5. SOCIO-ECONOMICS

5.1 The Socio-Economic Chapter will be prepared by Icen Projects and will consider the key socio-economic impacts of the Proposed Development during both the construction and operational phases.

Baseline Conditions

5.2 Based on the latest 2022 mid-year population estimates, Gravesham had a population of 106,970 people. Since 2012, the population of Gravesham grew by 4.3%, which equates to an increase of 4,411 people. When compared to the South East (23.1%) and England (23.1%), Gravesham has a higher proportion of younger people aged 0-19 (25.7%). Conversely, Gravesham has a lower proportion of older people aged over 60 (22.9%) than the South East (25.7%) and England (24.5%). 61.5% of the population of Gravesham are of working-age (ages 16 to 64 years), slightly higher than the South East region (61.7%) but lower than England (62.9%).

Labour Market

5.3 The labour profile of Gravesham shows that 70.6% of residents are economically active which is lower than the average for the South East (81.1%) and England (78.8%). A higher proportion of the population in Gravesham are unemployed (4.2%) compared to the South East (3.3%) and nationally (4.0%). This indicates that there is some flexibility in Gravesham's labour market to support new jobs. A lower proportion of the population of Gravesham (34.5%) has a RQF4+ (Regulated Qualifications Framework) qualification (equivalent to a Certificate of Higher Education/ first year of a bachelor's degree education) when compared to the South East (48.2%) and England (46.8%).

Table 5.1: Labour Market Profile

Indicator	Gravesham	South East	England
Working-age population (16-64 years) % of the Total Population (2022)	61.5%	61.7%	62.9%
Economic Activity Rate (April 2024 – March 2025)	70.6%	81.1%	78.8%
Unemployment - as a proportion of economically active aged 16-64 (April 2024 – March 2025)	4.2%	3.3%	4.0%
Tier 1-3 Occupations (managers, professionals, associate professional) (April 2024 – March 2025)	48.7%	55.7%	53.7%

RQF4+ Qualifications (January 2024 – December 2024)	34.5%	48.2%	46.8%
Earning by place of residence (2024), Gross Weekly Pay	£690.5	£779.2	£732.0
Earning by workplace base (2024), Gross Weekly Pay	£759.8	£754.1	£732.1

*Source: ONS (2025)⁴

- 5.4 There are approximately 34,000 employee jobs in Gravesham. The three largest employment sectors in Gravesham in 2023⁵ were Administrative and Support Service Activities (14.7%), Wholesale and Retail Trade (13.2%), and Accommodation and Food Service Activities (11.8%). The construction sector accounts for 7.4% of the employment in Gravesham, which is higher than across the South East (4.9%) and England (4.7%).

Deprivation

- 5.5 A review of the English Index of Multiple Deprivation (IMD)⁶, 2019 for the Lower Super Output Areas (LSOA) where the Proposed Development is located (Gravesham 012E) shows that the area is ranked within the 10% least deprived areas in the country. Out of the nine indicators of deprivation, the area is most deprived in terms of Crime (ranked in the 40% most deprived neighbourhoods). The area is ranked in the 10% least deprived neighbourhoods in terms of Health.

Housing

- 5.6 Policy CS02: Scale and Distribution of Development of the Gravesham Local Plan Core Strategy⁷ sets out the Borough's housing need for the period 2011-2028. It identifies a need for 438 dwellings per year between 2024/2025 and 2027/2028.
- 5.7 As GBC's Local Plan Core Strategy was adopted in September 2014, it is now more than five years old, therefore the local housing need figure, derived using the standard method set out in the Planning Practice Guidance (PPG), is utilised. The Gravesham Five-Year Land Supply Statement 2024-2029⁸ indicates a Five-Year Supply Local Housing Need of 3,360 dwellings (672 dwellings per annum).

⁴ ONS (Accessed 2025) Annual Population Survey

⁵ ONS Business Register and Employment Survey, 2023

⁶ Ministry of Housing, Communities and Local Government (2019), Indices of Multiple Deprivation

⁷ Gravesham Borough Council (2014) Gravesham Local Plan Core Strategy

⁸ Gravesham Borough Council (2025) Gravesham Five-Year Land Supply Statement 2024-2029

Health Profile

- 5.8 Data provided by the Office for Health Improvement and Disparities, compares the health of the residents living close to the Site with trends across England across a range of indicators. The health profile of this area is generally considered to be above the national averages for the majority of health indicators.
- 5.9 The life expectancy in the Middle layer Super Output Area (MSOA) in which the Site is located (Gravesham 012) is 85.8 for women and 82.0 for men which is higher than nationally. The proportion of people reported having a long-term illness or disability in the MSOA is 17.1%, which is similar to Gravesham (17.0%) and England (17.6%). The proportion of reception students who are considered obese is 10.8%, similar to the MSOA rate of 10.5% and higher than the England rate of 9.6%.

Potential Effects

Likely Significant Effects

- 5.10 It is anticipated that the main socio-economic impacts of the Proposed Development will be linked to the provision of new housing. There will also be employment opportunities generated (both direct and indirect) during the construction phase. Equally, there will be economic benefits as the increase in private sector investment in the area will contribute to Gross Value Added (GVA).

Construction

- 5.11 The likely significant effects identified for the construction works for assessment in the ES are set out in **Table 5.2**.

Table 5.2 Likely Significant Effects During Construction

Receptor	Effects	Scoped In
Local Labour Market	Temporary direct and indirect construction employment will be generated. This will create positive economic impacts including the generation of GVA in the WIA. There will also be multiplier effects generated from the supply chain and the spending into the local economy.	✓
Local Economy	Temporary construction injection of capital in the WIA	✓

- 5.12 During the construction phase there may also be temporary impacts on the health of the population living close to the Site, such as noise and air quality impacts related to construction activities and additional vehicular movements. The significance of this will be assessed through a Health Impact Assessment (HIA) with mitigation methods recommended where necessary. The HIA will be appended to the Socio-Economic ES Chapter.

Operation

5.13 The likely significant effects identified for the operational phase for assessment in the ES is as follows in **Table 5.3**.

Table 5.3: Likely Significant Effects for the Completed Development

Receptor	Effects	Scoped In
The local housing market and people requiring housing in the LIA.	Housing stocks are susceptible to changes in demand/supply and there is currently significant affordable housing need. As such, there is potential for long-term, permanent significant effect of an increase to housing against Gravesham housing targets.	✓
Local labour market	The new residential population will increase the labour supply, and the provision of employment land will increase employment opportunities within the LIA and WIA.	✓
Local economy	The introduction of new households will permanently increase residential spend within the LIA.	✓
Local education facilities at the relevant school catchment area (early years, primary school, and secondary school)	Existing education facilities would be susceptible to changes in population. As such, there is potential for long-term, permanent significant effects on the LIA and WIA if there is insufficient capacity from the housing element which is not mitigated.	✓
Local healthcare facilities (GP Facilities) in the relevant GP catchment area	The permanent effect that the changes in the population will have on GP facilities' capacity within the LIA.	✓
Surrounding open spaces, play spaces and sports facilities	There is a wide range of open spaces (including play space and sports facilities) within the LIA which will be susceptible to changes in population.	✓
Local community facilities (libraries, youth centres and community centres)	Existing community facilities would be sensitive to changes in population. As such, there is potential for long-term, permanent significant effects on the LIA and WIA, if there is insufficient capacity which is not mitigated.	✓

Non-Significant Effects

5.14 Permanent health effects will arise once the Proposed Development is complete and occupied. These health effects are not expected to be significant and therefore scoped out of the ES chapter. However, health will be assessed through a Health Impact Assessment (HIA) appended to the ES with mitigation methods recommended where necessary.

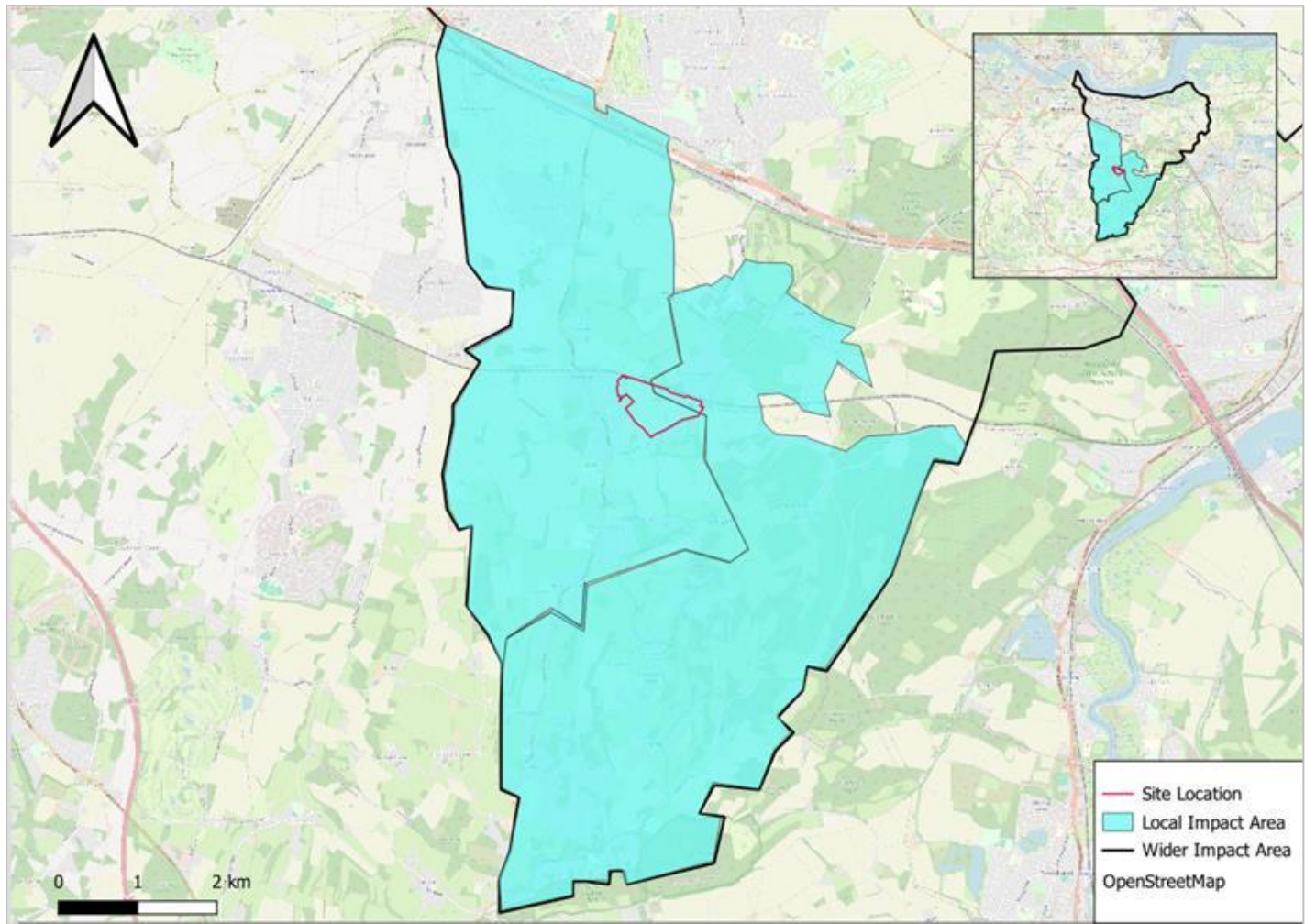
Assessment Methodology

- 5.15 The assessment of the likely significant effects will be undertaken using the methodology set out below.

Proposed Study Area

- 5.16 A LIA has been identified as Middle Super Output Areas (MSOAs) Gravesham 012, and Gravesham 013 to provide an understanding of the characteristics of the area surrounding the Site. The GBC boundary has been identified as a WIA as it is expected that the Borough will capture a large proportion of the impacts.
- 5.17 The extent of this impact area may vary for some receptors following best practices or the availability of data. Where this is the case, this will be highlighted within the Socio-Economic Chapter. Indirect or multiplier effects of the Proposed Development, for example concerning the wider economy, will also be considered. A map of the proposed Study Area is shown in **Figure 5.1**.

Figure 5.1: Study Area



Source: Icen Analysis, 2025

-
- 5.18 In some instances, a distance of 1.6km will be used to determine access to social infrastructure (such as childcare or sport and recreation facilities). 1.6km equates to an approximate walking time of 20 minutes for an able-bodied individual.

Legislation, standards and guidance

- 5.19 There is no legislation which is directly applicable to the assessment of socio-economic effects. The assessment will include a review of the planning policy context (at the national, county and local level) and take into account relevant economic strategies. The following policy is relevant to the Proposed Development:

- National Planning Policy Framework (2024)⁹;
- Kent and Medway Economic Framework (2024)¹⁰;
- Gravesham Local Plan Core Strategy (2014)¹¹; and
- Gravesham 2040 (2025)¹².

Approach to the baseline

- 5.20 The baseline analysis will identify the current demographic profile of the area as well as the labour market, health profile, provision of housing, and social and community infrastructure in the area, including any deficiencies or surplus capacity and any planned new facilities. The impact areas identified in the baseline section will be used, although the extent may be varied for some receptors following best practices or the availability of data. Where this is the case, this will be highlighted within the Socio-Economic ES Chapter.
- 5.21 The baseline will draw on a range of published data sources to understand both the social and economic characteristics of the assessment area including (but not limited to) data from the Office for National Statistics (ONS), the Office for Health Improvement and Disparities (OHID), the Department of Education, NHS Digital, and other recognised sources along with local planning policy, economic strategies, local plan evidence base (employment and open space), and information from the Applicant.
- 5.22 The evaluation of the effects of the Proposed Development will be based on an assessment of the magnitude of the effect and the importance of the identified receptor. Effects will be identified on a

⁹ Department for Levelling Up, Housing and Communities. National Planning Policy Framework. 2024

¹⁰ Kent County Council (2024) Kent and Medway Economic Framework

¹¹ Gravesham Borough Council (2014) Gravesham Local Plan Core Strategy

¹² Gravesham Borough Council (2025) Gravesham 2040

matrix basis from major adverse through to major beneficial, representing the scale of effects above and beyond the baseline position. Effects will be evaluated on a net additional basis taking into account existing conditions at the Site. Where possible, the scale of effect will be quantified concerning current levels of the provision under each receptor. The duration of the impacts will also be taken into account.

- 5.23 The significance of each of these overall socio-economic effects will be assessed, considering deprivation, local unemployment levels, economic activity rates, and housing needs. Where significant adverse effects are identified, appropriate mitigation measures to address any significant adverse effects will be included and assessed.
- 5.24 Mitigation measures will be identified to maximise the positive impacts of the Proposed Development and to offset any potentially significant adverse impacts.
- 5.25 Consideration will also be given to the cumulative impacts of the Proposed Development with other committed and proposed developments in the area as agreed with the GBC.
- 5.26 It is proposed to provide HIA as a technical appendix to the Socio-Economics Chapter. The HIA will be prepared as a standalone document to evaluate the impact of the Proposed Development on the wider determinants of health. Based on the scale and nature of the Proposed Development, the HIA will be a 'rapid HIA' that involves a focused investigation of health impacts considering both qualitative and quantitative evidence.
- 5.27 The likely effects of the Proposed Development on health outcomes of the general population and identified vulnerable/ priority groups will be undertaken as part of this HIA. This will draw on information set out in various chapters of the ES including: socio-economics, air quality, noise and vibration, energy, and transport.
- 5.28 The assessment will be centred on the determinants of health including: access to healthcare and other social infrastructure, access to open space and nature, accessibility and active travel, housing design and affordability, access to healthy food, air quality, noise and neighbourhood amenity, social cohesion and inclusive design, and environmental sustainability. Particular attention will be given to changes in the local environment and the neighbourhood. This will include a policy review, baseline assessment, assessment of impacts utilising the NHS Healthy Urban Development Unit Health Impact Assessment Tool, and identification of mitigation and monitoring measures. We would seek to agree the scope and proposed methodology with the Gravesham Public Health team.

6. TRANSPORT AND ACCESS

Baseline Conditions

Active Travel

- 6.1 With regard to the existing footway provision, a footway is provided along the eastern side of Camer Road from the Royal Hounds Dog Park north towards Sole Street station. On Norwood Lane, a footway is provided on the northern side of the road which terminates approximately 100m east of Nursery Road. Continuing west on this footway, pedestrians are able to route to Meopham Station.
- 6.2 There is an extensive public right of way (PRoW) network near the Site including:
- Footpath NS192 which bisects the Site and, in its entirety, runs from Wrotham Road (A227) to the south to Sole Street in the north.
 - Footpath NS250 which runs from the Camer Road / Norwood Lane junction north-west across open land to connect to Tradescent Drive.
 - Footpath NS191 which runs from Camer Road east to Gold Street.
 - Footpath NS308 which runs from Norwood lane to Tradescent Drive.
 - Bridleway NS242 which runs from the Royal Hounds Dog Park to Henley Street.

Public transport

Bus

- 6.3 The nearest bus stops to the Site are located on Camer Road in proximity to Sole Street station. These stops are served by the 311, 416 and 695 to destinations including Rochester and Gravesend. Additional stops are provided on Wrotham Road (A227) approximately 1km west of the Site served by the 34, 223, 305, 306, 308, 416, 418R, 418W, 695, M1 and VIG01 to destinations including Vigo Village, Sevenoaks and Gravesend.

Rail

- 6.4 Sole Street railway station is located to the north-east of the Site and provides hourly services to both London Victoria and Gillingham. Further rail services are available at Meopham Station approximately 1km to the north-west of the Site accessible via Norwood Lane and Wrotham Road. More frequent services are provided to Dover Priory, London Victoria and Gillingham.

Highway Network

Camer Road

- 6.5 Camer Road bounds the Site to the south-east and comprises a two-way single carriageway subject to the national speed limit, though this reduces to 30mph on the approach to Sole Street station. The road is approximately 6m in width with limited footway provision.

Norwood Lane

- 6.6 Norwood Lane bounds the Site to the south-west and comprises a two-way single carriageway operating at the national speed limit to the south and 30mph to the north in the vicinity of the existing residential dwellings. The road varies in width from approximately 4m south of the Site to 5m adjacent to the residential dwellings.
- 6.7 There is currently a footway provided on the eastern side of the carriageway from Wrotham Road to the north which continues southbound until the property named 'Alston' at which point it is extinguished. After this point, there is mixed footway provision to Footpath NS192, with provision along the frontage of Norwood Farmhouse and Norwood Farm Cottage.

Wrotham Road (A227)

- 6.8 Wrotham Road runs to the west of the Site on a north-south alignment between Gravesend and Meopham. In proximity to the Site, the road comprises a two-way single carriageway operating with a 30mph speed limit. Footways are provided on both sides of the carriageway providing connections to local facilities.

Highway safety

- 6.9 There have been no collisions in the most recent five-year period on Camer Road and only one slight collision on Norwood Lane. There have been five slight collisions and two serious collisions on Wrotham Road (A227) with two slight collisions on Green Lane. Whilst there have been two collisions at the Wrotham Road / Norwood Lane junction in the five-year period, this is significantly below the rate of one collision per annum so there is deemed to be no inherent safety issues with the local highway network. It is noted that, whilst DfT data is suitable for scoping purposes, the Transport Assessment (TA) will utilise the most recent available data to be obtained from Kent County Council (KCC), which will be inclusive of the reasons for collisions.

Potential Effects

Likely Significant Effects

Construction

- 6.10 With consideration of the environmental characteristics of the Site and the anticipated construction activities, the potential effects identified for the construction works for assessment in the ES are set out in **Table 6.1** below

Table 6.1: Potential Significant Effects During Construction

Receptor	Effects	Scoped In
Existing residents	Noise and vibration impacts on existing properties due to construction HGVs; severance effects on existing communities; risks from hazardous loads; dust and dirt impacts	✓
Existing residents	Effects on existing communities from increases in construction traffic volumes	✓
Existing business employees	Noise and vibration impacts on existing properties due to construction HGVs; severance effects on existing communities; risks from hazardous loads; dust and dirt impacts	✓
Highway Network	Net change in traffic patterns during construction; daily link flows; traffic speed; effect on personal injury accidents, driver delay¹³	✓
Pedestrians and Cyclists	Net change in traffic during construction and resulting effects on severance, delay, fear and intimidation and amenity for pedestrians and cyclists. Effect on personal injury collisions.	✓

Operation

- 6.11 With consideration of the environmental characteristics of the Site and the Proposed Development once completed and operational, the potential effects identified for the operational phase for assessment in the ES is as follows in **Table 6.2** below.

Table 6.2: Potential Significant Effects for the Completed Development

Receptor	Effects	Scoped In
----------	---------	-----------

¹³ Refer to the study area at paragraph 6.18

Existing residents	Severance effects on existing communities	✓
Existing residents	Effects on existing communities from increases in traffic volumes	✓
Existing business employees	Severance effects on existing communities	✓
Highway Network	Net change in traffic patterns during operation daily link flows; traffic speed; effect on personal injury collisions, driver delay¹⁴	✓
Pedestrians and Cyclists	Net change in traffic during operation and resulting effects on severance, delay, fear and intimidation and amenity for pedestrians and cyclists. Effect on personal injury collisions.	✓

Non-Significant Effects

6.12 There are no non-significant effects anticipated for the Transport and Access assessment.

Assessment Methodology

6.13 The assessment of the likely significant effects will be undertaken using the methodology set out below.

6.14 The scope of the Transport and Access assessment will cover all phases of development including the enabling works and construction activity (medium-term) and completed development (long-term) effects and cumulative effects.

6.15 For each element the assessment will cover the peak of each phase of works, for example, peak construction phases with regard to vehicle and people movements, a hybrid where construction and occupation occurs in tandem, and a fully occupied and operational development for the completed effects and cumulative effects.

6.16 The following topics will be assessed for the construction and completed phases of the Proposed Development in line with The Institute of Sustainability and Environmental Professionals (ISEP) Guidelines (2023)¹⁵:

¹⁴ Refer to the study area at paragraph 6.18

¹⁵ Environmental Assessment and Traffic Movement Guidelines (2023)

-
- Severance;
 - Driver Delay;
 - Pedestrian Delay;
 - Non-Motorised User Amenity;
 - Road Safety; and
 - Hazardous Loads / Large Loads.

6.17 The scope of the highway capacity assessments for the Proposed Development will be agreed with KCC and a more defined study area and scope will be presented within the TA Scoping Note. Consideration will be given to the guidance on study areas within the ISEP Guidelines (2023):

- Rule 1: Include highway links where traffic flows will increase by more than 30% (or the number of heavy goods vehicles will increase by more than 30%).
- Rule 2: Include highway links of high sensitivity where traffic flows have increased by 10% or more.

6.18 It is, however, likely that the study area for the Proposed Development will include an assessment of the following junctions and links:

- Camer Road;
- Norwood Lane;
- Green Lane;
- Wrotham Road;
- A2/Wrotham Road Junction;
- Sole Street;
- Jeskyns Road;
- Henhurst Road;
- A2/Watling Street Junction; and
- A2.(near to the Site).

6.19 The traffic and transport impacts of the Proposed Development will be assessed in line with the ISEP Guidelines and informed by scoping discussions with KCC and National Highways (NH). The scope of the Transport and Access assessment will include consideration of:

- Identification of the sensitivity of each receptor;
- Assessment Year and Time;
- Temporal Scope;
- Magnitude of Change, and;
- Receptor sensitivity and magnitude of change will together determine the scale and significance of an effect.

6.20 In line with the ISEP Guidelines, the sensitivity of affected receptors will be considered on a scale of high, medium, low or very low. The sensitivity of a road can be defined by the vulnerability of the user groups who may use it, e.g. elderly people, or children.

6.21 A sensitive area may be where pedestrian activity may be high, for example in the vicinity of a school or where there is already a collision cluster. It also takes account of the existing nature of the road e.g. an existing 'A' road is likely to have a lower sensitivity than a minor residential road as it is already used by a larger volume of traffic; therefore a small increase in vehicle flow would have a smaller change in the nature of the road.

6.22 **Table 6.3** sets out the scale of sensitivity against differing receptors to demonstrate how the assessment is to be completed.

Table 6.3: Potential Significant Effects During Construction and for the Completed Development

Receptor Type	Receptor Sensitivity
Receptors of greatest sensitivity to traffic flow: schools, colleges, playgrounds, collision clusters, retirement homes, roads without footways that are used by pedestrians	High
Traffic flow sensitive receptors: congested junctions, doctors' surgeries, hospital, shopping areas with roadside frontage, roads with narrow footways, recreation facilities	Medium
Receptors with some sensitivity to traffic flow: place of worship, public open space, tourist attractions and residential areas with adequate footway provision	Low
Receptors with low sensitivity to traffic flows and those sufficiently distant from affected roads and junctions: links where no pedestrian	Very Low

activity occurs and where there is no provision for pedestrians. For example, strategic roads such as motorways and trunk roads or rural roads where there are no pedestrian-generating land uses within the vicinity	
---	--

6.23 A review of each highway link within the proximity of each receptor in relation to the key factors which affect the sensitivity of that link will be undertaken.

6.24 The ES chapter will assess the following scenarios:

- Baseline - using traffic surveys and data from the Kent Transport Model (KTM).
- Future Baseline – using data from the KTM.
- Future Baseline + Construction Phase – using data from the KTM and calculated construction flows.
- Future Baseline + Proposed Development – using data from the KTM and calculated development flows.
- Future Baseline + Proposed Development + Cumulative Development – using data from the KTM, calculated development flows and cumulative development flows provided in assessments for relevant sites.

6.25 Based on the years assessed within the KTM, 2019 will be utilised as the Baseline year, with 2042 as the Future Baseline year.

Assessment Time Periods

6.26 The ES Transport and Access Chapter will assess the following time periods for each of the above scenarios:

- AM Peak Hour
- PM Peak Hour
- 24 Hour Annual Average Daily Traffic (AADT)

Temporal Scope

6.27 The assessment will identify whether the resultant effects of the Proposed Development will be permanent or temporary in nature and categorised as follows:

-
- Permanent – these are effects that will remain even when the Proposed Development is complete, although these effects may be caused by environmental changes that are permanent or temporary.
 - Temporary – these are effects that are related to environmental changes associated with an activity and that will cease when that activity finishes (construction activity). Temporary effects can be further categorised by the time period of which they will last; short-term (0-2 year impact), medium-term (3-5 year impact) and long-term (5-10 year impact).

Determining the Magnitude of Change

6.28 The ISEP guidelines provide a thorough approach to the assessment of environmental effects of traffic associated with proposed major developments.

6.29 Under the ISEP guidelines, it is recommended that the impacts of major developments are considered under each category:

- Severance;
- Driver Delay;
- Pedestrian Delay;
- Non-Motorised User Amenity;
- Fear and Intimidation;
- Road Safety; and
- Hazardous Loads / Large Loads.

7. AIR QUALITY

Baseline Conditions

- 7.1 GBC has declared three Air Quality Management Areas (AQMAs) due to exceedances of the air quality objectives for nitrogen dioxide (NO₂) although these are not in close proximity to the Proposed Development. The closest AQMA to the Site is the Gravesham A2 AQMA, which is located approximately 2.7km to the northeast of the Site.
- 7.2 NO₂ diffusion tube monitoring is carried out throughout the borough. At the nearest diffusion tube to the Site, GR94, the AQS objective for annual mean NO₂ concentrations has been met between 2020 and 2024. Details of the site are set out in **Table 7.1**, along with concentrations recorded.

Table 7.1: NO₂ Concentrations recorded at the nearest Diffusion Tube Monitor (µg/m³)

Monitoring Site	Type	Distance to Kerb (m)	2020	2021	2022	2023	2024
GR94 – Opp The George PH, Wrotham Road, Meopham, DA13 0AJ	Roadside	0.7	27.2	25.5	26.6	23.3	19.6
Data obtained from GBC Air Quality Annual Status Report 2025 ¹⁶							

- 7.3 The Site is located in an area where air quality is mainly influenced by road transport using Norwood Lane and Camer Road, which bound the Site to the west and east, respectively.
- 7.4 The Chatham Main Line passes to the north of the Site. This is an electrified line although it is likely that it will also support some diesel traffic. The Defra technical guidance document Local Air Quality Management (LAQM).TG22¹⁷ provides a list of heavily trafficked railway lines along which assessment should be considered if the background annual mean NO₂ concentration is above 25 µg/m³ and there is relevant exposure within 30m of the track. The railway line is not included on the list presented in LAQM.TG22 and initial review indicates that the background NO₂ concentration in this area is lower than the 25 µg/m³ threshold.

¹⁶ Gravesham Borough Council. (2025). 2025 Annual Status Report.

¹⁷ Department for Environment, Food and Rural Affairs (DEFRA), (2022): Part IV The Environment Act 2021 Local Air Quality Management Review and Assessment Technical Guidance LAQM.TG(22).

- 7.5 There are no industrial pollution sources in the immediate vicinity of the Site that will influence the local air quality.
- 7.6 During construction of the Proposed Development there is the potential for impacts to occur as a result of dust and PM₁₀ emissions. Guidance provided by the Institute of Air Quality Management (IAQM)¹⁸ recommends that an assessment is undertaken where there are human receptors within 250m of the Site boundary or within 50m of the routes used by construction vehicles up to 250m from the site entrance; and where there are dust sensitive ecological receptors within 50m of the Site boundary or within 50m of the routes used by construction vehicles up to 250m from the site entrance. Human receptors are located within 250m of the Site, but there are no dust sensitive ecological habitats in the vicinity of the Site. An assessment of the impacts of the construction of the Proposed Development on human receptors will therefore be included in the assessment. An assessment of the impacts on ecological receptors during the construction phase has not been considered further.

Potential Effects

Likely Significant Effects

Construction

- 7.7 The likely significant effects identified for the construction works for assessment in the ES are set out in **Table 7.2**.

Table 7.2: Likely Significant Effects During Construction

Receptor	Effects	Scoped In
Human (e.g. existing residential dwellings, schools, hospitals, care homes)	• Potential temporary increase in dust generated by on-site activities during the construction phase of the Proposed Development. • Potential increase in particulate matter (as PM₁₀) concentrations generated by on-site activities during the site preparation, earthworks and construction phase of the Proposed Development. • Potential increase in air pollutants (NO₂, PM₁₀ and PM_{2.5}) generated from construction plant and vehicle exhaust emissions during the site preparation, earthworks and construction phase of the Proposed Development.	✓

Operation

- 7.8 The likely significant effects identified for the operational phase for assessment in the ES is as follows in **Table 7.3**.

¹⁸ Guidance on the assessment of dust from demolition and construction (version 2.2), IAQM, January 2024.

Table 7.3: Likely Significant Effects for the Completed Development

Receptor	Effects	Scoped In
Human (e.g. existing residential dwellings, schools, hospitals, care homes)	- Potential change in pollutant concentrations (notably NO₂, PM₁₀ and PM_{2.5}) due to exhaust emissions from road traffic generated during the operational phase of the Proposed Development. - Exposure of future occupants to pollutant concentrations (notably NO₂, PM₁₀ and PM_{2.5}) and the suitability of the Site for its proposed end use will be considered.	✓
Ecological	Potential change in pollutant concentrations (notably Oxides of Nitrogen) due to exhaust emissions from road traffic generated during the operational phase of the Proposed Development.	✓

Non-Significant Effects

- 7.9 Potential effects during construction and once the Proposed Development is completed and operational that are not likely to be significant are set out in **Table 7.4**, together with justification of scoping out of the ES.

Table 7.4: Non-Significant Effects Proposed to be Scoped Out of ES

Receptor	Effects	Scoped In
Ecological	Potential temporary increase in dust generated by on-site activities during the construction phase of the Proposed Development.	X
Human	- Emissions from industrial sources on local air quality - Emissions from rail sources on local air quality	X

Assessment Methodology

- 7.10 The assessment of the likely significant effects will be undertaken using the methodologies set out below.

Construction Phase

- 7.11 Construction related impacts will also be examined. This will involve a review of the proposed works and related traffic data during the various phases of the development to identify any potentially adverse effects at nearby sensitive receptors. The construction assessment will be carried out in-line with IAQM guidance.

Operational Phase

- 7.12 The air quality assessment will be undertaken using detailed dispersion modelling (ADMS Roads) for road traffic emissions. The assessment will take account of all relevant national and local policies and relevant Defra technical guidance relating to air quality.
- 7.13 The road traffic assessment will focus on NO₂ and fine particulate matter (PM₁₀ and PM_{2.5}) and a comparison of predicted concentrations with the statutory air quality standards and objectives. The significance of predicted impacts will be determined in accordance with the Environmental Protection UK (EPUK) and IAQM Planning Guidance¹⁹ as well as the Kent and Medway Air Quality Partnership Air Quality and Planning Technical Guidance²⁰.
- 7.14 The extent of the assessment of the traffic related air quality impacts will be determined by the extent of the Transport Assessment as agreed with the relevant bodies. It is anticipated that this will cover the local road network and any roads predicted to experience significant changes in flow.
- 7.15 The ADMS Roads modelling will be verified against existing monitoring data for the area (where relevant data exists). It is not intended at this stage to carry out additional air quality monitoring as the air quality within the vicinity of Meopham is generally good and as a result the council has not declared any AQMAs nearby.

¹⁹ EPUK & IAQM. Land-use Planning and Development Control: Planning for Air Quality, January 2017

²⁰ Kent & Medway Air Quality Partnership (2015). Air Quality Planning Guidance.

8. NOISE AND VIBRATION

Baseline Conditions

- 8.1 The current typical ambient noise environment is dominated by road traffic on the surrounding road network (including Camer Road and Norwood Lane), and rail traffic on the Chatham Main Line, to the north of the Site.
- 8.2 Baseline noise levels will be obtained by an unattended noise survey, undertaken during daytime and night-time periods. A baseline noise model will be completed using traffic data provided by the transport consultant and verified using the baseline survey.

Potential Effects

Potential Significant Effects

Construction

- 8.3 The potential significant effects identified for the construction works for assessment in the ES are set out in **Table 8.1**.

Table 8.1: Potential Significant Effects During Construction

Receptor	Effects	Scoped In
Surrounding residential receptors	Noise and vibration generated during typical construction activities at the Site.	✓

Operation

- 8.4 The potential significant effects identified for the operational phase for assessment in the ES is as follows in **Table 8.2**.

Table 8.2: Potential Significant Effects for the Completed Development

Receptor	Effects	Scoped In
Existing residential dwellings	Changes in noise levels at existing road links due to changes in local traffic flows	✓
Proposed residential receptors	Ambient noise at proposed residential use, in relation to the noise environment	✓

Non-Significant Effects

- 8.5 Prior to assessment, there are no certain non-significant effects for the Noise and Vibration chapter.

Assessment Methodology

- 8.6 Existing ambient noise levels will be measured in order to inform computer modelling for the assessment of effects at the Proposed Development. This will be carried out at locations representative of the Proposed Development over both day and night-time periods. Subjective vibration observations will be undertaken on-site to identify the requirement for further consideration.
- 8.7 Ambient noise conditions will be considered using a computer noise modelling, which will be informed by traffic flows and verified using the obtained baseline sound data. Noise parameters, such as $L_{Aeq,T}$, $L_{A90,T}$, $L_{A10,T}$ and $L_{Amax,F}$ will be monitored and the relevant values obtained for the standard measurement periods. The results from the noise modelling will be used as a basis to assess the likely impact on the Proposed Development.

Legislation, Guidance and Policies

- 8.8 Legislation and guidance documents to be used in the assessment will include:
- BS 8233:2014: Sound Insulation and Noise Reduction for Buildings - Code of Practice²¹;
 - BS 5288-1:2009+A1:2014, Code of Practice for noise & vibration control on construction & open sites – Part 1: Noise²²;
 - BS 5288-2:2009+A1:2014, Code of Practice for noise & vibration control on construction & open sites – Part 2: Vibration²³;
 - World Health Organisation (WHO) - Guidelines for Community Noise²⁴;
 - Calculation of Road Traffic Noise (CRTN)²⁵;

²¹ The British Standards Institution (2014). BS 8233:2014: Sound Insulation and Noise Reduction for Buildings - Code of Practice. BSI Standards Ltd

²² The British Standards Institution (2014). BS 5288-1:2009+A1:2014, Code of Practice for noise & vibration control on construction & open sites – Part 1: Noise. BSI Standards Ltd

²³ The British Standards Institution (2014). BS 5288-2:2009+A1:2014, Code of Practice for noise & vibration control on construction & open sites – Part 2: Vibration. BSI Standards Ltd

²⁴ World Health Organization (1999). Guidelines for Community Noise. World Health Organization.

²⁵ Department of Transport (1988). The Calculation of Road Traffic Noise. Her Majesty's Stationery Office.

-
- Design Manual for Roads and Bridges (DMRB) LA111 ²⁶

Construction Noise Effects

- 8.9 Likely impacts from the construction phase will be calculated based on noise levels pertaining to typical construction activities and the likely distances between these activities and the nearby existing residential receptors. Construction noise levels will be considered against the target construction noise criterion of 75 dB $L_{Aeq,16hr}$, provided within BS 5228-1.

Construction Vibration Noise Effects

- 8.10 The likelihood of impacts from construction vibration will be considered against typical distances at which vibration from construction activities may be perceptible. Construction vibration will be considered against target criteria derived using the guidance provided within BS 5228-2.

Operational Noise Effects

- 8.11 Ambient noise levels will be calculated across the Site by use of a computer noise model. The noise propagation across the Proposed Development will be modelled in order to identify indicative mitigation requirements for glazing and ventilation.
- 8.12 The calculated ambient noise levels will be assessed in accordance with the guidance provided within BS 8233 and other relevant standards. Maximum noise levels overlooking road/rail sources will be considered using the measured noise data and assessed against the guideline value provided by the WHO Guidelines for Community Noise.

Operational Noise Effects, Changes in Road Traffic Flows

- 8.13 The change in road traffic noise levels on the surrounding road network will be assessed based on the baseline and proposed 18-hour Annual Average Weekday Traffic (AAWT) road traffic data, provided by the transport consultant. The noise change, in dB, will be calculated for each road links using the Background Noise Level (BNL) calculation procedure set out in CRTN and the magnitude of impact assessed using the methodology provided in Volume 11 of the DMRB.
- 8.14 Potential cumulative effects of the Proposed Development when considered in combination with any nearby schemes with planning permission will be assessed.

²⁶ Highways England (2020). Design Manual for Roads and Bridges LA111. Highways England

9. HYDROLOGY, FLOOD RISK AND DRAINAGE

Baseline Conditions

- 9.1 The Site lies in 'Flood zone 1 – Low probability' according to the Environment Agency's (EA) online flood maps²⁷. The Site is located approximately 6km west of the River Medway and approximately 7km south of the River Thames²⁸. There are no existing ditches within or in vicinity of the Site.
- 9.2 The EA Risk of Flooding from Surface Water (RoFSW) mapping²⁹ indicates that there is an overland flow pathway crossing the Site near its western boundary. This conveys water from an upstream watershed extending up to Foxendown Lane.
- 9.3 A secondary area of flood risks is located directly adjacent to The Railway Inn and along Station Approach, immediately adjacent to the northeastern corner of the Site (outside the red line boundary). This is associated with a localised low point at the downstream end of the land east of Camer Road and Camer Park.
- 9.4 Kent County Council (KCC) Preliminary Flood Risk Assessment (published September 2011)³⁰ provides mapping of the areas within the county susceptible to groundwater flooding. The Site lies outside of all such areas.
- 9.5 The published geology³¹ at the Site indicates that most of the Site is underlain by Lewes Nodular Chalk, with an area of Thanet Formation (sand) in the eastern part of the Site. Superficial deposits of Head (Clay, silt, sand and gravel) are present in both the northwestern and northeastern corner of the Site.
- 9.6 The Soilscales designation for the Site is '*slightly acid loamy and clayey soils with impeded drainage*' with an area designated as '*shallow lime-rich soils over chalk or limestone (freely draining)*' in the western half of the Site. This indicates that the ground away from the areas of Thanet Formation is likely to have good soakage characteristics, in particular beneath the superficial Head deposits.

²⁷ Environment Agency (2025). Flood Map for Planning dataset (available online).

²⁸ Distance measured from closest site boundary to closest bank of Main River, in a straight line in stated direction.

²⁹ Environment Agency (2025). Flood Map for Planning dataset (available online).

³⁰ Kent County Council (2011). Preliminary Flood Risk Assessment. Kent County Council

³¹ British Geology Survey (2025). Geology Viewer (available online).

- 9.7 Ground investigations conducted at the site in April 2025 confirmed the desktop geology. Infiltration testing indicated variable rates of between 6.24×10^{-6} m/s to 1.09×10^{-4} m/s in the chalk, with much lower rates obtained in the head deposits. Groundwater monitoring conducted over a 4-week period showed fairly constant groundwater levels of between 4.64m to 4.75m below ground level.
- 9.8 The Site partially lies within groundwater Source Protection Zone (SPZ) III – Total Catchment, with the westernmost portion of the site located within groundwater Source Protection Zone (SPZ) II – Outer Protection Zone. It overlays a Medium-High to High groundwater vulnerability aquifer, with soluble rock risks possible.
- 9.9 The Site is located within the Medway Management Catchment of the Thames River Basin Management Plan (RBMP)³². Current water quality data (cycle 3, 2022) for the 'Ebbsfleet Water Body', which is the nearest monitored water body within the Medway Lower Operational Catchment, indicates it to have Moderate ecological status with chemical assessment not required.
- 9.10 A public foul sewer, owned by Southern Water, is present within Norwood Lane on the southwest of the Site. A separate Southern Water sewer network is located northeast of the Site within Sole Street, on the northern side of the Chatham Main Line.

Potential Effects

Construction

- 9.11 The potential significant effects identified for the construction works for assessment in the ES are set out in **Table 9.1**.

Table 9.1: Potential Significant Effects During Construction

Receptor	Effects	Scoped In
Downstream water network	Silt pollution and spillage incidents affecting the downstream water environment as a result of construction activities	✓
Groundwater table	Groundwater body could be impacted by oil/chemical spillage as a result of construction activities	✓

³² Environment Agency (2022). Thames River Basin District river basin management plan: updated 2022 (available online)

Operation

- 9.12 The potential significant effects identified for the operational phase for assessment in the ES is as follows in **Table 9.2**.

Table 9.2: Potential Significant Effects for the Completed Development

Receptor	Effects	Scoped In
Downstream properties	Increase in surface water runoff due to the increase in impermeable surfacing as a result of development	✓
Downstream properties	Displacement of floodwaters due to proposed development in flood risk areas	✓
Groundwater table	Impact on water quality in the receiving water environment due to pollutants from the development being discharged to ground	✓
Receiving foul sewer network	Increased in foul water flows to the existing foul water network increasing sewer flood risks downstream of the proposed development	✓

Non-Significant Effects

- 9.13 Potential effects during construction and once the Proposed Development is completed and operational that are not likely to be significant are set out in **Table 9.3**, together with justification of scoping out of the ES.

Table 9.3: Non-Significant Effects Proposed to be Scoped Out of ES

Receptor	Effects	Scoped In
Downstream flow pathways	Localised overland flow pathways temporary altered during Construction Phase as a result of earthworks, temporary compounds, etc. are unlikely to significantly affect overall pathways and watercourse away from the site	X
Downstream river catchments	Impact on the water quality of the downstream river catchments due to the proposed development would be very limited due to its distance from the nearest watercourse	X

Assessment Methodology

- 9.14 The assessment of the likely significant effects will be undertaken using the methodology set out below. The study area will be defined by the Site boundaries.
- 9.15 The ES chapter will identify and assess the effects of the Proposed Development on surface water quantity and quality, groundwater quantity and quality, and wastewater drainage as a result of the change in land use and regime during the construction and completed Proposed Development phases.
- 9.16 The assessment of likely significant effects will be based on a review of published data including evidence base documents, site surveys and site visits, ground investigation results, online mapping (British Geological Survey (BGS), EA, Ordnance Survey, etc), and liaison with the Lead Local Flood Authority (LLFA) and Southern Water.
- 9.17 The Proposed Development drainage strategy will be required to attenuate runoff prior to discharge to the water environment. Suitable calculations will be provided along with plans showing the land allocation within the Proposed Development for surface water attenuation areas.
- 9.18 The proposed drainage strategy will need to include sustainable drainage systems (SuDS) in order to provide sufficient cleansing of storm runoff prior to discharge to the water environment. The proposed method of assessment is the simple index approach prescribed in The SuDS Manual (CIRIA C753).
- 9.19 An outline Flood Risk Assessment (FRA) & Drainage Strategy (DS) report will contain information on the management of flood risk and surface water within the site and will be submitted with the planning application. The FRA & DS will identify those mitigation measures set out in the ES for the Proposed Development and provide information on how they will be managed in the future.
- 9.20 A Construction Environmental Management Plan (CEMP) will be prepared to address risks and mitigation measures during construction. Depending on the progress of the CEMP preparation, the ES chapter will outline the proposed measures from the CEMP or will set out the measures that the CEMP should include.
- 9.21 Further measures will be recommended as additional proposed mitigation measures to be incorporated within a reserved matters application and a full detailed Drainage Strategy for each phase of the Proposed Development as and when detailed proposals for the Site come forward.
- 9.22 The significance of the effects on the water environment receptors will be determined by combining the sensitivity of identified receptors with the predicted magnitude of change, using a matrix.

10. ARCHAEOLOGY

Baseline Conditions

Study Area

- 10.1 The Site lies in two Archaeological Notification Areas (ANA) designated for its Medium Palaeolithic potential and as an area of multi-period background potential. It is located adjacent to the historic settlements of the medieval villages of Meopham, Hook Green, and Sole Street.
- 10.2 A baseline assessment of the Study Area indicates undesigned heritage assets are present within the Site outline and also in close proximity to the Site, suggesting a low potential for prehistoric to medieval remains, and a moderate potential for post-medieval remains.
- 10.3 An Archaeological Desk-Based Assessment (DBA) will be undertaken and will form the archaeological baseline for the ES chapter. The DBA will consider data from a Study Area, anticipated to comprise a 1km radius from the Site. This will be agreed in consultation with the Archaeological Advisory Team, who provides archaeological advice to GBC. The Science Advisor at Historic England will also be consulted, when relevant.
- 10.4 The following sources will be consulted in the production of the DBA:
- Kent Historic Environment Record (KHER)
 - British Geological Survey (BGS) – solid and Drift geology digital mapping and geological borehole data where applicable (British Geological Survey, 2025, Online Historic Geology Borehole Data and Digital Drift and Solid Geology Data, <https://www.bgs.ac.uk/discoveringGeology/geologyOfBritain/viewer.html>);
 - Historic England – Information on statutory designated assets data including National Heritage List for England (NHLE), World Heritage Sites, Scheduled Monuments, Listed buildings, and any identified Heritage at Risk (Historic England 2020, Environmental Impact Assessment and the Historic Environment: A Guide to Good Practice);
 - Historic maps – Ordnance Survey (OS) maps from the historic first edition through to modern OS mapping. Earlier historic maps will also be consulted where available (<https://maps.nhl.uk/os/>);
 - Geographical and basic topographical layout using Google Maps and Light Detection And Ranging (LIDAR) imagery (www.google.co.uk/maps, <https://lidarfinder.com>);

-
- Aerial Photography – Historic and modern aerial photography by using the Historic England Aerial Photo Explorer (<https://historicengland.org.uk/research/results/aerial-archaeology-mapping-explorer/>);
 - Site Reports – Reports on past archaeological investigations within the Study Area; and
 - Details of the Proposed Development – Existing and proposed site plans, topographical survey, contamination report, borehole data, existing site services and utilities report.
- 10.5 In addition, a geophysical survey (GS) will be undertaken to support the application, to further assess the potential for previously unknown archaeological deposits. The programme for GS will be agreed via a Written Scheme of Investigation (WSI), a method statement including a specification for works agreed with the Archaeological Advisory Team to GBC.
- 10.6 The potential sensitive receptors include all of the known and as-yet unknown archaeological assets within the Site. Designated and undesignated archaeological assets within the Study Area and will be identified as part of the DBA.
- 10.7 At present, the following baseline information have been established:
- 10.8 The Site does not contain any heritage assets designated as being of national importance, such as listed buildings or Parks and Gardens of Special Historic Interest. However, the Site is surrounded by Grade II listed buildings, such as Norwood Farmhouse on the western boundary of the Site (LEN: 1039912). The nearest Grade I listed building is Parish Church of St John the Baptist, approximately 1km south-west of the Site. The nearest Scheduled Monument is deserted medieval manorial settlement of Cossington, approximately 1.2km from the Site;
- 10.9 The Site is located within two different ANAs. Most of the Site falls within ANA 59, whilst the portion along the northern edge falls within ANA 3. Both areas are designated as having medium or some potential for Palaeolithic and multi-period archaeological deposits;
- 10.10 There are three archaeological assets located within the Site boundary:
- A Roman copper alloy *nummus* of Constantine I (MKE120881);
 - A 17th century farmstead (MKE84228) associated with Norwood Farmhouse, a Grade II listed building (MKE27575);
- 10.11 A post-medieval outfarm of regular L-plan form (MKE84310).

Consultation to Date

- 10.12 Following consultation with the Archaeological Advisor to GBC, it has been requested that the planning application must be supported by a DBA, a geophysical survey and an ES chapter. They have also advised that if significant archaeology is recorded during the geophysical survey, a trial trench evaluation might also be required, and/or clear options for post-determination flexibility in layout/design for preservation in situ and/or recording.

Potential Effects

Likely Significant Effects

- 10.13 In assessing the likely effects of the Proposed Development on archaeology receptors, the intention is to identify how, and to what degree, it would affect the significance of the identified archaeological assets. The methodology for the assessment of potential effects on designated and non-designated heritage assets takes into account the following legislation, policy and guidance:

Legislation

- Ancient Monuments and Archaeological Areas Act 1979 – Part 1 Ancient monuments: Protection of Scheduled Monuments (<https://legislation.gov.uk/ukpga/1979/46/section/1>)

National Planning Policy

- National Planning Policy Framework (Ministry of Housing, Communities & Local Government, National Planning Policy Framework, 2024)

Local Planning Policies and Guidance

- Gravesham Local Plan Core Strategy and Local Plan Policies Map (2014)

Other Relevant Guidance

- Government Planning Practice Guidance 2023 (www.gov.uk/guidance/conserving-and-enhancing-the-historic-environment);
- English Heritage (2008) Conservation Principles, Policies and Guidance;
- Historic England (2015), managing Significance in Decision-Taking in the Historic Environment – Historic Environment Good Practice Advice in Planning 1: The Historic Environment in Local Plans (GPA2);
- Good Practice Advice in Planning 3 ('GPA3') (2017): The Setting of Heritage Assets; and
- Historic England (2020) Good Practice in Planning: Enabling Development and Heritage Assets

Professional Regulations and Standards & Guidance

- Historic England (2022) Planning and Archaeology: Historic England Advice Note 2017;

- Chartered Institute for Archaeologists (CIfA), 2020, Standard for archaeological geophysical survey;
- Chartered Institute for Archaeologists (CIfA), 2023, Standard for archaeological excavation;
- Chartered Institute for Archaeologists (CIfA), 2023, Standard for archaeological monitoring and recording;
- Chartered Institute for Archaeologists (CIfA), 2014, Standard and Guidance for the Collection, Documentation, Conservation and Research of Archaeological Materials (revised 2020);
- Chartered Institute for Archaeologists (CIfA), 2014, Standard and Guidance for Archaeological Field Evaluation (revised 2023);
- Chartered Institute for Archaeologists (CIfA), 2014, Code of Conduct (revised 2023); and
- Chartered Institute for Archaeologists (CIfA), 2014, Standard and Guidance for the Creation, Compilation, Transfer and Deposition of Archaeological Archives (revised 2020).

Construction

10.14 The potential significant effects identified for the construction works for assessment in the ES are set out in **Table 10.2**.

Table 10.2: Potential Significant Effects During Construction

Receptor	Effects	Scoped In
Prehistoric Remains	• Construction phase works which results in below ground impacts and/or landscaping has the potential to effect buried archaeological remains	✓
Roman Remains	• Construction phase works which results in below ground impacts and/or landscaping has the potential to effect buried archaeological remains.	✓
Medieval Remains	• Construction phase works which results in below ground impacts and/or landscaping has the potential to effect buried archaeological remains	✓
Post-medieval Remains	• Construction phase works which results in below ground impacts and/or landscaping has the potential to effect buried archaeological remains.	✓

-
- 10.15 All effects that may result in a high magnitude of change to any known or unknown archaeological remains within the Site will be scoped into the assessment. This will primarily consist of works that penetrate the ground surface as they have the potential to damage and/or remove archaeological deposits, features and finds. These will likely all occur during the enabling and construction phases and include activities such as (but not limited to) piling, excavation of service trenches, foundations or any other element, probing, coring, ground levelling, road construction, compound construction, below ground demolition.
- 10.16 The level of impact on archaeological heritage receptors will be fully assessed within the DBA, which will form a technical appendix to the ES, and the results included within the ES chapter. Where possible there will be an attempt to mitigate by design any impacts on particularly sensitive assets. Where adverse effects on sensitive receptors are determined to be 'significant' for the [purposes of the EIA Regulations, then they will be subject to further mitigation and justification.

Non-Significant Effects

Operation

- 10.17 With consideration of the environmental characteristics of the Site and the Proposed Development once completed and operational, no likely significant effects on sensitive receptors have been identified.

Assessment Methodology

Basis of Assessment

- 10.18 The ES Chapter will set out an assessment of the impacts of the groundworks and construction works associated with the Proposed Development on any identified or potential archaeological remains. This will be followed by an assessment of the overall significance of effect upon archaeological assets, both before and after mitigation. The significance of effect reflects both the importance of the resource and the degree to which the resource would be impacted (i.e. magnitude of change).
- 10.19 The ES Chapter will provide a reasonable worst-case assessment based on the maximum building envelope, as the construction of the Proposed Development is the time at which archaeological assets (receptors) could be impacted due to associated groundworks.

Assessment of Effects

- 10.20 Physical impacts on archaeological receptors resulting in the disturbance or removal, in part or in whole, of buried heritage assets result in direct, permanent, site-scale adverse effects on those receptors. In addition to the above, impacts that result in alteration in the below-ground burial environment, such as alteration of groundwater hydrology, have the potential to result in indirect, permanent effects that may affect the buried heritage assets within the site and the immediate vicinity

(local scale), that may either be adverse (resulting in the physical alteration of buried heritage assets) or neutral (resulting in no discernible change in the nature of the buried heritage assets).

- 10.21 Buried heritage assets are finite, and irreplaceable once physically disturbed. The understanding of the significance of any individual heritage asset or group of assets often relies on a physical relationship to other heritage assets adjacent, or an associative relationship to assets nearby or in the wider environment. For this reason, once damaged or removed from its context a heritage asset cannot be meaningfully replicated or replaced, and its significance is likely to be reduced or lost. Effects arising from the removal of buried heritage assets are therefore usually adverse. An appropriate mitigation strategy would aim to eliminate, offset, or reduce to an acceptable level, any adverse effect.
- 10.22 The process of impact assessments applied to buried heritage involves the following steps:
- Assessing the **potential** for unknown archaeological assets based on known baseline preliminary evidence.
 - Understanding the archaeological assets. This includes describing the asset, its surroundings and defining its heritage **significance** (referred to in the ES chapter as ‘sensitivity’ to avoid confusion with the significance of effect).
 - Understanding the level and degree of impact (**magnitude of change**) to the significance of the archaeological asset.
 - Determining the **significance of effect** on archaeological assets caused by the Proposed Development, by considering the magnitude of the impact and assessing the significance of the change.
- 10.23 The likely significant effects of the Proposed development on known archaeological assets as well as currently unknown assets that may be present on the Site will be assessed. A full assessment of the planning policy context at national, strategic and local level will be set out together with the relevant methodology and assessment criteria.
- 10.24 The ES Chapter will present the potential effects associated with the Proposed Development to below ground archaeological assets.
- 10.25 In line with the NPPF, local planning policies and industry standards and guidance, an Archaeological DBA will be prepared to establish the archaeological significance and value of known buried assets, the potential impact of the Proposed Development upon any such assets. The DBA will establish the archaeological baseline conditions at the Site.

- 10.26 **Significance** values, or sensitivity, of an archaeological receptor are guided by its designated status and its heritage interest. Each identified archaeological asset can be assigned a value in accordance with the criteria set out in the Historic England's 'Conservation Principles' and NPPF Annex 2, as per table 2 below. Using professional judgement and the results of consultation with relevant stakeholders, archaeological assets are also assessed on an individual basis. Regional variations and individual qualities are also considered where applicable. This includes aspects such as the regional scarcity of specific asset type, or whether assets can be considered to be schedulable quality due to them being of national importance.

Table 10.2: Significance Classification

Value	Description
International / National (very high)	The highest status of asset and indicative of national importance: e.g. World Heritage Sites (WHS), Scheduled Monuments (SMs), Grade I and II* Listed Buildings (LBs), Grade I and II* Registered Parks and Gardens (RPGs), Protected Wrecks, Heritage assets of national importance, well preserved historic landscapes with exceptional coherence, time depth, or other critical factor(s).
National / Regional / County (high)	Archaeological sites that may be designated or undesignated, may contain well preserved or in situ structures, buildings of historical significance, historic landscapes with a reasonably defined extent, or reasonable evidence of occupation/settlement or activities (ritual, industrial etc.). e.g. Grade II RPGs, Conservation Areas (CAs), Designated historic battlefields, Grade II LBs, burial grounds, protected heritage landscapes such as Ancient Woodland, heritage assets of regional or county importance.
Sub-regional / District (medium)	Designated or undesignated archaeological sites with reasonable evidence of human activity. Assets may be of limited historic value but may contribute to district or local knowledge and/or research objectives. May contain structures or buildings of potential historic merit. e.g. Historic village settlements, associated historic field systems and boundaries, historic road systems.
Sub-regional / District (medium)	Heritage assets with a local level cultural or education value only e.g. Historic field systems and boundaries, agricultural features such as ridge and furrow, ephemeral archaeological evidence, artefacts of poor contextual stratigraphy.
Negligible	Historic assets with very little or no surviving archaeological interest or stratigraphic integrity. Buildings and landscapes of no historical significance.

	e.g. Destroyed objects, buildings of no architectural merit, relatively modern landscape features or disturbances such as quarries, field boundaries, drains etc.
Unknown	Insufficient information exists to assess the importance. Significance of below ground archaeological remains is often unknown until their nature and extent

Avoidance and Mitigation Measures

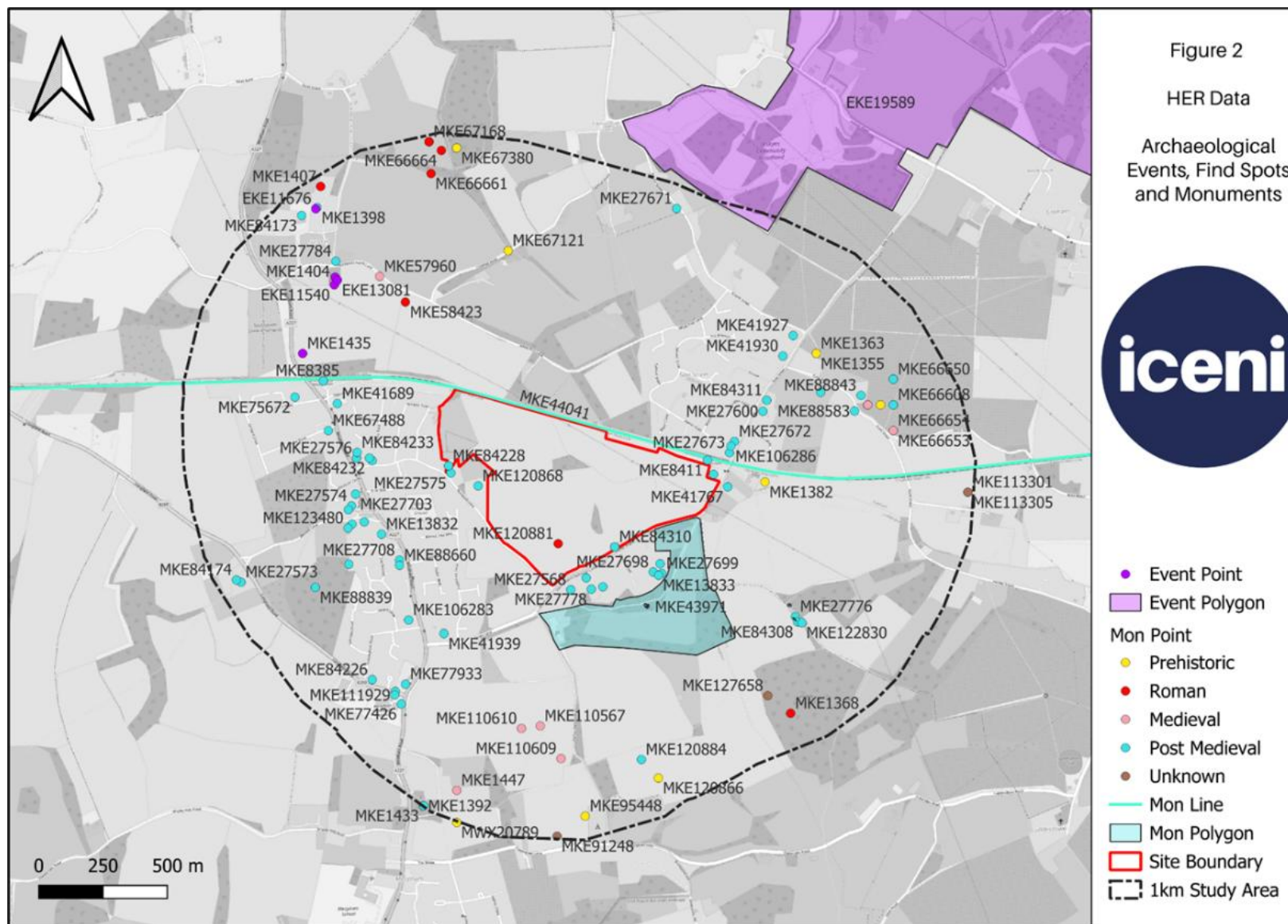
10.27 If required, an appropriate mitigation strategy will be identified, discussed and agreed as appropriate. This may include the below:

- Archaeological trial trench evaluation;
- Archaeological excavation or strip, map and record excavation; and
- Archaeological watching brief.

Cumulative Assessment

10.28 Cumulative effects on archaeological assets will be considered as part of the ES chapter.

Figure 10.1: Archaeological Events, Find Spots and Monuments



11. ECOLOGY

- 11.1 This input considers the impacts of the Proposed Development on ecological receptors during construction and operation; including potential significant effects. It sets out the proposed methodology for the ecological assessment and identifies impacts that can be scoped out of the assessment. Where necessary further assessment will be presented in the ES.
- 11.2 The Site is located in Meopham, Kent. The Site occupies approximately 43.67ha and comprises a residential property with associated garden; agricultural fields, hedgerows, woodland, and grassland. The Site is bounded by Chatham Main Line to the north, Camer Road to the east and south-east, Norwood Lane to the south-west, and residential properties with associated gardens to the west. The wider landscape is largely rural; and comprises residential properties with associated gardens, agricultural fields, hedgerows and blocks of woodland. The village of Hook Green lies immediately to the west of the Site; and the village of Sole Street to the north.

Relevant Legislation and Planning Policy

- 11.3 Relevant legislation and planning policies that are relevant to the ecological assessment of the Proposed Development are:
- The Conservation of Habitats and Species Regulations 2017 (as amended)³³
 - The Environment Act 2021³⁴
 - The Wildlife and Countryside Act 1981 (as amended)³⁵
 - The Countryside Rights of Way Act 2000³⁶
 - The Natural Environment and Rural Communities (NERC) Act 2006³⁷
 - Hedgerows Regulations 1997³⁸

³³ <http://www.legislation.gov.uk/uksi/2017/1012/made>

³⁴ <https://www.legislation.gov.uk/ukpga/2021/30/contents/enacted>

³⁵ <http://jncc.defra.gov.uk/page-1377>

³⁶ <https://www.legislation.gov.uk/ukpga/2000/37/section/16>

³⁷ <http://www.legislation.gov.uk/ukpga/2006/16/contents>

³⁸ <https://www.legislation.gov.uk/uksi/1997/1160/contents>

-
- The Protection of Badgers Act 1992³⁹
 - The Wild Mammal (Protection) Act 1996⁴⁰
 - The National Planning Policy Framework (NPPF) 2024⁴¹
 - Government Circular 06/05⁴²
 - Gravesham Borough Council Local Plan Core Strategy (Adopted September 2014)⁴³
 - Kent Biodiversity Strategy⁴⁴

Survey Methods

Desk Study

11.4 A desk study was undertaken in July 2025 to determine the presence of designated sites and habitats of conservation importance, along with existing records of protected and notable species of relevance to the Site.

11.5 The following bodies were consulted for the desk study:

- Google Earth Pro for aerial imagery⁴⁵.
- Defra Magic Map⁴⁶ for records of statutory designated Application Sites, European Protected Species Mitigation Licences (EPSMLs), great crested newt class licence returns (GCNCL), and great crested newt (GCN) pond survey records.
- Kent and Medway Biological Record Centre (KMBRC)⁴⁷ for existing records of protected and notable species.

³⁹ <http://www.legislation.gov.uk/ukpga/1992/51>

⁴⁰ <https://www.legislation.gov.uk/ukpga/1996/3/contents>

⁴¹ <https://www.gov.uk/government/publications/national-planning-policy-framework--2>

⁴² Office of the Deputy Prime Minister (ODPM) Circular 06/2005. Biodiversity and Geological conservation – Statutory Obligations and their Impact within the Planning System. ODPM, London.

⁴³ <https://www.gravesham.gov.uk/local-plan-policy/local-plan>

⁴⁴ <https://kentnature.org.uk/strategy/kent-biodiversity-strategy/>

⁴⁵ Available at <https://earth.google.com/web>

⁴⁶ Available at <https://magic.defra.gov.uk/MagicMap.html>

⁴⁷ Search request available at <https://www.kmbrc.org.uk/data-search-service>

-
- Magic Map⁴⁶ for ponds within 250m of the Site.

11.6 The desk study involved obtaining the following records:

- International statutory designated sites (Ramsar and Proposed Ramsar sites) and UK National Site Network (NSN) Sites (Special Protection Areas (SPAs) and SACs); including Potential SPAs (pSPAs) and Possible SACs (pSACs)) within 10km.
- National statutory designated Sites (SSSIs, National Nature Reserves (NNRs) and LNRs) within 2km.
- Non-statutory designated Sites (Local Wildlife Sites; LWSs) within 2km.
- Protected and notable species within 2km.
- EPSMLs within 2km.
- GCNCL and GCN pond records within 1km.
- Ancient woodland parcels within 30m.
- Waterbodies within 250m.
- Habitats of Principal Importance⁴⁸ within or immediately adjacent to the Site.

Ecological Surveys

11.7 A suite of ecological surveys have been completed or are due to be completed within the Site in 2025 in accordance with the relevant good practice guidance, as outlined below. The results of these surveys inform the assessment of potential impacts.

11.8 A Preliminary Ecological Appraisal (PEA), in accordance with the Chartered Institute of Ecology and Environmental Management CIEEM's industry standard guidelines ⁴⁹ was conducted on 30th April and 20th May 2025. . The PEA included the following:

- UK Habitats Survey using the methods outlined in 'The UK Habitat Classification Version 2.0⁵⁰:'

⁴⁸ <https://www.gov.uk/government/publications/habitats-and-species-of-principal-importance-in-england>

⁴⁹ CIEEM (2017) Guidelines for Preliminary Ecological Appraisal, 2nd edition. Chartered Institute of Ecology and Environmental Management, Winchester.

⁵⁰ UKHab Ltd (2023). *UK Habitat Classification Version 2.0* (at <https://www.ukhab.org>)

- Assessment of habitat suitability for protected and notable species.
- Badger survey within the Site in line with 'Surveying Badgers'⁵¹.

11.9 Biodiversity Net Gain (BNG) Assessment will be undertaken including:

- Habitat Condition Assessment (HCA) conducted in accordance with the UK Habitat Classification criteria⁵⁰ and in line with the UK Habitat criteria required for use within the DEFRA Statutory Biodiversity Metric⁵².
- Net gain baseline calculations and proposed habitats calculations in line with the Defra Statutory Metric User Guide⁵² and best practice principles for BNG⁵³.
- Bat roosting and activity surveys are being undertaken in accordance with the Bat Conservation Trust's Bat Good Practice Survey Guidelines⁵⁴ including:
 - Preliminary Roost Assessment of buildings (PRA).
 - Ground Level Tree Assessment (GLTA).
 - Bat activity surveys (nighttime bat walkover and static monitoring surveys).

11.10 Breeding bird surveys following the Common Bird Census (CBC) methodology⁵⁵ have been undertaken.

11.11 Dormouse surveys are being undertaken in line with current good practice guidance^{56, 57}.

11.12 Herpetofauna surveys are being undertaken, including:

⁵¹ Harris, S., Cresswell, P., Jefferies, D. *Surveying Badgers*

⁵² Defra (2024) *The Statutory Biodiversity Metric User Guide. Updated July 2025. Available at <https://www.gov.uk/government/publications/statutory-biodiversity-metric-tools-and-guides>.*

⁵³ Baker, J., Hoskin, R., Butterworth, T. (2018) *Biodiversity Net Gain. Good Practice Principles for Development: A Practical Guide..*

⁵⁴ Collins, J. (ed.) (2023). *Bat Surveys for Professional Ecologists: Good Practice Guidelines (2023) 4th edn.* Bat Conservation Trust, London.

⁵⁵ Gilbert G, Gibbons D & Evans J. (2011). *Bird Monitoring Methods.* Pelagic Publishing.

⁵⁶ Bullion, S., Wolton, R. & White, I. (2025) *Hazel Dormouse Conservation Handbook – Third edition.* The Mammal Society

⁵⁷ Wells, D., Chanin, P. & Gubert, L. (2025) *Hazel Dormouse Mitigation Handbook.* The Mammal Society.

- An assessment of likely access routes for any Herpetofauna species to and from any potential breeding ponds or areas
- Great Crested Newt Habitat Suitability Index (HSI) assessment.
- Reptile presence/absence surveys in accordance with industry good practice guidance^{58, 59}.

11.13 The following description of the Site baseline is based on the above detailed survey work and will be further added to and updated as the design develops and the full survey dataset becomes available. Surveys followed the relevant methodologies (as applicable at the time of the survey) described above and referenced within this document.

Baseline Conditions

Desk Study

Designated Sites

11.14 Statutory and non-statutory designated sites identified within the potential zone of influence (Zoi) of the Proposed Development are presented in **Table 11.1** below.

Table 11.1: Designated Sites within ZOI of the development

Site Name	Description	Distance and Orientation from Site
Statutory Designated Sites		
Internationally Designated Sites (Ramsar) & UK National Site Network (SPA, SAC)		
North Downs Woodlands SAC	'9130 Asperulo-Fagetum beech forests This site consists of mature Asperulo-Fagetum beech forests and also yew 91J0 Yew Taxus baccata woods on steep slopes. The stands lie within a mosaic of scrub and other woodland types and are the most easterly of the beech woodland sites selected. Parts of the woods were affected by the Great Storm of 1987. 91J0 Taxus baccata woods of the British Isles Yew Taxus baccata woodland at this site is associated with 9130 Asperulo-Fagetum beech forests, scrub and small areas of unimproved grassland on thin	3km SE

⁵⁸ Froglife (1999). Froglife Advice Sheet 10, Reptile Surveys, An Introduction to Planning, Conducting and Interpreting Surveys for Snakes and Lizard Conservation. Froglife, Peterborough.

⁵⁹ Herpetofauna Groups of Britain and Ireland (1998). Evaluating local mitigation/translocation programmes: Maintaining best practice and lawful standards. HGBI advisory notes for Amphibian and Reptile Groups. Froglife, Halesworth.

	chalk soils. Where the shade is not too dense dog's mercury <i>Mercurialis perennis</i> predominates in the ground flora. The site is the most easterly of those selected.'	
Nationally Designated Sites (SSSI, NNR, LNR)		
Shorne and Ashenbank Woods SSSI	'Shorne and Ashenbank Woods form a complex of ancient and plantation woodland, and include a variety of stand-types associated with Tertiary gravels, clays and sands. The site supports an important and diverse invertebrate fauna, especially its Coleoptera (beetles), Hemiptera (true bugs), and Odonata (dragonflies).'	1.7km SE
Non-statutory Designated Sites		
GR15 Grassland and Scrub, Istead Rise Local Wildlife Site (LWS)	8.37ha containing deciduous woodland	1.5km N
GR03 Pasture South of Istead Rise LWS	1.44ha	1.6km NW
GR09 Nurstead and Cozendon Woods, Nash Street LWS	22.94ha containing ancient woodland	0.8km N
GR10 Happy Valley, Meopham LWS	63.02ha	1.7km S
GR04 Henley Wood and Pasture LWS	34.32ha containing ancient woodland	0.7km SE
GR06 Strawberry Hill Pasture and Woodland, Meopham LWS	74.26ha containing ancient woodland	1.6km SE

*SPA – Special Protection Area, SAC – Special Area of Conservation, SSSI – Site of Special Scientific Interest, NNR – National Nature Reserve, LNR – Local Nature Reserve, LWS – Local Wildlife Site

Ancient Woodland

11.15 The desk study returned no records of ancient woodland parcels within 30m of the Site.

NERC s41 Habitats of Principal Importance (HPI)

11.16 The desk study returned one record 'Deciduous woodland' which is listed under s41 of the NERC Act 2006⁴⁸ and lies within the Site.

Habitats

11.17 The following habitats were recorded within the Site during the baseline survey:

-
- Grassland: Modified grassland
 - Heathland and Shrub: Bramble scrub
 - Cropland: Cereal crops
 - Cropland: Arable field margins
 - Woodland and Forest: Other lowland mixed deciduous woodland (including HPI)
 - Urban: Developed land; sealed surface
 - Urban: Artificial unvegetated, unsealed surface
 - Heathland and Shrub: Hedgerows (including HPis)
 - Individual Trees: Rural trees

Protected and Notable Species Surveys

11.18 Surveys for Protected and Notable species are still ongoing. Completed surveys will inform the assessment of impacts for the ES.

Consideration of Ecological Receptors

11.19 The consideration of ecological receptors will include the following:

- Internationally and Nationally Designated Sites for Nature Conservation
- Non-statutory designated sites
- Habitats and botanical species of interest
- Badgers
- Bats
- Birds
- Dormice
- Great crested newt
- Reptiles
- Water vole, otter and beaver

- Hedgehog
- Invertebrates

Potential Effects

Likely Significant Effects

Construction

11.20 The likely significant effects identified for the construction works for assessment in the ES are set out in **Table 11.2**.

Table 11.2: Likely Significant Effects During Construction

Receptor	Effects	Scoped In
Bramble scrub	These areas contained common and widespread species with no rare or notable species recorded. This habitat will be lost as a result of the Proposed Development. The intrinsic loss of this habitat is not considered to be significant. However, it's value lies in the protected species which it could support and therefore this habitat has been scoped into the assessment.	✓
Woodland	Three parcels of woodland are present within the Site. These areas are to be retained as part of the proposals. In the absence of mitigation, effects on woodland include disturbance (visual and noise), pollution (surface water runoff and dust), and lighting. In addition to this, there may be impacts on protected and/or notable species which are present within the woodland. Given this, impacts on woodland have been scoped into the assessment.	✓
Hedgerows	Hedgerows will be partially removed as part of the proposed development. This could result in significant impacts on both the hedgerows themselves, and the protected and/or notable species which they support. In the absence of mitigation, effects to retained hedgerows include disturbance (visual and noise), pollution (surface water runoff and dust), and lighting. Given this, impacts on hedgerows are scoped into the assessment.	✓
Rural trees	Scattered trees are present across the Site. For the purposes of this assessment, it is assumed that at least some of these trees will require removal. Retained trees will be subject to impacts in the absence of mitigation including accidental damage, roost compaction, pollution and dust deposition. Given this, significant effects cannot be scoped out and rural trees are scoped into the assessment.	✓
Badger	The potential badger sett identified within the north west of the Site will be retained. A 30m buffer will be implemented from this area of woodland to the development Site. However, in the absence of mitigation, significant impacts including accidental sett destruction, killing and/or injury and disturbance of badgers, loss of habitat and fragmentation could occur.	✓

	Given this, significant effects cannot be scoped out and badgers are scoped into the assessment.	
Bats	Bat Activity surveys are currently being undertaken. Upon completion of these surveys the level of use by bats within the Site will be known, and bespoke mitigation will be developed. Scattered trees are also present within the Site, once a tree removals plan has been developed, these trees will need to be assessed for their suitability to support roosting bats. In the absence of mitigation, effects on bats during construction include habitat loss and fragmentation, disturbance and mortality. Given this, significant effects cannot be scoped out and bats are scoped into the assessment.	✓
Birds	Potential effects on breeding birds during construction include habitat loss, mortality, fragmentation and disturbance, inclusive of considerations to ground nesting birds. Given this, significant effects cannot be scoped out and birds are scoped into the assessment.	✓
Dormice	Dormouse surveys are currently being carried out. Upon completion of these surveys the presence of dormouse within the Site will be known, and bespoke mitigation will be developed, if required. For the purposes of this scoping report, it is assumed that dormouse are present within suitable habitats within the Site. Potential effects on dormouse during construction include habitat loss, severance, disturbance and mortality. Given this, significant effects cannot be scoped out and dormice are scoped into the assessment.	✓
Reptiles	Likely significant effects on reptiles during construction include habitat loss and fragmentation, disturbance and mortality of individuals. Given this, significant effects cannot be scoped out and reptiles are scoped into the assessment.	✓

Operation

11.21 With consideration of the environmental characteristics of the Site and the Proposed Development once completed and operational, the likely significant effects identified for the operational phase for assessment in the ES is as follows in **Table 11.3**.

Table 11.3: Likely Significant Effects for the Completed Development

Receptor	Effects	Scoped In
Designated Sites	During the operational phase of the Proposed Development, potential effects on designated sites include increased visitor pressure.	✓

Habitats (woodland, scrub, hedgerows, trees)	During the operational phase of the Proposed Development, potential effects on retained habitats include disturbance and pollution (noise, lighting) and increased visitor pressure (woodland).	✓
Protected species: Badger, bats, birds, dormice, reptiles	During the operational phase of the Proposed Development, potential effects on protected species include increased disturbance.	✓

Non-Significant Effects

11.22 Potential effects during construction and once the Proposed Development is completed and operational that are not likely to be significant are set out in **Table 11.4**, together with justification of scoping out of the ES.

Table 11.4: Non-Significant Effects Proposed to be Scoped Out of ES

Receptor	Effects	Scoped In
Construction		
Designated Sites	No direct or indirect impacts to designated Sites will occur during the construction phase of the development given the lack of functional and structural connectivity between the Site and designated sites.	X
Modified grassland	This area contained common and widespread species with no rare or notable species recorded. This habitat will be lost as a result of the Proposed Development. The loss of this habitat is not considered to be significant and therefore been scoped out of the assessment.	X
Cereal crops	This habitat will be lost as a result of the Proposed Development. The loss of this habitat is not considered to be significant and has been scoped out of the assessment.	X
Great Crested Newts (GCN)	Two waterbodies are present within 500m of the Site. The closest waterbody is 68m from the Site boundary. This was dry at the time of survey and therefore great crested newts are unlikely to be present. No access was granted to the second waterbody which lies c.460m from the Site boundary. No impacts on ponds will occur as a result of the proposed development. The Site is not located within the commuting pathway between a network of ponds, and the pond which was not able to be accessed is not within 100m of the Site, within which the core movement of great crested newts between ponds occurs. The majority of the Site is considered to be unsuitable for great crested newts in their terrestrial phase, and embedded mitigation will prevent the low risk of killing and injury of individual	X

	roaming newts. Given this, any impacts are unlikely to be significant, and great crested newts have been scoped out of the assessment.	
Water vole, otter, white clawed crayfish and Beaver	No watercourses are present within or adjacent to the Site. Given a lack of suitable habitat for these species, impacts on water vole, otter, white clawed crayfish and beaver have been scoped out of the assessment.	X
Invertebrates	Habitats within the Site are common and widespread and considered unlikely to support rare and notable invertebrates. Given this, invertebrates have been scoped out of the assessment.	X
Hedgehog	Habitats within the Site are suitable for hedgehogs. These are largely restricted to the boundaries of the Site, which are anticipated to be retained. Therefore, habitat loss and fragmentation as a result of the proposed development are not considered to be significant in relation to hedgehogs. Embedded mitigation will prevent impacts such as killing and injury. Given this, impacts on hedgehogs are scoped out of the assessment.	X
Operation		
Modified grassland	This area contained common and widespread species with no rare or notable species recorded. This habitat will be lost as a result of the Proposed Development. Therefore, impacts on modified grassland have been scoped out of the assessment.	X
Cereal crops	This habitat will be lost as a result of the Proposed Development. Therefore, impacts on crops has been scoped out of the assessment.	X
Great Crested Newts (GCN)	No impacts on ponds will occur as a result of the proposed development. The majority of the Site will continue to be unsuitable for great crested newts in their terrestrial phase. Given this, any impacts are unlikely to be significant, and great crested newts have been scoped out of the assessment.	X
Water vole, otter, white clawed crayfish and Beaver	No watercourses are present within or adjacent to the Site. Given a lack of suitable habitat for these species, impacts on water vole, otter, white clawed crayfish and beaver have been scoped out of the assessment.	X
Invertebrates	Habitats within the Site are common and widespread and considered unlikely to support rare and notable invertebrates. Given this, invertebrates have been scoped out of the assessment.	X
Hedgehog	Habitats within the Site are suitable for hedgehogs. These are largely restricted to the boundaries of the Site, which are anticipated to be retained. Therefore, habitat fragmentation	X

	as a result of the proposed development is not considered to be significant in relation to hedgehogs. Embedded mitigation will prevent impacts such as habitat fragmentation. Given this, impacts on hedgehogs are scoped out of the assessment.	
--	--	--

Assessment Methodology

11.23 The assessment of the likely significant effects will be undertaken using the methodology set out below.

Baseline Data Collection Surveys

11.24 Field surveys as described above are being undertaken and will inform the ES process. The scope of the proposed surveys has been derived based on the findings of the PEA.

Impact Assessment Methodology

11.25 The impact assessment process will consider potential ecological receptors within the Ecological Zone of Influence (ZOI). The ZOI is an area defined by the assessment in which there may be receptors subject to impact as a result of the Proposed Development. Such receptors will include designated sites, notable habitats and protected species, and these could be affected directly, e.g. works affecting a receptor within the Site such as removal of a tree occupied by bats, or indirectly, e.g. a designated site downriver of a development being affected by sediment deposition, etc.

Zone of Influence (Zoi)

11.26 For the purposes of the assessment the Study Area for the Proposed Development extends to the Site itself and a series of buffers within which effects have been assessed. The Study Area varies for ecological features depending on best practice guidance, species and their specific sensitivities, the likely sources of effect and the nature of the development (see section on Ecological Survey Methods).

11.27 The proposed Zoi for ecological receptors considered within the assessment of impacts are as follows:

- Internationally Designated Sites – within 10km of the Site
- Nationally Designated Sites – within 2km of the Site
- Non-statutory designated Sites -within 2km of the Site
- Habitats and botanical species of interest – within the Site
- Badgers – the Site + 50m
- Bats – the Site

- Birds – the Site
- Dormice – the Site
- Reptiles – the Site

Ecological Valuation

11.28 The assessment will be undertaken following guidelines set out by CIEEM⁶⁰. The guidelines recommend that site sensitivity is best described as 'Ecological Value'. The Ecological Value of any given Site relates to its habitat assemblages and species populations and their importance to wider ecological processes. The Ecological Value of the Study Area is determined for each of its component habitats and species. The guidelines recommend that Ecological Value should be determined within a defined geographical context. The levels of geographical value adopted in this assessment are described in **Table 11.5** below):

Table 11.5: Ecological Valuation Criteria

Ecological Value	Qualifying Criteria	Relevant Context
International	A Study Area is considered of international value when it supports: • An internationally designated site or candidate site (SPA, potential (p)SPA, SAC, cSAC, pSAC, Ramsar, Proposed Ramsar site) or an area which Natural England (NE) has determined meets the published selection criteria for such designations, irrespective of whether or not it has yet been notified. • A viable area of a habitat type listed in Annex 1 of the Habitats Directive, or smaller areas of such habitat which is essential to maintain the viability of that ecological resource on an international level. • >1% of the European Resource of an internationally important species, i.e. those listed in Annex 1, 2 or 4 of the Habitats Directive	Europe
National	A Study Area is considered of National Ecological Value when it supports: • A nationally designated site (SSSI, NNR, or a discrete area which NE has determined meets the published selection criteria for national designation irrespective of whether or not it has yet been notified. • A viable area of a Habitat of Principal Importance for Conservation, or smaller areas of such habitat which	UK

⁶⁰ CIEEM (2018) Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine version 1.3. Chartered Institute of Ecology and Environmental Management, Winchester.

	are essential to maintain the viability of that ecological resource at a national level. • A viable area of Ancient Semi-Natural or Ancient Replanted Woodland as defined by Natural England. • >1% of the National Resource of a regularly occurring population of a nationally important species, i.e. a Species of Principal Importance for Conservation and/or species listed on Schedules 1, 5 (S9 (1, 4a, 4b)) or 8 of the Wildlife and Countryside Act 1981. A regularly occurring and viable population of a UK Red Data Book species.	
County	A Study Area is considered of County ecological value when it supports: • County sites and other sites which the designating authority has determined meet the published ecological selection criteria for designation, e.g. Local Nature Reserves, County Wildlife Sites. • Viable areas of legally protected habitat/habitat identified in County Biodiversity Action Plan (BAP), or smaller areas of such habitats that are essential to maintaining the viability of the resource at a county scale. • Any regularly occurring population of an internationally/nationally important species or a species in a relevant County BAP which is important for the maintenance of the regional meta-population. • Networks of species-rich hedgerows.	Kent
District	A Study Area is considered of District Ecological Value when it supports: • District sites and other sites which the designating authority has determined meet the published ecological selection criteria for designation, e.g. Sites of Nature Conservation Importance, Local Wildlife Sites. • Viable areas of legally protected habitat/habitat identified in a Local BAP or smaller areas of such habitats which are essential to maintaining the viability of the resource at a district level. • Any regularly occurring population of an internationally/nationally important species or a species in a Local BAP which is important for the maintenance of the viability of the feature at a district level. • Networks of habitat which contribute to ecological connectivity at a district level.	Gravesham District
Local	A Study Area is considered of Local Ecological Value when it supports: • Commonplace and widespread semi-natural habitats, e.g. scrub, poor semi-improved grassland, coniferous plantation woodland, intensive arable	Within a 2km radius of the Site

	farmland etc. which, despite their ubiquity, contribute to the ecological function of the local area (habitat networks etc.). • Very small, but viable, populations of internationally/nationally important species or a species in a relevant UK/Council BAP which is important for the maintenance of the viability of the population at a local level. • Networks of habitat which contribute to ecological connectivity at a local level.	
Site	A Study Area is considered of Site Ecological Value when it supports: • Species populations/habitats of limited ecological value, e.g. amenity grassland, but which contribute to the overall function of the Site's ecological function.	Site

Significance Criteria

11.29 All potential effects are assessed against standard parameters as set out within the CIEEM guidance⁶⁰.

Via this approach, a scientific and repeatable method is applied whereby all aspects of a potential effect are considered. Unless otherwise stated, effects identified in the assessment are considered to be adverse.

11.30 Effects are considered with reference to the following parameters:

- extent
- duration
- reversibility
- frequency

11.31 A degree of confidence is assigned to assess the likelihood of an effect occurring. The following level (as defined within the CIEEM guidance) is referred to:

- certain/near-certain: probability estimated at >95%;
- probable: probability estimated at 50 – 95%;
- unlikely: probability estimated at 5 – 49%; and
- extremely unlikely: probability estimated at <5%.

11.32 Based on these parameters, an effect is then considered to be either significant or not significant and likely to be either beneficial or adverse. An effect is considered to be significant if it has the potential to affect the integrity of a habitat or the conservation status of a species. Technical definitions of integrity and conservation status follow the CIEEM guidance.

11.33 In response to the above, and to ensure significant effects on ecological features are still placed within an appropriate context, a geographical approach is adopted to determine the ecological value of a feature. Significance is then considered at the same geographical level. For example, when a significant effect is predicted on a feature of Local Ecological Value, it may be considered significant 'at a local level'. However, where only a small part of an ecological feature is affected, the geographical level at which the significant effect will occur may be lower, for example an ecological feature of Local Ecological Value may be subject to an effect that is significant 'at a Site level'.

11.34 The EIA process requires that the significance of an effect is described as either 'major', 'moderate', 'minor' or 'negligible/none'. However, best practice guidance in relation to EcIA does not support this approach, due to the complexities of ecological processes.

11.35 To allow the potential effects identified to be considered alongside those addressed in other topic chapters, a 'translation' from EcIA significance to EIA significance is undertaken, as set out in **Table 11.5** below. The translation relates the geographically based significance of ecological effects (identified through the EcIA process) to the standard terminology for significance presented in other chapters (following the EIA process), allowing direct comparison.

11.36 Effects of Major and Moderate significance are considered 'significant' in the context of the 2017 EIA Regulations.

Table 11.5: Ecological Effect 'Significance' translation to EIA terminology

EIA Significance Terminology	Corresponding EcIA Effect Significance Terminology
Major	International/European
	UK/National
Moderate	County
	District
Minor	Local
	Study Area
Negligible/None	Not Significant

Cumulative Effects

11.37 The method above is followed using data for proposed schemes provided by GBC through the scoping process Landscape and visual impact assessment (LVIA)

12. LANDSCAPE AND VISUAL IMPACT ASSESSMENT

Baseline Conditions

- 12.1 The Site is located to the east of Hook Green and to the southwest of Sole Street and is bordered by the Chatham Main Line to the north, Camer Road to the southeast, and Northwood Lane to the southwest. The northwestern boundary is marked by the rear gardens of the properties along Nursery Road and Fairview Gardens, within the village of Hook Green. Overall, the Site is well-contained and is bordered by defensible boundaries on all four sides. The Site predominantly comprises flat, agricultural land. There are few buildings of note on Site with the only exceptions being a residential property situated off Norwood Lane and an associated small stable block with a small pastoral field north of the residential property, both situated in the western portion of the Site
- 12.2 The Site falls within the administrative boundary of GBC, within the Green Belt. It has no other significant planning policy designations. There are no statutory landscape or ecology designations on Site, and no heritage constraints within the Site. As outlined in **Section 2**, there are several Listed Buildings in proximity to the Site, including Norwood Farmhouse (Grade II Listed) located along Norwood Lane adjacent to the Site and conservation areas. South east of the Site, the Kent Downs National Landscape abuts Camer Road, running along the Site’s south east / eastern boundary.
- 12.3 Due to the combination of a relatively flat and low-lying Site and existing landscape features both within and surrounding the Site, visibility is generally localised and restricted to those areas within the immediate vicinity. With longer range views screened by vegetation, transport infrastructure and built form. Parts of the Site are visible from the National Landscape to the east of the Site, viewed from the Public Right of Way (PRoW) (i.e. NS191) that cross the adjacent fields.
- 12.4 An indicative study area of approximately 1km around the Site is considered appropriate at this stage, although it will be refined through further field work and the production of a Zone of Theoretical Visibility (Zot).

Potential Effects

Likely Significant Effects

Construction

- 12.5 The likely significant effects identified for the construction works for assessment in the ES are set out in **Table 12.1**.

Table 12.1 **Likely Significant Effects During Construction**

Receptor	Effects	Scoped In
----------	---------	-----------

Landscape Receptors		
The Site's Character	Direct effects on the landscape character of the Site	✓
Landscape elements on the Site: Hedges, Trees, Woodland, Ditches and Land	Potential for direct effects to hedgerows, trees, ditches, woodland and land.	✓
Kent – Landscape Character Area (LCA) Ash Downs	Potential for direct and indirect effects to the landscape character.	✓
Kent - LCA Luddesown: West Kent Downs	Potential for indirect effects to the landscape character.	✓
Kent Downs National Landscape	Potential for indirect effects to the Kent Downs National Landscape.	✓
Gravesham - LCA Meopham Downs	Potential for direct and indirect effects to the landscape character.	✓
LLCA defined by applicant within 2km study area	Potential for direct and indirect effects to the landscape character.	✓
Visual Receptors		
Residential properties along Camer Road, Camer Street, Norwood Lane, Nursery Road, Fairview Gardens and Tradescant Drive	Potential changes to view experienced by the residents.	✓
Users of Camer Road, Norwood Lane, Green Lane and Camer Street	Potential changes in the composition of the view experienced by motorists and users of the roads.	✓
Recreational users of PRoW NS250, NS192, NS308, NS242, NS223, NS191 and NS190	Potential changes in the composition of the view experienced by recreational users of the PRoW network.	✓

Operation

- 12.6 The potential for likely significant effects identified for the operational phase for assessment in the ES is as follows in **Table 12.2**.

Table 12.2 Likely Significant Effects for the Completed Development

Receptor	Effects	Scoped In
----------	---------	-----------

Landscape Receptors		
The Site's Character	Direct effects on the landscape character of the Site	✓
Landscape elements on the Site: Hedges, trees, field margins and land	Potential for direct effects to hedgerows, trees, ditches, woodland and land.	✓
Kent - LCA Ash Downs	Potential for direct and indirect effects to the landscape character.	✓
Kent - LCA Luddesdown: West Kent Downs	Potential for indirect effects to the landscape character.	✓
Kent Downs National Landscape	Potential for indirect effects to the Kent Downs National Landscape.	✓
Gravesham - LCA Meopham Downs	Potential for direct and indirect effects to the landscape character.	✓
LLCA defined by applicant within 2km study area	Potential for direct and indirect effects to the landscape character.	✓
Visual Receptors		
Residential properties along Camer Road, Camer Street, Norwood Lane, Nursery Road, Fairview Gardens and Tradescant Drive	Potential changes to view experienced by the residents.	✓
Users of Camer Road, Norwood Lane and Camer Street	Potential changes in the composition of the view experienced by motorists and users of the roads.	✓
Recreational users of PRoW NS250, NS192, NS308, NS242, NS223, NS191 and NS190	Potential changes in the composition of the view experienced by recreational users of the PRoW network.	✓

Non-Significant Effects

- 12.7 Potential effects during construction and once the Proposed Development is completed and operational that are not likely to be significant are set out in **Table 12.3**, together with justification of scoping out of the ES.

Table 12.3 Non-Significant Effects Proposed to be Scoped Out of ES

Receptor	Effects	Scoped out
Landscape Receptors		
NCA 119 – North Downs	Direct and indirect effects on the landscape character are unlikely due to the geographic extent of the character area and scale of the Proposed Development in relation to it.	X

Kent Downs National Landscape	Direct and indirect effects on the night sky are unlikely due to the proximity to the existing settlements at both Sole Street and Hook Green	X
Visual Receptors		
Residential properties along Walnut Tree Way, Ediva Road, Wrotham Road, Station Road, Edmund Close, The Railway Sidings, Cheshunt Close, Melliker Lane, Camer Park Road, Huntingfield Road, Manor Road, Sole Street and Longfield Road.	Potential for changes in the view experienced by the residents, but due to the angles of the properties, intervening built form, intervening landform and existing vegetation, no significant effects are expected.	X
Recreational users of PRow NS250, NS192, NS308, NS242, NS223, NS191 and NS190	Direct and indirect effects on the composition of the view during the night time are unlikely due to the proximity to the existing settlements at both Sole Street and Hook Green.	X
Recreational users of PRow NS186, NS304, NS185, NS187, NS315, NS173, NS152, NS253, Judson's Recreation Ground and NS248.	Limited potential for changes in the view experienced by walkers, but due to intervening vegetation and built form, these are not expected to be significant.	X

Assessment Methodology

- 12.8 The construction and operational assessment of the likely significant effects will be undertaken using the methodology set out below.
- 12.9 The landscape and visual assessment of the ES will consider the likely significant effects of the Proposed Development on landscape and visual receptors. It will consider the degree of change to the existing landscape character, and the potential effects of the Proposed Development on visual receptors. Mitigation will be embedded into the Proposed Development, and these together with any further mitigation measures will be described.
- 12.10 The assessment will be undertaken for the:
- Peak construction activity in winter;
 - Year 1 operation in winter; and
 - Year 15 of the operation in summer presenting the established proposed planting.
- 12.11 The overall scope of the assessment will involve the determination of:

-
- Landscape and visual impact assessment methodology and significance criteria (the assessment will be undertaken in line with the guidance set out in Guidelines for Landscape and Visual Impact Assessment 3rd Edition⁶¹);
 - Zone of Theoretical Visibility ('ZTV') to determine location of representative viewpoints. The proposed viewpoint plan is illustrated in **Appendix A3**;
 - A photographic record will be provided of key views in winter and summer. These will potentially include wireline or massing model photomontages specified as 'Type 3' in accordance with Landscape Institute Technical Guidance Note 06/19: Visual Representation of Development Proposals⁶²;
 - Baseline studies, including assessment of existing landscape character and published documents on local landscape character, and the identification of existing visual receptors and the composition of their current view;
 - Review of the Proposed Development and proposed mitigation measures;
 - Qualitative assessment of the effects of the Proposed Development on existing landscape character and on existing landscape assets (vegetation, water bodies) both within the Site itself and within the neighbouring area;
 - Qualitative assessment of visual effects of the Proposed Development on the visual amenity of the visual receptors; and
 - Qualitative commentary on construction (temporary) effects.

⁶¹ Landscape Institute and IEMA (2013), Guidelines for Landscape and Visual Impact Assessment, Third Edition.

⁶² Landscape Institute (2011), Technical Guidance Note 06/19, Visual Representation of Development Proposals. Available at: <https://www.landscapeinstitute.org/visualisation/>

13. CUMULATIVE SCHEMES

13.1 The EIA Regulations specify the information to be included in an ES (Schedule 4) and require that in assessing the effects of a particular development, consideration should be given to cumulative effects. Potential cumulative effects can be categorised into two types:

- combined effects - occur when two or more different environmental effects from the Development (e.g. dust, noise, traffic) act together to produce a different level of effect/ impact experienced by a particular receptor. These combined effects (or 'Intra-Project') can be additive or synergistic such that the sum of the impacts can be less or more than the individual impacts (i.e. because they may exacerbate or neutralise one another); and,
- cumulative effects - are those that accrue over time and space from a number of different development activities and projects in geographical proximity to one another, which individually might be insignificant, but when considered together, could create a significant cumulative effect (also referred to as 'Interproject' effects).

13.2 The cumulative assessment is important to ensure that the combined effects of other schemes with the Development are understood appropriately for decision making. The cumulative effects of the Development and cumulative schemes in the local area will be considered on a topic-by-topic basis with the cumulative assessment methodologies and the cumulative effects reported in a subsection of each ES chapter, along with mitigation measures where necessary. Combined effects will be considered in a separate chapter titled '**Residual Effects, Mitigation and Cumulative Effects**'

13.3 The below sets out screening criteria to identify which cumulative schemes in the area should be subject to assessment:

- Proposed by way of the submission of a planning application and subject to a high certainty of being delivered, permitted/with a resolution to grant planning permission or under construction;
- Located within 2km of the site boundary, spatially linked to the Site by means of the local road network or visible in views to and from the site; and
- Which are 10,000sqm in floor area or would give rise to more than 150 residential units;

OR

- Exceptional schemes that do not fit within the above parameters.

13.4 A planning search was undertaken considering the above criteria, no cumulative schemes were identified.

14. TOPICS TO BE SCOPED OUT OF THE EIA

Introduction

- 14.1 Some topic areas are considered to result in non-significant effects on the environment or are considered to be non-EIA issues. The purpose of the EIA is to assess only those matters considered to have the potential to result in significant effects. Non-significant topic areas in respect of the Proposed Development are considered below.
- 14.2 Text explaining why these topics have not been included in the EIA, including the justification presented below, will be included in the EIA Methodology chapter of the ES.
- 14.3 The baseline conditions for the environmental disciplines below are as discussed in **Section 2** of this Report and are not repeated below.

Arboriculture

- 14.4 During the construction phase, where possible, existing vegetation including the existing areas of woodland within the centre of the Site will be retained.
- 14.5 Retained trees would be protected by measures such as hoarding/fencing, which will be detailed in the CEMP. Additionally, appropriate measures will be adopted to protect ecological receptors such as the nearby ancient woodlands, including noise, dust and lighting effects. With the implementation of the CEMP, it is not anticipated that the Proposed Development will result in significant arboricultural effects.
- 14.6 Where possible, existing vegetation and trees within and bounding the Site will be retained and enhanced. The Proposed Development will also incorporate woodland blocks. This will inevitably increase the tree cover and tree diversity on the Site. Impact on the nearby ancient woodland will be considered within the Environmental Statement as part of the Air Quality chapter. Further to this, an Arboricultural Impact Assessment (AIA) will be submitted alongside the planning application which will outline appropriate mitigation measures.

Agricultural Land

- 14.7
- 14.8 ALC is graded from 1 to 5, with Best and Most Versatile Land ('BMV') agricultural land graded 1 to 31. According to the Agricultural Land Classification ('ALC') of England and Wales published by the Ministry of Agriculture, Fisheries and Food, the land at the Site provisionally falls within Grade 2 – 'very

good quality agricultural land', it is noted that these provisional maps are produced at reconnaissance level and are not intended to be used for planning decisions.

- 14.9 It is noted that the loss of agricultural land would be irreversible and permanent, with no mitigation available to offset any impacts. The planning application and Planning Statement will detail the loss of agricultural land and the balance against the benefits of the scheme.

Built Heritage

- 14.10 The first stage of this assessment will focus on the identification of heritage assets likely to experience an effect as a result of the proposed development (establishing the baseline position).
- 14.11 The study area proposed is a 500m buffer from the boundary of the Site. This represents the minimal data gathering areas, and where designated heritage assets are most likely to be affected by the proposed development. It is considered that there are unlikely to be significant effects beyond 500m of the site boundary due to the distance from the Site and the scale of development already being characteristic in the wider settings of heritage assets beyond this distance.
- 14.12 Designated heritage assets may include Scheduled Monuments; Listed buildings; Registered Parks and Gardens; Registered Battlefields; and Conservation Areas. We have reviewed the local list and can confirm there are no Non-Designated Heritage Assets (NDHA) within the vicinity of the Site that may be affected by proposals. Initial data review identifies 19 designated historic assets lie within the 500m study area. These assets are listed in **Section 2** of this report, and shown in **Figure 2.1**.

Likely Significant Effects – Construction

- 14.13 With consideration of the environmental characteristics of the Site and the anticipated construction activities, there is the potential for significant effects from construction activity from increased traffic, noise and activity from construction work. These effects would be temporary and reversible and so there would be no long-term significant effects arising.

Likely Significant Effects – Operation

- 14.14 With consideration of the environmental characteristics of the Site and the Proposed Development once completed and operational, no likely significant effects on sensitive receptors have been identified. The non-significant effects are set out in **Table 14.1**.

Non-Significant Effects

- 14.15 Potential effects during construction and once the Development is completed and operational that are not likely to be significant are set out in **Table 14.1**, together with justification of scoping out of the ES.

Table 14.1: Non-Significant Effects Proposed to be Scoped Out of ES

Receptor	Effects	Scoped In
Norwood Farmhouse (Grade II)	• Temporary minor adverse effects to the setting of the receptor arising from visible construction activity. These are temporary and reversible. • No significant effects on Norwood Farmhouse are considered likely to arise from the proposed development. The key features of the receptor's significance, which are primarily related to the architectural detailing of the receptor, would not be impacted as part of the proposed development and the immediate setting of the asset is beyond the red line boundary. The masterplan will include embedded design mitigation against the heritage impact arising from the baseline change in character of the Site and as such it is considered that the impact will be non-significant.	X
Hook Green Conservation Area	• Minor temporary adverse effects to the setting of the receptor arising from visible construction activity, although visibility is likely to be very limited due to the existing setting. These are temporary and reversible. • The setting of the Hook Green Conservation Area is characterised by modern residential development. The site does not materially contribute to the setting of the receptor. The Proposed Development would be understood as a wider, contextual development and would not materially impact the character or appearance of the Conservation Area. The Proposed Development is unlikely to lead to any significant effects to the character of setting or views to and from the receptor during operation due to the distance and interposing development.	X
Waterditch (Grade II) (List Entry Number: 1039914)	• Minor temporary adverse effects to the setting of the receptor arising from visible construction activity, although visibility is likely to be very limited due to the existing setting. These are temporary and reversible. • The setting of this asset is defined by the Hook Green Conservation Area, a tightly drawn boundary which covers the historic core of the village. The Proposed Development is unlikely to lead to any significant effects to the character of setting or views to and from the receptor during operation due to the distance, interposing development and well- defined setting of the receptor, defined by the Hook Green Conservation. The site does not materially contribute to the setting of the receptor.	X
Nevill House (Grade II) (List Entry Number: 1096350)	• Minor temporary adverse effects to the setting of the receptor arising from visible construction activity, although visibility is likely to be very limited due to the existing setting. These are temporary and reversible. • The setting of this asset is defined by the Hook Green Conservation Area, a tightly drawn boundary which covers the historic core of the village. The Proposed Development	X

	is unlikely to lead to any significant effects to the character of setting or views to and from the receptor during operation due to the distance, interposing development and well- defined setting of the receptor, defined by the Hook Green Conservation. The site does not materially contribute to the setting of the receptor.	
The White House (Grade II) (List Entry Number: 1096349)	• Minor temporary adverse effects to the setting of the receptor arising from visible construction activity, although visibility is likely to be very limited due to the existing setting. These are temporary and reversible. • The setting of this asset is defined by the Hook Green Conservation Area, a tightly drawn boundary which covers the historic core of the village. The Proposed Development is unlikely to lead to any significant effects to the character of setting or views to and from the receptor during operation due to the distance, interposing development and well- defined setting of the receptor, defined by the Hook Green Conservation. The site does not materially contribute to the setting of the receptor.	X
Mulberry House (Grade II) (List Entry Number: 1039911)	• Minor temporary adverse effects to the setting of the receptor arising from visible construction activity, although visibility is likely to be very limited due to the existing setting. These are temporary and reversible. • The setting of this asset is defined by the Hook Green Conservation Area, a tightly drawn boundary which covers the historic core of the village. The Proposed Development is unlikely to lead to any significant effects to the character of setting or views to and from the receptor during operation due to the distance, interposing development and well- defined setting of the receptor, defined by the Hook Green Conservation. The site does not materially contribute to the setting of the receptor.	X
Hook Green Farmhouse (Grade II) (List Entry Number: 1350238)	• Minor temporary adverse effects to the setting of the receptor arising from visible construction activity, although visibility is likely to be very limited due to the existing setting. These are temporary and reversible. • The setting of this asset is defined by the Hook Green Conservation Area, a tightly drawn boundary which covers the historic core of the village. The Proposed Development is unlikely to lead to any significant effects to the character of setting or views to and from the receptor during operation due to the distance, interposing development and well- defined setting of the receptor, defined by the Hook Green Conservation. The site does not materially contribute to the setting of the receptor.	X
The Old Forge The Old Forge Cottage (Grade II) (List Entry Number: 1367140)	• Minor temporary adverse effects to the setting of the receptor arising from visible construction activity, although visibility is likely to be very limited due to the existing setting. These are temporary and reversible. • The setting of this asset is defined by the Hook Green Conservation Area, a tightly drawn boundary which covers	X

	the historic core of the village. The Proposed Development is unlikely to lead to any significant effects to the character of setting or views to and from the receptor during operation due to the distance, interposing development and well- defined setting of the receptor, defined by the Hook Green Conservation. The site does not materially contribute to the setting of the receptor.	
Evenden Farmhouse (Grade II) (List Entry Number: 1096354)	- Minor temporary adverse effects to the setting of the receptor arising from visible construction activity, although visibility is likely to be very limited due to the existing setting. These are temporary and reversible. - The setting of this asset is defined by the Hook Green Conservation Area, a tightly drawn boundary which covers the historic core of the village. The Proposed Development is unlikely to lead to any significant effects to the character of setting or views to and from the receptor during operation due to the distance, interposing development and well- defined setting of the receptor, defined by the Hook Green Conservation. The site does not materially contribute to the setting of the receptor.	X
Camer Green Cottage (Grade II) (List Entry Number: 1372283)	- Minor temporary adverse effects to the setting of the receptor arising from visible construction activity, although visibility is likely to be very limited due to the existing setting. These are temporary and reversible. - The receptor is located on the opposite side of Camer Road, with no interrelationship with the Site. There is no intervisibility between the site and the receptor, with heavy screening provided by the mature hedgerows along Camer Road. The receptor is set back some distance from the road and has no functional relationship with the Site. Therefore, it is considered that the Proposed Development is unlikely to lead to significant effects to the character of setting or views to and from the receptor during operation due to the distance, interposing development and screening.	X
9 And 10, Camer Street (Grade II) (List Entry Number: 1096345)	- Minor temporary adverse effects to the setting of the receptor arising from visible construction activity, although visibility is likely to be very limited due to the existing setting. These are temporary and reversible. - The receptor is located on the opposite side of Camer Road, with no interrelationship with the Site. There is no intervisibility between the site and the receptor, with heavy screening provided by the mature hedgerows along Camer Road. The receptor is set back some distance from the road and has no functional relationship with the Site. Therefore it is considered that the Proposed Development is unlikely to lead to significant effects to the character of setting or views to and from the receptor during operation due to the distance, interposing development and screening	X
Somers (Grade II) (List Entry	Minor temporary adverse effects to the setting of the receptor arising from visible construction activity, although	X

Number: 1350235)	visibility is likely to be very limited due to the existing setting. These are temporary and reversible. The receptor is located on the opposite of Camer Road, with no interrelationship with the Site. There is no intervisibility between the site and the receptor, with heavy screening provided by the mature hedgerows along Camer Road. The receptor is set back some distance from the road and has no functional relationship with the Site. Therefore it is considered that the Proposed Development is unlikely to lead to significant effects to the character of setting or views to and from the receptor during operation due to the distance, interposing development and screening	
5 And 6, Camer Street (Grade II) (List Entry Number: 1096344)	- Minor temporary adverse effects to the setting of the receptor arising from visible construction activity, although visibility is likely to be very limited due to the existing setting. These are temporary and reversible. - The receptor is located on the opposite of Camer Road, with no interrelationship with the Site. There is no intervisibility between the site and the receptor, with heavy screening provided by the mature hedgerows along Camer Road. The receptor is set back some distance from the road and has no functional relationship with the Site. Therefore, it is considered that the Proposed Development is unlikely to lead to significant effects to the character of setting or views to and from the receptor during operation due to the distance, interposing development and screening	X
Bower Cottage (Grade II) (List Entry Number: 1096313)	- Minor temporary adverse effects to the setting of the receptor arising from visible construction activity, although visibility is likely to be very limited due to the existing setting. These are temporary and reversible. - The receptor is located along Sole Street, with no interrelationship with the Site. The receptor is some distance from the Site and has no functional relationship with the Site. Therefore, it is considered that the Proposed Development is unlikely to lead to significant effects to the character of setting or views to and from the receptor during operation due to the distance, interposing development and screening	X
Yeomans House (Grade II) (List Entry Number: 1095063)	- Minor temporary adverse effects to the setting of the receptor arising from visible construction activity, although visibility is likely to be very limited due to the existing setting. These are temporary and reversible. - The receptor is located along Sole Street, with no interrelationship with the Site. The receptor is some distance from the Site and has no functional relationship with the Site. Therefore it is considered that the Proposed Development is unlikely to lead to significant effects to the character of setting or views to and from the receptor during operation due to the distance, interposing development and screening	X

Sole Street House (Grade II) (List Entry Number: 1067728)	• Minor temporary adverse effects to the setting of the receptor arising from visible construction activity, although visibility is likely to be very limited due to the existing setting. These are temporary and reversible. • The receptor is located along Sole Street, with no interrelationship with the Site. The receptor is some distance from the Site and has no functional relationship with the Site. Therefore it is considered that the Proposed Development is unlikely to lead to significant effects to the character of setting or views to and from the receptor during operation due to the distance, interposing development and screening	X
Camer House (Grade II) (List Entry Number: 1052357)	• Minor temporary adverse effects to the setting of the receptor arising from visible construction activity, although visibility is likely to be very limited due to the existing setting. These are temporary and reversible. • The receptor is located on the opposite of Camer Road, with no interrelationship with the Site. There is no intervisibility between the site and the receptor, with heavy screening provided by the mature hedgerows along Camer Road. The receptor is set back some distance from the road and has no functional relationship with the Site. Therefore it is considered that the Proposed Development is unlikely to lead to significant effects to the character of setting or views to and from the receptor during operation due to the distance, interposing development and screening	X
Bailiffs House (Grade II) (List Entry Number: 1052333)	• Minor temporary adverse effects to the setting of the receptor arising from visible construction activity, although visibility is likely to be very limited due to the existing setting. These are temporary and reversible. • The receptor is located on the opposite of Camer Road, with no interrelationship with the Site. There is no intervisibility between the site and the receptor, with heavy screening provided by the mature hedgerows along Camer Road. The receptor is set back some distance from the road and has no functional relationship with the Site. Therefore it is considered that the Proposed Development is unlikely to lead to significant effects to the character of setting or views to and from the receptor during operation due to the distance, interposing development and screening	X
Building Approximately 30 Metres To West Of Camer House (Grade II) (List Entry Number: 1350234)	• Minor temporary adverse effects to the setting of the receptor arising from visible construction activity, although visibility is likely to be very limited due to the existing setting. These are temporary and reversible. • The receptor is located on the opposite of Camer Road, with no interrelationship with the Site. There is no intervisibility between the site and the receptor, with heavy screening provided by the mature hedgerows along Camer Road. The receptor is set back some distance from the road and has no functional relationship with the Site.	X

	Therefore it is considered that the Proposed Development is unlikely to lead to significant effects to the character of setting or views to and from the receptor during operation due to the distance, interposing development and screening	
--	---	--

Ground Conditions and Contamination

- 14.16 Demolition and construction works will be undertaken in line with standard practice and legislative requirements to manage any encounters of contaminated land to minimise pollution risks to groundwater and human health of construction workers. These measures would form part of the CEMP.
- 14.17 On completion of the Proposed Development, some of the Site will be covered with new buildings and hardstanding, with additional mitigation measures such as petrol interceptors in place where appropriate to minimise the potential for accidental spills and contamination. As such, the risk to receptors is considered to be low and it is not considered likely that there would be significant effects as a result of the operation of the Development.
- 14.18 The implementation of any necessary mitigation measures will be secured via suitably worded planning condition. This will ensure that no significant effects will occur and thus negate the requirement for EIA. A Geo-Technical Report will be submitted as part of the planning application which will identify any mitigation measures that are required to reduce the impacts relating to ground conditions.

Climate Change and Greenhouse Gases

- 14.19 As detailed within the ISEP's Climate Change Adaptation Practitioner Guidance (November 2022)^{vii}, human activity has caused significant climate change, resulting in changes to average climatic conditions and increased frequency and severity of extreme weather events, such as heavy and/or prolonged precipitation and heatwaves. This has the potential to impact the ability of the natural environment to adapt to the changing climate, in particular changing temperatures, rainfall quantities and frequencies, wind strength and sea level rise.
- 14.20 Measures to mitigate against the changing climate will be embedded within the design of the Proposed Development as the design evolves in response to technical studies. With respect to changing frequency and severity of extreme weather events, sustainable drainage features will be incorporated to manage surface water runoff, thereby reducing the risk of flooding on the Site and not increasing flooding elsewhere. An FRA and Drainage Strategy will be submitted with the planning application, which will assess the risks of flooding to and from the Proposed Development, taking into account the proposed drainage strategy and climate change. In response to changing temperatures, the landscaping strategy will maximise new planting and blue and green infrastructure to provide shading

and evaporative cooling to aid in mitigating the urban heat island effect. The buildings will incorporate passive design features which will allow the mitigation of overheating without the need for active cooling. Measures such as the provision of openable windows on multiple facades, external shading elements, and the delivery of green and blue infrastructure throughout the Site will aid to mitigate the risk of internal overheating within the Proposed Development. It is intended that detailed Part O compliant overheating assessments be undertaken for the Proposed Development at the detailed design stage to demonstrate that the risk of overheating will be sufficiently mitigated. This will be considered alongside other competing requirements for daylighting and space heating demand to ensure a balanced, science-led design.

14.21 The ISEP Guide: Assessing Greenhouse Gas Emissions and Evaluating their Significance (February 2022)^{viii} states that “...in the absence of any significance criteria or defined threshold, it might be considered that all GHG emissions are significant...”. However, the guide does provide a means to determine the significance of a Proposed Development’s whole life greenhouse gas (GHG) emissions in the context of the UK’s net zero compatible trajectory. Where a Proposed Development is considered compatible with the budgeted, science-based 1.5°C trajectory, or where it goes substantially beyond this, it may be concluded that the effect of the Proposed Development with respect to GHGs will be not significant.

14.22 During the construction of the Proposed Development, best practice measures will be employed to minimise GHG emissions associated with construction vehicles and plant. These will be set out in a CEMP (or equivalent). A CEMP is standard practice to manage environmental effects associated with the construction works. To minimise the embodied GHG associated with construction, materials will be procured in consideration of their embodied GHG. Circular economy principles will also be embedded within the design of the Proposed Development to reduce the consumption of virgin materials and the generation of waste, as well as the associated GHG emissions. Details of the measures to be embedded within the design of the Proposed Development to minimise embedded GHGs and to encourage the circular use of materials will be set out within the Sustainability and Energy Statement accompanying the planning application.

14.23 The Proposed Development will be designed to align with current industry best standard benchmarks with respect to energy efficiency and will therefore aim to achieve a significant reduction in operational GHG emissions through on-Site means alone. In doing so, the Proposed Development will align the reductions required to align with the 1.5°C trajectory. It is anticipated that this will be achieved through the incorporation of high levels of fabric energy efficiency, the employment of all-electric and low-carbon space and water heating systems. There is also potential for the incorporation of renewable technology to generate carbon-free electricity on-Site. This will ensure a significant reduction in carbon dioxide emissions over the Build Regulations Part L:2021^{ix} baseline is achieved. Further to this, the Proposed Development will be designed to encourage sustainable modes of transport, providing EV

charging facilities and discouraging the use of private vehicles, where practical, to minimise GHG emissions. Sustainable travel measures will be set out in the TA.

- 14.24 As it is anticipated that the GHG emissions associated with both the construction and operation of the Proposed Development will comply with those required to align with the 1.5°C trajectory, it is considered that the Proposed Development will not have a significant effect on GHGs. A specific climate change assessment is proposed to be scoped out of the EIA. However, measures to minimise GHG emissions will be set out in a Sustainability and Energy Statement that will be submitted as a standalone document as part of the planning application.

Waste

- 14.25 As detailed within ISEP's 'Materials and Waste in Environmental Impact Assessment' (March 2020), the effects of consuming and disposing of resources within the built environment has evolved considerably over the last decade. Sustainable resource management and the embedding of circular economy principles have become part of best practice, particularly as development synergies, industrial symbioses, market intelligent decisions and supply chain information continue to grow and become more accessible.
- 14.26 Construction works would inevitably lead to waste generation and consumption of materials and resources. Measures to reduce material consumption during the construction of the Proposed Development will be managed through the implementation of the waste hierarchy, good practice techniques and circular economy principles, in particular: the use of simple and repetitive design features that require reduced material consumption and local sourcing of materials, where possible.
- 14.27 No buildings will be demolished as part of the works. Construction waste would be managed through a CEMP (or equivalent) that could be secured through a planning condition, should permission be granted. A CEMP would set out measures and responsibilities to manage and control waste, taking into account the waste hierarchy. Furthermore, the CEMP would include measures such as: the employment of 'just in time' deliveries; the use of 'take back' schemes, whereby contractors take waste packaging and excess materials back for reuse or recycling; the segregation of material streams to encourage recycling at source; and the appropriate storage of materials to prevent weather and exposure damage.
- 14.28 The operation of the Proposed Development would inevitably increase waste generation compared to the baseline given the relatively undeveloped nature of the Site. The Proposed Development would be designed to provide sufficient external waste storage space for refuse and recycling and enable good access for kerbside collection in compliance with the requirements of GBC. To aid reducing waste to landfill, information would be provided to future occupiers of the Proposed Development on

the options available to reuse and recycle materials, as well as techniques that can be applied to reduce the generation of household waste.

- 14.29 When accounting for the measures above and the nature of the Site and Proposed Development, potential effects on waste management is unlikely to be significant in the context of the administrative area of Gravesham. It is therefore proposed that 'waste' is scoped out of the EIA.

Wind Microclimate and Daylight, Sunlight and Overshadowing

- 14.30 The Proposed Development would be low rise and up to a maximum of three storeys in height. Given this, the Proposed Development would not significantly affect the wind microclimate of the Site nor the immediate surrounding area. Similarly, the Proposed Development would not result in significant daylight, sunlight and overshadowing effects at residential properties surrounding the Site. It is therefore proposed that wind microclimate and daylight, sunlight and overshadowing assessments are scoped out of the ES.

Energy and Sustainability

- 14.31 The planning application will be supported by a standalone Sustainability Statement in accordance with GBC policy. This negates the need for a further sustainability assessment within the ES and accords with the Department of Communities and Local Government's (DCLG) consultation paper on EIA Good Practice (2006) which states:

"there is no requirement to include a sustainability appraisal within the Environmental Statement. If such an assessment is required by the Local Planning Authority, it should be provided as a separate document supporting the planning application"

- 14.32 The main sustainability commitments of the Proposed Development will be summarised in the ES. As such, all technical assessments will inherently test the principal sustainability design features sought as part of the planning application.

Major Accidents and Disasters

- 14.33 With reference to Regulation 4(4) and Schedule 4 of the EIA Regulations, this Scoping Report also considers whether there are likely to be any significant effects on the environment or the project arising from the vulnerability of the Proposed Development to major accidents or disasters. The EIA Regulations require the ES to consider the inclusion of:

"a description of the expected significant adverse effects of the development on the environment deriving from the vulnerability of the development to risks of major accidents and/or disasters which are relevant to the project concerned"

14.34 Available guidance (ISEP Quality Mark Article 'Assessing Risks of Major Accidents / Disasters in EIA') defines major accidents and disasters as:

“man-made and natural events which are considered to be likely and are anticipated to result in substantial harm that the normal functioning of the project is unable to cope with / rectify”

14.35 Overall, the vulnerability of the Proposed Development to risks of major accidents and/or disasters is considered to be low. Risk of flooding is considered to be low as the Site is not located within a Flood Zone. Flood risk therefore is at an acceptable level for the provision of residential development. Risks to fire can also be assumed to be low provided the detailed design and fire strategy is developed in line with the latest fire safety guidance. The Site will comprise residential properties and land for a primary school. Therefore, there will be no dangerous uses on Site and no hazardous waste produced on Site. No other significant effects relating to the vulnerability of the Proposed Development to major accidents and disasters have been identified and therefore it is proposed that major accidents and disasters is scoped out of the ES

A1. SITE LOCATION PLAN



A2. STRUCTURE OF ES CHAPTER

A3. VIEWPOINT LOCATION PLAN

References

- ⁱ Gravesham Borough Council (GBC), Local Plan. Available at: <https://www.gravesham.gov.uk/local-plan-policy/local-plan>
- ⁱⁱ Department for Environment Food & Rural Affairs, UK Air Information Resource, AQMAs Interactive Map. Available at: <https://uk-air.defra.gov.uk/aqma/maps/>
- ⁱⁱⁱ Natural England, National Character Area (NCA) Profile:119: North Down. Available at: <https://publications.naturalengland.org.uk/publication/7036466?category=587130>
- ^{iv} Kent and Medway Local Nature Recovery Strategy, Gravesham Borough Council Local Plan and Strategy Review. Available at: <https://www.makingspacefornaturekent.org.uk/wp-content/uploads/2025/01/Gravesham-local-plan-and-strategy-review-.pdf>
- ^v Natural England, Regional Agricultural Land Classification Maps. Available at: <https://publications.naturalengland.org.uk/category/5954148537204736>
- ^{vi} Magic Map. Available at: <https://magic.defra.gov.uk/MagicMap.html>
- ^{vii} Institute of Sustainability and Environmental Professionals (ISEP; 2022). '*Climate Change Adaptation Practitioner Guidance*'. Available at: <https://www.isepglobal.org/articles/new-guide-to-climate-change-adaptation>
- ^{viii} Institute of Sustainability and Environmental Professionals (ISEP; 2022). '*Assessing Greenhouse Gas Emissions and Evaluating their Significance*'. Available at: https://www.iema.net/media/xmgpooopk/2022_iema_greenhouse_gas_guidance_eia.pdf
- ^{ix} Department for Levelling Up, Housing and Communities and Ministry of Housing, Communities & Local Government (2018 to 2021) (2014; updated 2023). '*Conservation of fuel and power: Approved Document L*'. Available at: <https://www.gov.uk/government/publications/conservation-of-fuel-and-power-approved-document-l>
-