



Velmore Farm, Chandlers Ford Environmental Impact Assessment (EIA) Scoping Report

March 2026

Applicant
Wates Developments Ltd
Our reference
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Turley

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Document Version	Lead Authors	Reviewed By	Approved By
V1 (Draft)	Era Ceka Assistant Consultant, EIA James Banks Senior Consultant, EIA	Andy Ricketts Senior Director, EIA	Andy Ricketts Senior Director, EIA
V2 (Final)	Era Ceka Assistant Consultant, EIA James Banks Senior Consultant, EIA	Andy Ricketts Senior Director, EIA	Andy Ricketts Senior Director, EIA

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1. Introduction

Overview

- 1.1 Wates Developments Ltd (the 'Applicant') is preparing to submit an outline planning application (the 'Application') for a residential led development for up to 1,000 dwellings including land for educational purposes (Special Education Needs (SEN) / Early Years provision)¹, employment/community provision, Suitable Alternative Natural Greenspace (SANG), play areas, allotments and associated infrastructure (the 'Proposed Development'). The Application will be submitted to Test Valley Borough Council (TVBC) as the local planning authority (LPA).
- 1.2 The Applicant has instructed Turley to lead, manage and control the Environmental Impact Assessment (EIA) process for this project in line with the Town and Country Planning (Environmental Impact Assessment) Regulations 2017 (as amended)² (the 'EIA Regulations').
- 1.3 The Proposed Development forms part of the draft allocation (Policy SA6 'Land at Velmore Farm, Valley Park') in the Emerging Test Valley Local Plan 2042,³ which is currently at Regulation 18 stage.
- 1.4 The project team have developed a description of the Proposed Development (a 'High Level Development Specification'), which is outlined in Chapter 4. Whilst the Proposed Development continues to be refined and the development principles agreed upon, Chapter 4 aims to provide factual and sufficient information to inform the EIA Scoping process and the preparation of this EIA Scoping Report.
- 1.5 In line with the above, the area to be considered for the purposes of the EIA (the 'EIA Site Boundary') comprises approximately 69 hectares (ha), as shown in Figure 1.1. The EIA Site Boundary represents the maximum extent of all permanent and temporary works that may be required to deliver the Proposed Development, including elements that extend beyond the planning application boundary. This encompasses associated access improvements and highway works necessary to facilitate the Proposed Development (such as those delivered under Section 278 agreements), some of which fall within Eastleigh Borough Council (EBC). Any works undertaken within EBC will be limited to highway land and will be delivered under S278 Agreements, not requiring planning permission.

Request for a Scoping Opinion

- 1.6 To inform the EIA process, in accordance with Regulation 15 of the EIA Regulations, Turley requests a Scoping Opinion from TVBC, informed by this EIA Scoping Report.
- 1.7 In line with Regulation 15(2) of the EIA Regulations, this report contains the following:

¹ Form and size of education provision is yet to be agreed with HCC.

² The Town and Country Planning (EIA) Regulations 2017 No. 571 (as amended).

³ Test Valley Borough Council: Draft Local Plan 2042.

- A plan sufficient to identify the land (Figure 1.1);
- A description of the Proposed Development, including its nature, purpose, location, and technical capacity (Chapter 4);
- An explanation of the likely significant effects of the development on the environment (Technical Chapters 6 – 13); and
- Such other information or representations as the person making the request may wish to provide or make.

1.8 This EIA Scoping Report has been prepared in line with common EIA practice, whereby the appointed project team, based on an understanding of the EIA Site Boundary and the preliminary understanding of the Proposed Development (as set out in Chapter 4), have:

- Established the existing technical baseline, either through desk-top studies/reviews, surveys, and evaluation of available technical data;
- Identified the topics and effects which are unlikely to be significant, due to the absence of a receptor (due to the location of the EIA Site Boundary) or source of an effect due to the nature of the Proposed Development (as defined in Chapter 4), or through the commitment to mitigation;
- Identified the effects which are likely to be significant and the sensitive receptors that will be assessed in the ES; and
- Established the methodology for assessing the effects in the ES which are likely to be significant.

1.9 The above is documented in Chapter 5 and Technical Chapters 6 – 13.

1.10 The EIA Scoping Opinion is sought on the breadth of the technical topics and associated effects to be considered within the EIA and reported in the ES, as well as the scope and methodology for assessment.

1.11 In accordance with Regulation 15(4) of the EIA Regulations, it is anticipated that the statutory timescales will be met, and that the Applicant will be in receipt of a Scoping Opinion from TVBC no later than five weeks from the date of receipt of this request. Any deviation from this will be subject to a request from TVBC and subsequent agreement by the Applicant.

1.12 Furthermore, in line with Regulations 28, it is anticipated that TVBC will make available this report and their corresponding EIA Scoping Opinion, with accompanying consultee comments where applicable, for public inspection, either through TVBC planning portal website or by other means.

Definition of EIA

1.13 The term 'EIA' has the meaning given by Regulation 4 of the EIA Regulations, as 'a process consisting of -

- (a) the preparation of an environmental statement;
- (b) any consultation, public and notification required by, or by virtue of, these Regulations or any other enactment in respect of EIA development; and
- (c) the steps required under regulation 26' (consideration of whether planning permission or subsequent consent should be granted)'.

1.14 Under Regulation 4, Paragraph 2 an EIA must 'identify, describe, and assess in an appropriate manner, in light of each individual case, the direct and indirect significant effects of the proposed development on the following factors -

- (a) population and human health
- (b) biodiversity, with particular attention to species and habitats protected under any law that implemented Directive 92/43/EEC(1) and Directive 2009/147/EC(2);
- (c) land, soil, water, air and climate;
- (d) material assets, cultural heritage and the landscape; and
- (e) the interaction between the factors referred to in sub-paragraphs (a) to (d)'.

1.15 EIA is a procedure that must be followed for certain types of projects before 'development consent' (i.e., planning permission) can be given. The procedure is a means of drawing together, in a systematic way, an assessment of a project's likely significant environmental effects. This helps to ensure that the importance of the predicted effects and the scope for reducing or mitigating them are properly understood by the public and the relevant Local Planning Authority (in this case, TVBC) before it makes its decision.

1.16 The aim of EIA, as defined by national Planning Practice Guidance (PPG), is to 'protect the environment by ensuring that a local planning authority when deciding to grant planning permission for a project, which is likely to have significant effects on the environment, does so in the full knowledge of the likely significant effects, and takes this into account in the decision making process...' and '..also to ensure that the public are given early and effective opportunities to participate in the decision making procedures'⁴.

Requirement for EIA

1.17 The need for an EIA is recognised as the Proposed Development exceeds the thresholds and criteria within Schedule 2, 10 (b) 'urban development' of the EIA Regulations.

1.18 The Proposed Development does not comprise Schedule 1 development (large schemes for which EIA is mandatory); however, it does exceed the threshold and

⁴ Department for Levelling Up, Housing & Communities (DLUHC) and Ministry of Housing, Communities & Local Government (MHCLG), PPG, Paragraph 002 Reference ID: 4-002-20140306 [Online].

criteria within Schedule 2, Paragraph 10(b): 'Urban development projects'. For projects not in a 'sensitive area', the EIA Screening thresholds under 10(b) are:

- (i) non-dwelling development of more than 1ha;
- (ii) developments of more than 150 dwellings, or
- (iii) an overall area of development exceeding 5ha⁵.

1.19 Whilst the applicable thresholds are met, this does not determine the requirement for EIA but requires a subsequent stage to determine "...likely significant effects on the environment by virtue of factors such as its nature, size or location".

1.20 At this stage, a number of likely significant effects have been identified (see Chapters 6 - 13). Therefore, an EIA will be undertaken, the outputs of which will be reported in an ES. The EIA is being used as a tool to identify and manage the environmental impacts and where possible avoid, reduce or offset them as part of the design process (see further details in Chapter 2).

Stakeholder Engagement

1.21 Consultation is an important part of the EIA process. It is the responsibility of TVBC to undertake the appropriate level of consultation, including the identification of relevant and applicable statutory and non-statutory consultees, required to inform their Scoping Opinion.

1.22 It is anticipated that TVBC will consult with the following stakeholders during the preparation of their Scoping Opinion:

- TVBC (internal technical departments);
- EBC;
- Hampshire County Council (HCC);
- Lead Local Flood Authority (LLFA);
- Environment Agency;
- Natural England;
- National Highways;
- Health and Safety Executive;
- Historic England; and

⁵ Changed from 0.5 ha to 5 ha following amendments made as part of The Town and Country Planning and Infrastructure Planning (Environmental Impact Assessment) (Amendment) Regulations 2018 No. 695. Available at: <https://www.legislation.gov.uk/uksi/2018/695/made> [Accessed: 12/11/2025].

- Utility Providers.

2. Approach to EIA

Objectives

- 2.1 This report supports a formal request for a Scoping Opinion from TVBC as to the scope and methodology for assessment to be adopted in the EIA and reported in the ES. It aims to ensure that there is a clear and agreed scope for the EIA, including the relevant baseline studies, that will be required to ensure a robust assessment of likely significant effects.
- 2.2 The Scoping Opinion is sought on the technical breadth of the technical topics considered within the EIA and the specific effects within each of these technical topics (Technical Chapters 6 – 13).
- 2.3 The Institute of Sustainability and Environmental Professionals (ISEP) has issued guidance on the interaction of design and EIA as part of their 'Delivering Quality Development'⁶. The principles of these documents have been adopted for the EIA.

Iterative Approach to Scoping

- 2.4 Whilst this report seeks to establish the overall framework for the EIA in relation to the technical topics and associated likely significant effects that will be subject to detailed assessment, iterative 're-scoping' will continue as the design and strategy are refined, plans and principles are developed, and additional technical work is completed. Whilst the EIA will be based on the EIA Scoping Opinion (as required by Regulation 18, (4) (a)), it will take account of the continued understanding of environmental effects and development of primary and tertiary mitigation (see 'Defining Mitigation and how this will be Controlled'). This iterative 're-scoping' process will continue until the assessments within the ES are in their first draft, in advance of submission.
- 2.5 Any deviation between the scope of effects considered within this report and the ES will be clearly communicated in the ES. This is in accordance with the PPG⁷, which states that

‘...where it becomes evident during the assessment process...that a particular environmental factor is absent or unlikely to be significantly affected by a proposed development, there should be no need for further assessment of that factor even though it was identified in the scoping process...’.
- 2.6 It is requested that such an approach be clearly endorsed within the Scoping Opinion issued by the TVBC.

Approach to the Consideration of Alternatives

- 2.7 Schedule 4, Paragraph 2 of the EIA Regulations states that an ES should include:

⁶ ISEP (2025) EIA Guide to: Delivering Quality Development.

⁷ DLUHC and MHCLG, PPG, Paragraph: 038 Reference ID: 4-038-20170728 [Online].

“a description of the reasonable alternatives (for example in terms of development design, technology, location, size and scale) studied by the developer, which are relevant to the proposed project and its specific characteristics, and an indication of the main reasons for selecting the chosen option, including a comparison of the environmental effects”.

- 2.8 The PPG⁸ states that where “...alternative approaches to development have been considered, the Environmental Statement should include a description of the reasonable alternatives studied which are relevant to the proposed development and its specific characteristics and provide an indication of the main reasons for the choice made, including a comparison of the environmental effects”.
- 2.9 The EIA Regulations and PPG do not require an Applicant to consider alternatives but instead, where reasonable alternatives have been considered by the Applicant, these should be described, and an indication of the main reasons for selecting the chosen option, including a comparison of the environmental effects, should be provided.
- 2.10 The EIA Regulations and the PPG do not identify a specific methodology for the consideration of reasonable alternatives nor any associated criteria. Therefore, the methodology to be adopted will be based on professional experience of similar projects and an understanding of the Proposed Development and its characteristics as well as a focus on the delivery of a proportionate report, in line with PPG.
- 2.11 The consideration of alternatives has followed a two-step approach, with Step 1 completed as part of this report:
- Step 1: Consideration of ‘factors’ that constitute alternatives based on the EIA Regulations (i.e., alternative sites, alternative designs, alternative technologies and the ‘do nothing’ scenario) and justification / discussion of their inclusion / exclusion from further reporting; and
 - Step 2: Qualitative appraisal of the ‘factors’ brought forward from Step 1 and, where appropriate, a comparison of the environmental effects.

Step 1 – Consideration of Factors

- 2.12 The relevant factors have been considered to determine the need for further reporting:
- Alternative Sites – The Applicant has control of the land under their ownership, therefore, no alternative sites are viable or have been considered. In addition, the Proposed Development forms part of a draft allocation (SA6) as an area for development in the Emerging Local Plan that reinforces its suitability for development underpinned by the supporting Sustainability Appraisal and support evidence base⁹. Therefore, given the Applicants land control and draft allocation, alternative sites have not been considered and will not be taken forward into Step 2.

⁸ DLUHC and MHCLG, PPG, Paragraph 041 Reference ID: 4-041-20170728 [Online].

⁹ Draft Local Plan 2042 and evidence based available at: <https://www.testvalley.gov.uk/planning-services/planningpolicy/local-development-framework/draft-local-plan-2042?chapter=2>

- Alternative Designs –The design of the Proposed Development has and will evolve in response to technical studies and surveys to take account of environmental constraints, opportunities and feedback. As such, alternative design will be taken forward into Step 2.
- Alternative Technologies – Given the nature of the land uses proposed (as stated in Chapter 4), alternative technologies are not considered applicable for this type of development. The Application will be outline in nature; as such, the full details of construction methods and technologies are not known, and construction methods will be assessed on a ‘worst case’ basis rather than specific construction methods/technology. As such, alternative technologies/uses will not be taken forward to Step 2; and
- ‘Do Nothing’ Scenario – Schedule 4, Paragraph 3 of the EIA Regulations requires an ES to include a description of the relevant aspects of the current baseline environment which are likely to evolve without the implementation of development, subject to the availability of environmental information and scientific knowledge. The assessments of environmental effects presented in the ES¹⁰ will include the determination of the EIA Site Boundary and relevant technical topics study areas ‘Future Baseline’, being the likely condition of the EIA Site Boundary in the absence of the Proposed Development or other development. As such, the ‘Do Nothing’ Scenario will be taken forward to Step 2.

2.13 As set out above, ‘Alternative Designs’ and ‘Do Nothing’ scenarios will be taken forward from Step 1 into Step 2 and reported in the ES.

2.14 It is requested that such an approach be clearly endorsed within the EIA Scoping Opinion issued by TVBC.

The Extent of Data Collection

2.15 The EIA Site Boundary, upon which baseline data has been collected is defined in Figure 1.1. As noted in Chapter 1, this is considered to be the maximum extent of all permanent and temporary works associated with the components of the Proposed Development set out in Chapter 4.

2.16 Where required, technical specific study areas (informed by relevant best practice and guidance) will be based upon the EIA Site Boundary (i.e. radius of searches will be from the EIA Site Boundary).

2.17 The boundary for the collection of baseline data was extended recently to accommodate any potential works to the neighbouring highway network (i.e. Templars Way). Therefore, the majority of baseline data excludes this area. However, this is considered acceptable due to the limited value/sensitivity of areas within the highway corridor and the limited likelihood for significant direct effects with any works proposed. Baseline data for adjacent areas will also inform our understanding of the

¹⁰ It is not deemed necessary to consider the future baseline of environmental topics scoped out of the ES given that the Proposed Development is not expected to generate likely significant effects in relation to these topics.

existing environment. Additional, relevant ecological surveys will be undertaken as outlined in Chapter 9; however, this is unlikely to change the scope or methodology.

Assessment Against a Consistent Baseline Environment

- 2.18 Schedule 4, Paragraph 3 states that an ES should include:

“A description of the relevant aspects of the current state of the environment (baseline scenario)...”

- 2.19 Likely significant effects as a result of the Proposed Development will be described in the ES in relation to the deviation from the baseline environment within the EIA Site Boundary and / or relevant technical study areas.

- 2.20 For most technical topics and associated effects, the baseline environment will comprise the existing environmental characteristics and conditions based on surveys undertaken and information / data available at the time of the technical assessments. Deviation from this approach is noted under ‘Assessment Scenarios’ below.

- 2.21 The data used to inform the baseline conditions for the technical assessments reported in the ES (for those technical topics ‘scoped in’, see Technical Chapters 6 – 13 for more details) will vary depending upon the timing of the survey or the date when data sources will have been accessed. It is anticipated that the baseline conditions will largely be based on data accessed or surveys / studies completed in 2025/2026. Where relevant and robust, other data obtained from third parties may be older than 2025/2026, though may still be appropriate and relevant to the baseline scenario if there have been no notable changes, it is the latest available information or is representative of the existing baseline.

- 2.22 A consolidated list of baseline data sources will be provided as part of the ES. The origin of all data, the dates of surveys and the dates when data sources have been accessed will be clearly outlined alongside any limitations and assumptions.

Consideration of Future Baseline

- 2.23 Schedule 4, Paragraph 3 states that an ES should include:

“...an outline of the likely evolution thereof without implementation of the 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.”

- 2.24 As required by the EIA Regulations, the ES will report the future baseline scenario. This will consider potential changes to the Site and study area assuming no further development and the continuation of the existing management regime.

Identification of Sensitive Receptors

- 2.25 Schedule 4, Paragraph 4 states that an ES should include:

“A description of the factors specified in regulation 4(2) likely to be significantly affected by the development: population, human health, biodiversity (for example fauna and flora), land (for example land take), soil (for example organic matter, erosion, compaction, sealing), water (for example hydromorphological changes, quantity and quality), air, climate (for example greenhouse gas emissions, impacts relevant to adaptation), material assets, cultural heritage, including architectural and archaeological aspects, and landscape.”

- 2.26 Informed by baseline information and data, a series of receptors or receptor groups are identified, which are subject to likely significant effects arising from a project. These receptors are then subject to assessment within the EIA.
- 2.27 Details of the receptors which are considered likely to be significantly affected at this stage are set out in Technical Chapters 6 – 13.

Defining Mitigation and how this will be Controlled

- 2.28 Schedule 4, Part 7 of the EIA Regulations states that an ES should include:
- ‘a description of the measures envisaged to avoid, prevent, reduce or, if possible, offset any identified significant adverse effects on the environment and, where appropriate, of any proposed monitoring arrangements (for example the preparation of a post-project analysis). That description should explain the extent, to which significant adverse effects on the environment are avoided, prevented, reduced or offset, and should cover both the construction and operational phases’.
- 2.29 Through the EIA process different types of mitigation have been / will be identified and developed and these are defined as:
- Primary mitigation – modifications to the location or design of the Proposed Development made during the pre-application phase that are an inherent part of the project;
 - Secondary mitigation – actions that will require further activity in order to achieve the anticipated outcome and secured by planning condition / and or obligation; and
 - Tertiary mitigation – actions that would occur with or without input from the EIA feeding into the design process. These include actions that will be undertaken to meet other existing legislative requirements or actions that are considered to be standard practices used to manage commonly occurring environmental effects.
- 2.30 The assessment of the effects of the Proposed Development within the ES will be based on the information contained within a ‘Development Specification’, which will include primary and tertiary mitigation. Examples of primary mitigation include green infrastructure and associated set-backs, the retention of some existing features and proposed surface water drainage strategy. Examples of tertiary mitigation include the adoption of best practice measures that can be controlled via a Construction

Environmental Management Plan (CEMP), or measures required by legislative requirements (e.g., the Construction (Design and Management) Regulations 2015¹¹).

- 2.31 Primary and tertiary mitigation known at this stage is set out in the Preliminary Environmental Management Plan (PEMP) provided as Appendix 2.1.
- 2.32 Within the ES, following the conclusion of the likely significant effects based on the Proposed Development (inclusive of primary and tertiary mitigation), any further mitigation (secondary mitigation) to reduce an adverse effect or enhance a beneficial one will be identified.
- 2.33 Secondary or tertiary mitigation measures are only considered appropriate if there is a high level of confidence in their mechanism for implementation (by the Applicant or third party).
- 2.34 The ES will be supported by a EMP which will detail all mitigation identified within the EIA process (including EIA Scoping) and will form Volume 3 of the ES (see 'Format of the ES').
- 2.35 This document will define all the environmental requirements of the Proposed Development to ensure that the impacts concluded through the EIA process can be relied upon. The EMP can be extracted by TVBC to support the preparation of appropriate planning conditions / obligations attached to any planning permission, where necessary.

Consideration of Off-Site Mitigation

- 2.36 Off-site improvements/mitigation are likely to be limited to highway improvements and likely to be delivered under a S278 agreement. The full extent of these works, will, however, not be fully understood until junction modelling has been undertaken and advice received from HCC Highways.
- 2.37 As stated in Chapter 5 'Water Environment', upgrades to water utility infrastructure are likely to be required to facilitate the Proposed Development, however the extent of works are unknown at this stage and subject to further consultation with Southern Water. With that said, it is likely that a third party (i.e. Southern Water) will be responsible for delivering these upgrades.
- 2.38 It is considered appropriate that such mitigation does not need to be within the EIA Site Boundary, as this does not form part of the Proposed Development. Any improvements, if required, may be considered at a high-level within the ES and this will be informed by the level of information available.

Information to Inform the Assessments within the ES

- 2.39 Given the outline nature of the Application, the ES will be based on a defined set of parameter plans and accompanying design principles. The design principles will form part of a 'Development Specification' that will accompany the ES and set the framework for the assessment of likely significant environmental effects and will only

¹¹ Construction (Design and Management) Regulations 2015 No. 51.

include the necessary information required to inform a robust assessment. It will outline the key development principles, including quantum of development (e.g., residential units, employment floorspace), infrastructure requirements, and timescales. This document, together with the parameter plans, will form the basis of the EIA and define the scope within which all technical assessments will be undertaken. These plans will include, but are not limited to, maximum building heights, development zones, access points, and land use distribution across the EIA Site Boundary.

- 2.40 The ES will assess the Proposed Development in accordance with these parameters to ensure flexibility within an agreed envelope of development. This approach allows for a degree of design evolution through future detailed design stages, while still enabling a robust environmental assessment. These documents are intended to provide clarity for the determining authority and stakeholders, establishing the parameters within which future reserved matters applications or detailed design stages will be brought forward. The ES will therefore evaluate the 'worst-case' scenario within these defined parameters to ensure that any potential environmental effects are properly mitigated where necessary.

Assessment Scenarios

- 2.41 The EIA will assess the likely effects arising from the Proposed Development, taking account of demolition, site preparation / enabling works, earthworks, remedial works and construction (collectively referred to as 'construction') and operational stages.
- 2.42 The following scenarios will be assessed where relevant to each technical topic (and likely significant effects):
- Baseline (2026) + Proposed Development Peak Construction – this will vary across technical topics and will not be attributed to a specific year, rather it will be determined at what point the worst-case effect could occur. This will be clearly defined within the technical assessments reported in the ES; and
 - Baseline (2026) + Proposed Development Full Operation – this will consider environmental effects associated with the full operation of the Proposed Development, once completed.
 - Baseline (2026) + Proposed Development Full Operation + Cumulative Projects – This will consider environmental effects associated with the full operation of the Proposed Development and the identified Cumulative Projects (as stated in Chapter 14).
- 2.43 All scenarios will be considered against the existing baseline conditions as defined above (see 'Assessment Against a Consistent Baseline Environment').
- 2.44 Additional specific operational assessment scenarios will be considered within the ES as follows:
- Transport and Access, Noise and Vibration and Air Quality
- 2.45 The Transport Assessment requires the consideration of cumulative projects and strategic growth as part of a future year scenario. The traffic data to inform the

assessment of traffic related effects in the ES will be based on the same scenario and considered to represent a worst-case scenario. These are:

- Opening Year (2038) with Cumulative Projects (and other strategic growth) without the Proposed Development traffic; and
- Opening Year (2038) with Cumulative Project Projects (and other strategic growth) with the Proposed Development traffic.

Climate Change

- 2.46 To ensure alignment with the Royal Institution of Chartered Surveyors (RICS) Whole Life Carbon Assessment for the Built Environment (2024) standards¹², the assessment of greenhouse gas emissions will encompass all stages of the Proposed Development, including the end-of-life (decommissioning) stage, in order to present a holistic and reasonable worst-case scenario. A design life of 60 years will be applied, consistent with the principles set out in the RICS Standard. Further detail is provided in Chapter 12.

Approach to Defining Level of Effect and Significance

- 2.47 The method for assessment of effects (i.e. assessment criteria) will vary somewhat across technical topics, owing to the presence of specific technical guidance prepared in isolation but the assessment of likely significant effects (and specifically the conclusions) will be based on a singular common approach.
- 2.48 A stepped approach will be adopted to define effects for the construction and / or operational stages of the Proposed Development, as outlined below. The steps comprise the following, which are discussed further below:
- Step 1: Define environmental sensitivity;
 - Step 2: Define magnitude of change;
 - Step 3: Define level of effect; and
 - Step 4: Conclude on significance.
- 2.49 The method for assessing the level of effect varies between technical topics but in principle will be based on:
- The environmental sensitivity (or value, importance, etc.) of a receptor – including aspects such as adaptability, tolerance to change or recoverability from a change; and

¹² RICS (2024) Whole life carbon assessment for the built environment (2nd edition). Available at: https://www.rics.org/content/dam/ricsglobal/documents/standards/Whole_life_carbon_assessment_PS_Sept23.pdf [Accessed: 27 November 2025].

- The magnitude of change (or impact) from the baseline conditions – including aspects such as probability / likelihood of occurrence, geographical extent, complexity, duration, frequency and reversibility (i.e. temporary or permanent).
- 2.50 Sensitivity (or value, importance, etc.) will be assessed on a scale of high, medium, low and negligible and the magnitude of change (or impact) will be assessed on a scale of large, medium, small and negligible.
- 2.51 Where relevant, other factors such as feedback from stakeholders, relevant legislation, international / national / regional / local standards and guidance and the inter-relationship between effects will also be considered.
- 2.52 The interpretation and use of the above will be set out within the assessment methodology of each technical topic within the ES.
- 2.53 The assignment of the level of effect will be based on professional judgement with the support of the matrix below (Table 2.1), which is seen as a tool to assist with the process. Whilst the matrix within Table 2.1 provides ranges, this is to guide the competent expert and a definitive level of effect will be provided, where possible, for each effect.

Table 2.1: Matrix to support determining the level of effect

Magnitude of change (or impact)	Sensitivity (or value, importance, etc.)				
		High	Medium	Low	Negligible
	Large	Major	Moderate to Major	Minor to Moderate	Negligible
	Medium	Moderate to Major	Moderate	Minor	Negligible
	Small	Minor to Moderate	Minor	Negligible to Minor	Negligible
	Negligible	Negligible	Negligible	Negligible	Negligible

- 2.54 The terms set out in Table 2.1 used to define the level of effects identified are described as follows and these can be ‘beneficial’ or ‘adverse’:
- Major effect – where the Proposed Development is likely to cause a considerable change from the baseline conditions and the receptor has limited adaptability, tolerance or recoverability or is of the highest sensitivity;
 - Moderate effect – where the Proposed Development is likely to cause either a considerable change from the baseline conditions at a receptor that has a degree of adaptability, tolerance or recoverability or a less than considerable change at a receptor that has limited adaptability, tolerance or recoverability;
 - Minor effect – where the Proposed Development is likely to cause a small, but noticeable change from the baseline conditions on a receptor that has limited

adaptability, tolerance or recoverability or is of the highest sensitivity or a considerable change from the baseline conditions at a receptor which can adapt, is tolerant of the change and / or can recover from the change; and

- Negligible – where the Proposed Development is unlikely to cause a noticeable change at a receptor, despite its level of sensitivity or there is a considerable change at a receptor that is not considered sensitive to a change.
- 2.55 For some technical topics, relevant guidance or the nature of the effect requires that differing criteria or scales for determining the level of effect be used. For consistency within the ES, the final ‘level of effect’ will be reported using the terminology and conclusions set out above. This enables the conclusions of assessments across all technical topics to be understood for the decision-making process, along with allowing robust analysis and appraisal as part of the assessment of cumulative effects.
- 2.56 For each effect, a binary judgement will be made as to whether the effect is ‘Significant’ or ‘Not Significant’. This determination will be based on professional judgement and / or relevant guidance and standards, where applicable. Significance will only be concluded for residual effects (i.e. following the identification of secondary mitigation or enhancement).
- 2.57 Effects will also be described in line with the requirements of the EIA Regulations (i.e. as direct or indirect; short (<1 year), medium (1 – 10 years) or long-term (10+ years); permanent or temporary).
- 2.58 Summary of effect tables that outline the likely significant effects, receptors, residual level of effect and whether this is considered to be ‘Significant’ or ‘Not Significant’ will be provided at the end of each Technical Chapter within the ES.
- 2.59 Cumulative effects will be considered as a single co-ordinated assessment as outlined in Chapter 14.

Format of the ES

- 2.60 The ES will comprise four volumes:
- Volume 1: Primary Report and Supporting Graphics;
 - Volume 2: Technical Appendices to the Primary Report;
 - Volume 3: Environmental Management Plan; and
 - Volume 4: Non-Technical Summary.

Competent Expertise

- 2.61 Regulation 18, Paragraph 5(a) of the EIA Regulations requires the ES to be prepared by competent experts.
- 2.62 The EIA will be led by Turley. ISEP has awarded Turley the EIA Quality Mark in recognition of our technical quality and commitment to improvement in practice.
- 2.63 All technical assessments within the EIA will be undertaken by a suitably qualified project team, inclusive of a thorough technical review to assure technical credibility, followed by a subsequent procedural review by the EIA co-ordination team and EIA Project Director.
- 2.64 In line with the EIA Regulations, all contributors to the EIA are competent experts in EIA and this will be demonstrated in the ES with an overview of each key expert's qualifications, professional accreditations, and experience provided in Appendix 2.2.



Interaction of the ES with Other Application Documents and Plans

- 2.65 The Application will be accompanied by a number of documents and plans, some of which will inform the ES and will be appended to the ES as supporting technical evidence (included as part of Volume 2). Other documents and plans will form standalone 'Application Documents' and where they contain information of relevance to the EIA, this will be summarised in the ES to ensure sufficient and robust data is included.
- 2.66 At this stage, the following documents are anticipated to be included as appendices to the ES in Volume 2:
- Construction Dust Assessment;
 - Shadow Habitat Regulations Assessment; and
 - Ecological Surveys.

Co-ordination with Habitats Regulation Assessment

- 2.67 Regulation 27 of the EIA Regulations states:
- 'Where in relation to EIA development there is, in addition to the requirement for an EIA to be carried out in accordance with these Regulations, also a requirement to carry out a Habitats Regulation Assessment, the relevant planning authority or the Secretary of State, as the case may be, must, where appropriate, ensure that the Habitats Regulation Assessment and the EIA are co-ordinated'.
- 2.68 A shadow Habitat Regulations Assessment (sHRA) will be submitted as an appendix to the forthcoming Biodiversity chapter to demonstrate that the Proposed Development will not affect the integrity of the following internationally designated sites within which the EIA Site Boundary falls within the Zone of Influence (ZOI). Table 2.2 provides

a breakdown of each of these designations, their reason for designation, and the pressures that the sHRA and EIA will provide further assessment on that may affect the sensitive habitats and species within these designations. The locations of these designations in the context of the EIA Site Boundary are shown in Figure 9.1.

Table 2.2: Internationally Designated Sites and Pressures for Assessment

Designation	Qualifying Habitats and Species	Pressures for Assessment
The New Forest SPA, SAC and Ramsar	Presence of multiple Annex I habitats. Presence of Annex II species: Southern damselfly <i>Coenagrion mercurial</i>; Stag beetle <i>Lucanus cervus</i>; Great crested newt <i>Triturus cristatus</i>. Presence of Annex I species: Dartford warbler <i>Curruca undata</i>; Hen harrier <i>Circus cyaneus</i>; Hobby <i>Falco Subbuteo</i>; Honey buzzard <i>Pernis apivorus</i>; Nightjar <i>Caprimulgus europaeus</i>; Wood warbler <i>Phylloscopus sibilatrix</i>; Woodlark <i>Lullula arborea</i>. Presence of valley mires and wet heathlands Supports important assemblages of wetland invertebrates and plants.	Recreational Pressure
River Itchen SAC	Presence of Annex I habitats: Water courses of plain to montane levels with <i>R. fluitantis</i> Presence of Annex II species: Atlantic Salmon <i>Salmo salar</i>; Brook Lamprey <i>Lampetra planeri</i>; Bullhead <i>Cottus gobi</i>; Otter <i>Lutra lutra</i>; Southern Damselfly <i>Coenagrion mercurial</i>; and White-clawed Crayfish <i>Austropotamobius pallipes</i>.	Change in nutrient levels
Solent Maritime SAC	Presence of multiple Annex I habitats. Presence of Annex II species: Desmoulin's whorl snail <i>Vertigo moulinsiana</i>	Recreational pressure Change in nutrient levels
Solent and Dorset Coast SPA	Presence of Annex I species: Common tern <i>Sterna Hirundo</i>; Little tern <i>Sterna albifrons</i>; Sandwich tern <i>Thalasseus sandvicensis</i>.	Recreational pressure Change in nutrient levels
Solent and Southampton Water SPA and Ramsar	Presence of multiple Annex I species. Important waterbird assemblage, both breeding and wintering. Supports important assemblages of wetland invertebrates and plants.	Recreational pressure Change in nutrient levels

2.69 The EIA and HRA processes will be coordinated in relation to:

- Baseline data collection, specifically surveys that have been ongoing within the EIA Site Boundary (further details are provided in Chapter 9);
- Scope - The pressures identified above being considered holistically at the receptor level in Chapter 9;
- Consultation - Consultation between the EIA and HRA process will be coordinated with Natural England;
- Assessment - In terms of the approach and methodology for the impacts considered in Chapter 9;
- Mitigation development – Any mitigation required for the sHRA process will be aligned with the EIA process; and
- Cumulative Assessment – Assessment of cumulative effects within the sHRA will align with the Cumulative Projects considered within the EIA (as identified in Chapter 15), unless other specific requirements are defined by Natural England.

2.70 It is highly likely that prior to the preparation of the ES, many of the above pressures and associated effects will be further understood and concluded as unlikely to be significant. This will be clearly reported in the ES.

3. EIA Site Boundary Context

Overview

- 3.1 This Chapter summarises the location of the EIA Site Boundary and its wider setting. Technical baseline information is provided in Chapter 5 (for those topics for which no likely significant effects are identified) and in Technical Chapters 6 – 13 (for those technical topics for which likely significant effects have been identified).

Location

- 3.2 The EIA Site Boundary is primarily comprised of 13 arable fields used for grazing by cattle and horses, with trees and hedgerows located along field boundaries and woodland to the west. There are existing occupied buildings onsite located within the south/southeast north of PRoW 050/7/1, associated with Velmore Farm.
- 3.3 The topography of the EIA Site Boundary is undulating, comprising low hills and shallow valleys. Elevation varies across the area, ranging from the highest elevation of approximately 62.3 m AOD in the southwest whereas the lowest elevation is approximately 33 m AOD in the northeast.
- 3.4 The EIA Site Boundary is bound by:
- ‘Land at Castle Lane’ (25/02777/SCRS) directly north and Templars Way that forms the northern boundary;
 - The southern edge of Chandlers Ford to the northeast;
 - Vegetated boundary and Chilworth Corporate Park to the east;
 - Mature woodland and established tree belt to the west;
 - Hut Wood Site of Importance for Nature Conservation (SINC) to the south.
- 3.5 There is a 400kV overhead powerline (OHL) on a west - east alignment, high and intermediate-pressure gas mains, as well as potable water mains which also cross the EIA Site Boundary.
- 3.6 There is one PRoW [Ref: 050/7/1] running east to west along the southern boundary of the EIA Site Boundary, and one public bridleway [Ref: 050/6/1] running north to south within the western portion of the EIA Site Boundary before connecting to Castle Lane to the north.
- 3.7 The Rough SINC is located at the western end of the EIA Site Boundary, where approximately half of the designation falls within the EIA Site Boundary as well as a small part of the Austin’s Copse Chilworth SINC falling within the western boundary.

- 3.8 The existing surrounding land uses are predominantly comprised of agricultural land to the west and south. The residential and commercial area of Chandlers Ford is located to the wider area in the east and north of the EIA Site Boundary.
- 3.9 The M3 motorway is located 1km to the east of the EIA Site Boundary which follows onto the M7 and provides routes into Southampton, Portsmouth, and further towards London.
- 3.10 The city of Southampton is located approximately 8km to the southwest of the EIA Site Boundary.

4. High Level Development Specification

Boundary

- 4.1 All temporary and permanent works will take place within the boundary shown on Figure 1.1. The EIA Site Boundary extends beyond the planning application boundary to encompass all works associated with the Proposed Development, including access infrastructure improvements and related highway works to enable the Proposed Development.

Overview of Site Preparation

- 4.2 Construction access, routing and movements will be agreed with TVBC prior to construction as part of a CEMP. Construction access in the first instance will be obtained from Templars Way via new access points that will be created early in the construction stage and then be used as a primary construction access before becoming the permanent access points for the operational stage. It is anticipated that construction vehicles will arrive/depart via Templars Way before dispersing toward the M3/M27 to the east or Castle Lane to the west¹³.
- 4.3 It is assumed that temporary fencing and hoarding will be erected around the perimeter of the EIA Site Boundary at the outset of construction. Appropriate alternative routes will be provided for vehicles, pedestrians and cyclists where the temporary closure of existing routes (including roads, footways and PROWs) is needed to facilitate the works. Temporary secure access gates will be provided at the EIA Site Boundary accesses to manage the movement of vehicles, plant, equipment and personnel required for construction. Welfare facilities and other temporary infrastructure (e.g. construction compound, material laydown, storage area etc.) will be set up at a designated location within the Site, as determined by the appointed contractor. Where required, smaller satellite compounds will be provided throughout the EIA Site Boundary, as required.
- 4.4 Local excavation and trenching works will be required to install services, drainage runs and foundations for structures. It is assumed all the necessary diversion and capacity upgrades (if required) would be undertaken by the relevant district network operator (or their appointed contractor).
- 4.5 The 400kV overhead powerline (OHL) will remain on its existing west - east alignment, with statutory stand-off distances from development maintained (30m). Other non-structural development may, however, occur within this area such as SuDS, internal roads, green infrastructure, recreational open space and SANG. High and intermediate-pressure gas mains, as well as potable water mains, also cross the EIA Site Boundary and will be appropriately offset from built development in accordance with statutory requirements that include 12.2m (high-pressure gas); 6.1m (intermediate-pressure gas); and 6m (potable water). During construction, safe working methods will be implemented to take account of these assets and included in the CEMP. This will

¹³ To be agreed with TVBC.

include adherence to relevant health and safety legislation including GS6 Avoiding danger from overhead lines¹⁴, and ensuring construction workers are briefed on the appropriate methods of working and the easements.

- 4.6 There is one Public Right of Way (PRoW) [Ref: 050/7/1] running east to west along the southern boundary of the EIA Site Boundary, and one public bridleway [Ref: 050/6/1] running north to south along the western portion of the EIA Site Boundary before connecting to Castle Lane to the north that have the potential to be affected by the Proposed Development. As a worst-case assumption, the PRoW / bridleway may be temporarily closed or diverted during construction, until a time where they are permanently re-opened along the same route. If continued use is deemed safe during construction, routes will be protected by fencing/ hoarding to allow for safe continued access.
- 4.7 The route of the Roman Road that passes through the Site on a north east to south east trajectory will be retained on its current alignment and a 15m stand-off distance implemented.
- 4.8 A 20m built development offset will be applied from the boundary of the Hut Wood Site of Importance for Nature Conservation (SINC) to the south of the EIA Site Boundary. Protective fencing will also be installed along the perimeter of Hut Wood SINC and around retained Habitats of Principal Importance where they fall adjacent to or within construction areas to prevent accidental damage arising from inappropriate machinery use/access.
- 4.9 The EIA Site Boundary primarily comprises of multiple arable fields, many of which will be cleared at the outset of the construction stage to implement earthworks and create development plateaus. Some boundary trees and hedgerows will also be subject to removal where it is required for access and infrastructure. Due to the EIA Site Boundary undulating topography, achieving suitable development plateau levels will require areas of both cut (lowering ground levels) and fill (raising ground levels). Any surplus material generated is expected to be retained for reuse on site that will be managed through a Materials Management Plan (MMP) to avoid unnecessary off-site disposal. At this stage, it is uncertain whether cut-and-fill balance will be achieved across the EIA Site Boundary and it is anticipated level changes could be up to +5m / - 5m compared with existing ground levels. Retained features and their associated easements / standoffs will, however, remain unaffected.
- 4.10 The existing buildings occupied within the EIA Site Boundary (i.e. those associated with Velmore Farm) will cease use and be subject to demolition and clearance prior to construction.
- 4.11 A Preliminary Risk Assessment (PRA) (Appendix 5.3)¹⁵ has been undertaken within the EIA Site Boundary to determine the potential contamination and geotechnical constraints. The assessment identified that given the existing uses within the EIA Site Boundary, unusually complex or significant contamination is considered unlikely barring some low-level risk associated with made ground within the Velmore Farm

¹⁴ HSE (2013) GS6 Avoiding danger from overhead lines.

¹⁵ Preliminary Risk Assessment 305395-R01(00). Velmore Farm. RSK Geosciences. February 2024.

farmyard area and fly tipped material along the southern boundary. With that said, further ground investigation(s) will determine the presence / absence of contamination (and its nature and extent, if present) and therefore the requirements for any remediation prior to the construction activities within the relevant area under construction. If required, a remediation scheme(s) (including verification plans as appropriate) will be submitted and agreed with TVBC in advance of works taking place. This will also identify the requirement for any construction specific method statements (e.g. if the need for dewatering is identified). These are all commonly applied mitigation measures upon which reliance can be applied.

- 4.12 The Proposed Development would generate waste during the construction stage, including, for example: bricks, glass, gypsum, aggregate, concrete, wood and plastic. This waste will be managed through the production of an outline Site Waste Management Plan (SWMP).
- 4.13 Temporary surface water drainage will be installed and maintained to mitigate flood risk and sediment loading in line with practice guidance such as CIRIA's Control of water pollution from construction sites¹⁶ to avoid pollution of neighbouring surface water bodies.
- 4.14 Construction compound lighting will be temporary, used only during winter when natural light levels are insufficient for safe working. All lighting will be designed and utilise measures to minimise spill beyond the boundary of the site compounds and directed away from sensitive habitats.
- 4.15 Information regarding foundations has not yet been finalised and will be subject to final building design and investigation of underlying ground conditions. It is assumed that shallow foundations are appropriate for development on-site, but the requirement for piled foundation cannot be rule out at this stage.
- 4.16 It is anticipated that mobile cranes will be required during construction.
- 4.17 All construction works will be undertaken in line with the requirements set out in the Construction (Design and Management) Regulations 2015¹⁷ and appropriate levels of security (e.g. personnel / CCTV) will be provided.
- 4.18 Construction working hours would be 08:00 to 18:00 Mondays to Fridays; 09:00 to 13:00 on Saturday; and it is anticipated that there will be no construction on Sundays or Bank Holidays. Some quiet works may be undertaken outside of these hours if agreed with TVBC.

Development Principles

- 4.19 The Proposed Development is for:

¹⁶ CIRIA (2001) Control of water pollution from construction sites. Guidance for consultants and contractors (C532).

¹⁷ Construction (Design and Management) Regulations 2015.

- Up to 1,000 residential dwellings (Use Class C3);
 - Land for educational purposes (Special Education Needs (SEN) / Early Years (Pre School) provision (Use Class F1))¹⁸;
 - 1.5ha Employment / Community Hub (Use Class E / B2 / B8);
 - SANG;
 - Allotments;
 - Landscaping and ecological enhancements;
 - Vehicular Access points from Templars Way; and
 - Public Open Space.
- 4.20 The maximum height of built development within the EIA Site Boundary will be up to 4 storeys and approximately 15m AOD above ground level (max of 20m including ground changes).
- 4.21 Two new accesses will provide access / egress into the Proposed Development. This includes:
- School Lane Access – This will involve modifying the existing Templars Way / School Lane three-arm roundabout to create a new four-way signalised junction, incorporating a fourth exit on its southern side to serve the Proposed Development.
 - Montgomery Way Access – This will involve modifying the existing Templars Way / Montgomery Way to create a new four- way signalised junction, incorporating a fourth exit to serve the south eastern elements of the Proposed Development.
- 4.22 These junctions will connect to the internal road network of secondary and tertiary roads that will lead to the proposed uses and will provide access for cars / vans, emergency vehicles, service and refuse vehicles. It is assumed that the existing track from Bournemouth Road will be retained as an emergency access into the southern part of the Proposed Development as well as being a cycle / pedestrian route.
- 4.23 Car parking will be provided as part of the Proposed Development in line with TVBC and HCC guidance.
- 4.24 The Proposed Development will incorporate new pedestrian and cycle access routes that will provide both access within the Proposed Development as well as wider connectivity across Templars Way and Bournemouth Road to local amenities. It is also envisaged that the PRow and bridleway that run along the boundary of the EIA Site Boundary will be retained on their current alignment and enhanced as part of the Proposed Development.

¹⁸ Form and size of education provision is yet to be agreed with HCC.

- 4.25 The Proposed Development will include SuDS features which will manage surface water and be designed to manage run off to greenfield rates equivalent to a 1 in 100 storm event with a 45% allowance for the potential impacts of climate change and not increase flood risk off Site. Built development will be focused to areas of the EIA Site Boundary at the lowest risk of flooding (Food Zone 1) as far as practical. Where this is not possible, such as with internal access roads, specific mitigation measures to ensure no increase in flood risk will be detailed. Based on existing geology it is likely infiltration measures will not be feasible across EIA Site Boundary, with water discharged off-site, albeit this will be confirmed through further investigation. Attenuation will be achieved through a series of proposed surface water attenuation areas, connected by a network of proposed swales and surface water sewers to convey surface water runoff through the EIA Site Boundary. The attenuation areas will be located strategically across the EIA Site Boundary in line with existing topography.
- 4.26 Following consultation with Southern Water, foul sewage from the Proposed Development will be discharged to and require treatment at the Millbrook Wastewater Treatment Works (WWTW). Permitted nitrogen concentrations at the Millbrook WWTW are 10 mg TN/L. Potable water will be supplied from the existing water main through the EIA Site Boundary and will comply with current building regulations and TVBC requirements for water efficiency.
- 4.27 Waste streams generated by the Proposed Development during operation will include residential / commercial and green waste. The Proposed Development will include appropriate facilities for the storage, handling and collection of these waste types. An Operational Waste Management Strategy (OWMS) will be developed to maximise segregation, recycling and diversion of waste from landfill during operation of the Proposed Development.
- 4.28 The Proposed Development will include a SANG located in the south western part of the EIA Site Boundary, as a result, the Rough SINC and St Austins SINC that partially lie within this area are proposed to be retained as part of the Proposed Development. This area will incorporate a range of biodiversity and landscaping enhancements. It will also provide recreational opportunities for future users, including walking routes. Across the remainder of the EIA Site Boundary, the Proposed Development will retain existing boundary hedgerows/trees (barring that required for access), enhance existing habitats, alongside the provision of public open space, play areas, and additional hedgerow, tree, and woodland planting. Furthermore, additional roosting features, above and beyond the minimum requirement of the mitigation licence, will be provided through the inclusion of bat boxes in/on new buildings and retained trees within suitable greenspace.
- 4.29 New lighting will be installed as part of the Proposed Development access, along internal routes, within parking and servicing areas associated with the commercial uses, and around pedestrian pathways where required. All future lighting installations will be designed to ensure appropriate levels of illumination across the site, avoiding dark spots and promoting a safe and welcoming environment and be cognisant of ecological constraints. Measures will be taken to minimise light spill and pollution to

surrounding areas. All lighting will be installed in accordance with relevant standards and best practice guidance¹⁹.

Operational Hours

- 4.30 The residential element of the Proposed Development will be operational 24/7 and 365 days a year due to its nature.
- 4.31 The educational provision (SEN / Early Years) facility opening hours are yet to be confirmed; however, it is expected to operate within the standard hours for local schools. Core hours are anticipated to be Monday to Friday, from approximately 7:30 AM to 4:00 PM, with occasional after-school activities taking place outside these times.
- 4.32 The specific use of the employment provision is still to be confirmed; for the purpose of EIA Scoping, it is currently assumed to operate on a 24-hour basis.

Timescales

- 4.33 Construction is anticipated to commence in 2029, subject to gaining planning permission. The Proposed Development will be delivered in a phased manner and, whilst subject to market demand, final completion and occupation is assumed in 2038.

¹⁹ British Standard 12464-2:2024 – Light and Lighting for Outdoor Workplaces; British Standard 13201 – Road Lighting; British Standard 5489-1:2020 Design Road Lighting; Hampshire County Council, Technical Guidance Note TG13 - Street Lighting; The Institution of Lighting Professionals, Guidance Note 08/23 Bats and Artificial Lighting at Night; The Institution of Lighting Professionals, Guidance Note 01/02; The Reduction of Obtrusive Light; ILP's Towards a Dark Sky Standard, A Lighting Guide to Protect Dark Skies (2021); Chartered Institution of Building Services Engineers, 2022. Society of Light and Lighting (SLL) Code of Lighting

5. Technical Topics which are Not Significant

Introduction

- 5.1 As part of the EIA process and based on the information available to date, there are several technical topics for which a further detailed assessment as part of the EIA is not justified and these topics (and related effects) will not be reported within the ES (i.e., 'scoped out').
- 5.2 The technical topics for which no likely significant environmental effects have been identified are:
- Archaeology;
 - Built Heritage;
 - Ground Conditions and Contamination;
 - Lighting;
 - Major Accidents and/or Disasters;
 - Materials and Waste;
 - Minerals; and
 - Water Environment.
- 5.3 The technical topics listed above are considered in turn below in this Chapter, with a factual evidence base provided. Where mitigation has been used to inform this judgement, the identified mitigation has been captured within the PEMP provided in Appendix 2.1. Whilst these topics are scoped out of the EIA process, all (barring the topics of Major Accidents and Disasters and Materials and Waste) will nonetheless be supported by separate technical reports submitted as part of the Application.
- 5.4 The other technical topics outlined within this EIA Scoping Report also identify effects that are unlikely / not significant. These are reported in Technical Chapters 6 – 13.

Archaeology

Technical Baseline

- 5.5 An archaeological desk-based assessment (DBA) (Appendix 5.1) has been completed for the EIA Site Boundary²⁰. The DBA considers the Historic Environment Record (HER) data for the EIA Site Boundary and surrounding area, along with cartographic evidence and the results of a geophysical survey undertaken in 2018²¹. A summary of the baseline information is provided below.

²⁰ TTRPS (2025). Archaeological Desk-Based Assessment. Velmore Farm, Templars Way, Chandlers Ford

²¹ SUMO (2018). Geophysical Survey Report. Velmore Farm, Chandler's Ford, Hampshire. Survey Report No. 13075

- 5.6 In terms of designated archaeological assets, no World Heritage Sites, Scheduled Monuments, Historic Wrecks or Historic Battlefields lie within the EIA Site Boundary or its direct vicinity. The nearest Scheduled Monument comprises a 230m long stretch of the Stoney Cross to Otterbourne Roman road, located c 300m to the north east (List Entry: 1001853). The road is projected to cross the central part of the EIA Site Boundary on a northeast to southwest alignment. This section of the road alignment is not designated.
- 5.7 The road forms a branch of the Winchester to Bitterne Roman road, dividing near Otterbourne Hill running south-westwards towards Chandler's Ford. Prior to the modern development of the area parts of the agger (a linear raised earthwork over which the road surface was constructed) were partially visible in fields between Castle Lane and Otterbourne Hill to the east of the EIA Site Boundary. Where the road crosses the EIA Site Boundary, the above ground traces of the road appear to have been ploughed out. The alignment of the road is clearly shown on the 1806 Ordnance Survey Drawing, and the HER records linear cropmarks that correlate with the road alignment.
- 5.8 With regards to non-designated archaeological assets, the HER records a number of other non-designated archaeological assets within the EIA Site Boundary in addition to the Roman Road. These include undated cropmarks of linear features and enclosures; a quantity of possible prehistoric burnt flint, one sherd of Iron Age pottery, and seventeen prehistoric worked flints recovered during a fieldwalking exercise.
- 5.9 The geophysical survey identified anomalies associated with the Roman road. The features were weak and intermittent and were attributed to roadside ditches. For much of its length, a Roman road is, effectively, a "peripheral" feature (located away from core settlement) and this may be partly responsible for the weak nature of the responses (indicating poor magnetic enhancement of the ditch fills). For the most part, however, the recorded anomalies are likely to reflect high levels of damage/destruction of the feature.
- 5.10 Other linear features and enclosures recorded on the HER as cropmarks were not identified by the survey. In other locations, a few weak ditch-type anomalies of possible archaeological interest were recorded, along with anomalies relating to former field boundaries, ridge and furrow and other agricultural features of limited archaeological significance.
- 5.11 When considered with the overall HER data the EIA Site Boundary is considered to hold a low potential for Palaeolithic, Mesolithic, Neolithic, Medieval and Post-Medieval remains; a low to moderate potential for Bronze Age and Iron Age remains; a high potential for evidence of the Roman road, and a low to moderate potential for evidence of Roman settlement activity.

Effects Unlikely/Not Significant

Setting impact on designated archaeological assets

- 5.12 The nearest Scheduled Monument comprises a 230m long stretch of the Stoney Cross to Otterbourne Roman road, located c 300m to the north east. When the area was developed in the 1980's a section of the road was preserved southwest of the existing industrial estate on Eagle Close. The scheduled section of the road is retained as open

green space with a public footpath and surrounded by residential housing. The location of the scheduled stretch is illustrated on Figure 2 in Appendix 5.1. The intervening space between the scheduled stretch of the road and the western EIA Site Boundary contains residential development, with boundaries defined by mature tree lines. Therefore, the setting effect on the Roman Road (SM 1001853) is not considered to be significant and will not be considered further within the EIA or reported within the ES.

Loss or damage of archaeological heritage assets during the demolition and construction stage (for all periods)

- 5.13 The desk-based assessment and supporting geophysical survey provide a robust level of baseline information to determine the EIA Site Boundary archaeological potential. The desk-based assessment has identified an overall low potential for archaeological remains dating from the Prehistoric and post-medieval periods. The likelihood of significant effects relating to archaeological remains of these periods is considered to be low. Therefore, effects on prehistoric and post-medieval periods are not considered to be significant and will not be considered further in the EIA or reported in the ES.
- 5.14 With regard to the Roman road and any associated remains, the desk-based assessment identified an overall high potential. However, the geophysical survey noted that any surviving remains were likely to be subject to high levels of damage due to past agricultural activity. Therefore, well-preserved remains of high significance are unlikely to survive. The alignment of the Roman road is also well understood from past historic mapping, and the alignment has been corroborated by the results of the geophysical survey. The Proposed Development will take account of the road alignment and maintain a 15m offset from built development within the EIA Site Boundary to ensure the feature is retained in situ and is not affected during construction. Therefore, the effect on Roman archaeological remains is not considered to be significant and will not be considered further within the EIA or reported within the ES.
- 5.15 Furthermore, adverse effects on potential archaeological receptors will be addressed through mitigation measures attached as pre-commencement conditions to the planning consent and completed prior to the construction stage. This mitigation will comprise a suitable scheme of archaeological trial trench evaluation with reporting of results, carried out in accordance with a Written Scheme of Investigation (WSI) agreed in advance with the TVBC and their archaeological advisors. The evaluation will target possible archaeological anomalies identified by the geophysical survey and establish the absence/presence of archaeological remains in areas of potential impact. The evaluation results will inform an appropriate mitigation strategy that may comprise a strategy for archaeological excavation and/or an archaeological watching brief during construction ground works.

Loss or damage of archaeological heritage assets during the operational stage (for all periods)

- 5.16 Following an appropriate scope of archaeological investigation, to be carried out prior to construction, in accordance with a WSI agreed in advance with TVBC and their archaeological advisors, impacts will have been mitigated prior to occupation, and therefore no operational stage effects are anticipated with respect to archaeological

assets. The effect on archaeological assets during operation is not considered to be significant and will not be considered further within the EIA or reported within the ES.

Built Heritage

Technical Baseline

- 5.17 A Built Heritage Assessment has been undertaken for the EIA Site Boundary (Appendix 5.2)²², which considers the Historic Environment Record (HER) data for the EIA Site Boundary and surrounding area, along with cartographic evidence. A Study radius of 1.5km was adopted for the EIA Site Boundary as shown in Figure 5.1. A summary of the baseline information is provided below.
- 5.18 In terms of designated heritage assets, no World Heritage Sites, Scheduled Monuments, Historic Wrecks or Historic Battlefields lie within the study EIA Site Boundary or its direct vicinity. The nearest Scheduled Monument comprises a 230m long stretch of the Stoney Cross to Otterbourne Roman road, located c 300m to the north east (NLHE ref: 1001853). The alignment of this road is projected to cross the central part of the EIA Site Boundary on a northeast to southwest alignment and is identified and detailed in the Archaeological Assessment (RPS 2025) (Appendix 5.1)²³ and addressed earlier within 'Archaeology'.
- 5.19 As shown in Figure 5.1, within this Study radius, the nearest Listed Building is approximately 530m to the southwest of the EIA Site Boundary, which is a Milestone, opposite the Church of St Denys, Chilworth (NLHE ref 1157464). Also in this general location are the Chilworth Old Village Conservation Area, five Grade II listed buildings associated with the Conservation Area and the Grade II Listed Church of St Denys (NLHE ref 115745). Associated with the Church is an individually listed funerary monument (NLHE Ref 1093661). Southeast of Chilworth Old Village, there are two entries for the same asset – the twin buildings of Grade II Listed Beehive Cottage (NLHE Ref 1301576 and NLHE Ref 1339189).
- 5.20 Some 600m to the north of the EIA Site Boundary and surrounded by more recent development is the Grade II Listed Zionshill farmhouse (NLHE Ref 1245290) and associated Grade II Listed barn (NLHE Ref 1271947). There are no other Designated assets within the Study Area.
- 5.21 With regard to non-designated heritage assets (NDHAs), the HER records show no previously recorded built NDHAs within the EIA Site Boundary or in its immediate vicinity.

Effects Unlikely/Not Significant

Potential Loss or damage of unidentified non-designated built heritage assets during the enabling and construction stage (demolition of existing Velmore Farmstead)

- 5.22 Following cartographic analysis, it was determined that the current Velmore Farm complex is located proximate to a historical farmstead possibly illustrated in the late 18th century and present on 19th century maps of the EIA Site Boundary. Overlaying

²² TTRPS (2025). Built Heritage Statement. Velmore Farm, Templars Way, Chandlers Ford

²³ TTRPS (2025). Archaeological Desk-Based Assessment. Velmore Farm, Templars Way, Chandlers Ford

cartographic analysis and comparison with historical photography and current EIA Site Boundary images, it is apparent, however, that this historical complex has been extensively modified and rebuilt during the 20th century. The current farmhouse building is substantively later in date, and workers' cottages within the EIA Site Boundary are post-1950 in date. The farmyard complex itself has been extensively redeveloped during the 20th century, such that it has lost any earlier potential historical integrity. On this basis, the Velmore Farm complex is not considered to meet the criteria for recognition as a non-designated heritage asset, following the guidance set out in HEAN7²⁴.

- 5.23 Therefore, the direct loss or damage to buildings associated with the Velmore Farm complex is not considered to be significant and will not be considered further in the EIA or reported in the ES.

Potential effects arising from a change to the setting of heritage assets greater than 1.5km from the EIA Site Boundary

- 5.24 As stated above, a Study radius of 1.5km was set as being proportionate to the Proposed Development as beyond the 1.5km radius the nearest notable grouping of designated heritage assets is along Flexford Road and centred on the Grade II* Listed Church Of St John The Baptist (NLHE Ref. 1093668), over 1.6km to the northwest of the nearest point of the EIA Site Boundary. Whilst there are sites beyond this limit that theoretically could have some limited intervisibility to the EIA Site Boundary, at this distance, taking into account the intervening topography, nearby development and lack of any identified significant historical connection, the EIA Site Boundary is not considered to have an important contribution to the significance of these places.

- 5.25 Therefore, effects on the setting of heritage assets beyond 1.5km from the EIA Site Boundary are not considered to be significant and will not be considered further in the EIA or reported in the ES.

Potential effects arising from a change to the setting of heritage assets within 1.5km of the EIA Site Boundary

- 5.26 As identified within Para 5.19, a number of designated heritage assets have been identified within 1.5km of the EIA Site Boundary that were considered as potential receptors. However, review of historical mapping, current topography and landscape features indicates that the designated heritage assets noted above did not have any evident historical connection or intervisibility with the EIA Site Boundary in terms of their current setting and experience. As such, it is determined that the EIA Site Boundary provides no contribution to their respective settings and therefore development within the EIA Site Boundary would not affect their individual or collective heritage significance as detailed in Chapter 5 of Appendix 5.2.

- 5.27 Therefore, effects on the setting of heritage assets within 1.5km from the EIA Site Boundary are not considered to be significant and will not be considered further in the EIA or reported in the ES.

²⁴ Historic England 2021 Local Heritage Listing: Identifying and Conserving Local Heritage. Historic England Advice Note 7 (2nd ed). Swindon. Historic England.

Ground Conditions and Contamination

Technical Baseline

- 5.28 It should be noted that a PRA has also been undertaken and is provided as Appendix 5.3 of the EIA Scoping Report²⁵. The PRA provides a detailed baseline of the EIA Site Boundary in terms of ground conditions and contamination, and the information present has been used to inform the summary of the baseline information that is presented within this EIA Scoping Report.
- 5.29 The EIA Site Boundary plus a 250m buffer has been considered as the study area with regard to identifying ground conditions receptors that could be impacted by the construction and operation of the Proposed Development.
- 5.30 Baseline data has been collected using the following sources, with further details available in the PRA, (Appendix 5.3):
- British Geological Survey (BGS) geological maps (bedrock and superficial geology)²⁶;
 - Aquifer designation maps and groundwater vulnerability maps²⁷; and
 - A site-specific environmental database search report (including historical mapping for the EIA Site Boundary, provided in Appendix 5.3).

Geological units

- 5.31 The bedrock in the area is characterised by the presence of sand, silt and clay layers, with the Earnley Sand Formation generally overlying the Wittering Formation (clay and sand), which in turn overlies clays of the London Clay Formation. Within the EIA Site Boundary, the predominant unit is the Wittering Formation, which is present across most of the central and southern areas, and extending northwards to the EIA Site Boundary in several locations. The Earnley Sand Formation is present within the EIA Site Boundary in three discrete locations, mainly within the northern half of the EIA Site Boundary. These are in the north-west corner, in a central location, and a deposit extending from the north-eastern boundary in a south-westerly directly. The London Clay Formation is only present within the EIA Site Boundary in very limited locations on the southern boundary, but is present to a greater degree within the study area, extending south from the EIA Site Boundary.
- 5.32 Superficial deposits are predominantly absent from the EIA Site Boundary and the study area, although Alluvium (silt) is present in a thin sliver running along the line of the western EIA Site Boundary.

²⁵ The boundary in Appendix 5.3 differs slightly from the EIA Site Boundary but this makes no material difference to the assessment.

²⁶ British Geological Survey (2025). Geology Viewer. Available online: <https://www.bgs.ac.uk/map-viewers/bgs-geology-viewer/>

²⁷ Department for Environment, Food and Rural Affairs (2025). MAGIC map. Available online: <https://magic.defra.gov.uk/>

Geological conservation sites

- 5.33 There are no sites of known geological interest, or geological conservation review sites within the EIA Site Boundary or within the study area.

Groundwater

- 5.34 The EIA Site Boundary is underlain by secondary A aquifers associated with the Earnley Sand Formation and the Wittering Formation with respect to bedrock. The small areas where London Clay Formation deposits are present within the EIA Site Boundary are classified as unproductive strata.
- 5.35 In the limited area where superficial units are present within the EIA Site Boundary (Alluvium along the western EIA Site Boundary), these are classified as secondary A aquifers.
- 5.36 The groundwater vulnerability is categorised as medium across the central and northern part of the EIA Site Boundary (and extending into the surrounding study area) and high in the southern section.
- 5.37 Information available from the MAGIC website indicates that the EIA Site Boundary and study area do not lie within a currently designated groundwater Source Protection Zone (SPZ).
- 5.38 The EIA Site Boundary and study area are not within a Nitrate Vulnerable Zone (NVZ) with respect to groundwater.
- 5.39 Based on information provided in the PRA (Appendix 5.3), the anticipated depth to the groundwater table is in the order of 1.75m below ground level (bgl) (estimated from British Geological Survey records). Shallow groundwater is anticipated to flow in a south-easterly direction, i.e. towards and in the direction of flow of the River Itchen. It is noted that shallow groundwater may also be present in any made ground deposits (if present) within the Site.
- 5.40 The environmental database report indicated that there were no recorded public or private groundwater abstractions within the Site or study area.

Land contamination and historical site usage

- 5.41 Detailed historical mapping was available for the EIA Site Boundary and study area as part of the environmental database search report (presented in Appendix 5.3).
- 5.42 The land use within the EIA Site Boundary and over the study area has been predominantly agricultural, including Velmore Farm (formerly Fulmer Farm), with an area of woodland, a pond and the route of a Roman road. Electricity cables are present overhead crossing the EIA Site Boundary from west to east. Outside the EIA Site Boundary, but within the study area (of 250m), features with the potential to have resulted in release of pollutants include:
- Historical pond on-site close to Velmore Farm (no longer present, so potentially has been infilled);

- Electricity substations to the north (approximately 40m from the EIA Site Boundary), to the south-east (approximately 50m and 60m from the EIA Site Boundary) and to the north-east (approximately 110m and 200m);
- Historical clay works to the east (approximately 100m from the EIA Site Boundary);
- Historical asphalt works (later an unspecified type of works, now Hutwood Court employment area) to the south (adjacent to the EIA Site Boundary);
- Historical tanks to the south-east (approximately 110m from the EIA Site Boundary); and
- Fly-tipping was noted during the EIA Site Boundary walkover as having been abundant along the southern boundary, and there was also evidence that some material had been burnt.

Land contamination (ground gas)

5.43 Potential sources of ground gases were identified within the PRA (see Appendix 5.3), in relation to the historical land use of the land within the EIA Site Boundary and the study area. The only potential ground gas generating material present within the EIA Site Boundary was identified as made ground used to infill a former pond located within the south section of the EIA Site Boundary. The ground gas risk assessment presented within the PRA determines that there is a low risk of ground gas generation potential from this source.

5.44 With respect to off-site potential sources, outside the EIA Site Boundary but within the study area, it is possible that made ground was used to infill a former clay pit. This is located 100m to the south-east of the EIA Site Boundary. The ground gas risk assessment presented within the PRA determines that there is a low risk of ground gas generation potential from this source.

5.45 Possible routes for ground gas migration are identified for the land within the EIA Site Boundary and study area, including the permeable geology of the Earnley Sand Formation and the Wittering Formation, building foundations, construction joints or cracks within buildings, and utility routes and service penetrations into buildings.

Landfill sites and waste transfer sites

5.46 There are no recorded historical or active landfill sites within the EIA Site Boundary or the study area. There are no licensed waste management sites within the EIA Site Boundary or the study area.

Unexploded Ordnance

5.47 The EIA Site Boundary is located predominantly within an area at low risk from unexploded wartime ordnance (see Zetica Risk Map for further details)²⁸. However, the eastern extents of both the southern access road and the northern access road

²⁸ Unexploded Bomb Risk Map, Zetica UXO obtained from Zetica website: <https://zeticauxo.com/guidance/risk-maps/>

(Templars Way) are within an area of land that is categorised as being at moderate risk from unexploded ordnance.

Natural geological hazards

- 5.48 Due to the presence of natural clays across the EIA Site Boundary and study area, there is a potentially moderate to low risk of ground subsidence due to shrinking/swelling clays. Areas of moderate risk cover the majority of the EIA Site Boundary, with areas of low-risk comprising part of the north-western corner of the EIA Site Boundary, and an area within the north-east of the EIA Site Boundary.
- 5.49 Risks across the EIA Site Boundary and study area due to running sands are generally categorised as being very low, with the exception of a very minor area running along the western EIA Site boundary (associated with Alluvium), where a low risk is noted to be present, and a small section of Templars Road (where the access road on the eastern side of the EIA Site Boundary extends towards Bournemouth Road).
- 5.50 With respect to the potential for risks from compressible ground, these are negligible across the majority of the EIA Site Boundary and study area. However, there are two small areas of moderate risk that are associated with the presence of Alluvium. These two areas correspond with those described above for a low risk of running sand hazards.
- 5.51 Collapsible hazards are categorised as being very low over most of the EIA Site Boundary and study area, with two small areas of negligible risk aligning with the presence of Alluvium (as described above for a low risk of running sand hazards).
- 5.52 Risks from landslides are very low across the entire EIA Site Boundary and study area.
- 5.53 There is negligible risk of ground dissolution due to soluble rocks across the EIA Site Boundary and study area.

Effects Unlikely/Not Significant

Disturbance to / loss of geological units during construction

- 5.54 The geological units that are present within the EIA Site Boundary and study area (comprising bedrock units from the Earnley Sand Formation, the Wittering Formation and the London Clay Formation, and superficial deposits of alluvium) are common in the UK, with no features of specific interest. Therefore, receptor sensitivity is negligible and any effects on the units will not result in significant effects.
- 5.55 Therefore, effects on geological units are not considered to be significant and will not be considered further in the EIA or reported in the ES.

Disturbance to designated geological sites during construction

- 5.56 There are no designated geological sites within the study area, therefore this issue is proposed to be scoped out of further assessment due to the absence of a receptor. Therefore, effects on designated geological sites are not considered to be significant and will not be considered further in the EIA or reported in the ES.

Effects from the mobilisation of existing contamination during construction on groundwater

5.57 The groundwater in bedrock deposits underlying the EIA Site Boundary is a secondary A aquifer; and in superficial geological units (where present) it is also a secondary A aquifer. There are no groundwater Source Protection Zones (SPZ) or groundwater abstractions on-site or within the study area.

5.58 The quality of groundwater will be appropriately protected by mitigation measures detailed in and secured by the CEMP, which will be secured through a condition of the planning application. This mitigation will include measures, such as procedures to mitigate against the presence of unexpected contaminated land, which are appropriate for protecting groundwater of the highest sensitivity, and will be adhered to across all areas of the EIA Site Boundary. This will ensure that effects on groundwater due to the mobilisation of existing contamination are minimised, with any potential residual effects being restricted to slight or negligible effects. The CEMP will provide the details of strategies to cover:

- Pollution incident control;
- Emergency preparedness;
- Construction site security; and
- Site materials and waste management.

5.59 If piling is required, the need for a piling risk assessment will be discussed and agreed with the local planning authority, prior to construction commencing. This will ensure that any potential risks to groundwater from piling operations (if applicable) mobilising existing contamination are managed appropriately.

5.60 Therefore, effects on groundwater are not considered to be significant and will not be considered further in the EIA or reported in the ES.

Mobilisation of existing contamination on land, groundwater and human health

5.61 Contamination may be present due to historical site use, and construction activities could mobilise existing contamination within the ground or in the groundwater (with subsequent effects on land, groundwater and possibly also human health receptors). Where excavations for foundations or infrastructure are created, and if piling is required for any element of construction works, this could result in exacerbating any existing contamination issues by producing preferential pathways for migration of contaminants.

5.62 Further site investigation works will be undertaken as the Proposed Development works proceed, and any contamination that is identified will be dealt with appropriately, in agreement with the local planning authority, prior to construction works commencing (this may include remediation and verification plans, as appropriate, and any necessary remediation will be undertaken prior to construction). This approach will ensure that there are no resultant significant effects on any sensitive receptors relating to contamination.

- 5.63 There are not anticipated to be any impacts relating to contamination in relation to groundwater or human health on the Proposed Development during operation as a result of existing contamination, as any relevant issues will have been identified and resolved prior to construction commencing.
- 5.64 Any issues relating to contamination resulting from project activities will be controlled by the requirements of the CEMP, conditioned as part of the planning application(e.g., issues relating to storage and use of fuels).
- 5.65 The effect of contamination on ground conditions receptors is likely to be temporary (although whether it is short-term or long-term will be dependent on the pollutant type) and local in extent. However, the tertiary mitigation measures detailed above will ensure that existing contamination within the EIA Site Boundary is identified and mitigated or remediated (as appropriate), and that any accidental contamination introduced as a result of the Proposed Development will be managed in accordance with procedures provided in the CEMP.
- 5.66 Therefore, the effects of existing or accidentally introduced contamination to land, groundwater or human health are not considered to be significant and will not be considered further in the EIA or reported in the ES.

Risk to human health from ground gas generation during construction and operation

- 5.67 It has been identified that small areas of material might be present within the EIA Site Boundary or the study area that has a low potential for the generation of ground gas. There is the potential for ground gas to affect human health, if it is being generated, and if preferential migration pathways are present (possibly via permeable geological units, piled foundations, construction joints/cracks or utility routes into buildings).
- 5.68 Further site investigation works will be undertaken as the Proposed Development works proceed, and any contamination that is identified with the potential to generate ground gases will be dealt with appropriately, in agreement with the local planning authority, prior to construction works commencing (this may include remediation and verification plans, as appropriate, and any necessary remediation will be undertaken prior to construction). This approach will ensure that there are no resultant significant effects on any sensitive receptors relating to ground gas hazards during the construction or operational stage.
- 5.69 Intrusive investigation works will therefore determine whether it is appropriate to undertake ground gas monitoring and/or sampling (for example if significant quantities of made ground are identified with the potential to generate ground gases), and any ground gas monitoring programme will be agreed with TVBC. These works will be completed in advance of the occupation / operation of the relevant part of the Proposed Development, ensuring that each area is suitable and safe for intended use prior it becoming operational. If a ground gas assessment is considered necessary, any recommendations for remediation or mitigation will also be followed prior to construction commencing. This could include requirements for procedures to protect construction staff, or for ground gas ingress preventative measures to be incorporated into buildings (with the scope/extent of any actions/measures to be agreed with the local planning authority). Subsequent to any recommended actions, effects from

potential ground gas hazards in relation to human health are not considered to be significant and will not be considered further in the EIA or reported in the ES.

Unexploded ordnance (UXO) risks during construction and operation

- 5.70 As stated above, the EIA Site Boundary is predominantly at low risk from unexploded ordnance hazards, with only the far eastern extent of the EIA Site Boundary being classified as of moderate risk.
- 5.71 The eastern end of the existing track access to Velmore Farm that is within the moderate risk area for UXO hazards will form an emergency access / pedestrian / cycle access to the Proposed Development. As the farm access route has been in this location since prior to World War 2, any UXO directly affecting this access route is expected to have been identified and dealt with at the time and would be unlikely to remain in situ. The extent of construction works in this location is not considered to require specific additional UXO risk assessment works.
- 5.72 The eastern section of Templars Way that is within the moderate risk area for UXO hazards will be subject to highway improvement works, which will incorporate the provision of a pedestrian and cycle route along the southern side of the existing carriageway. The extent of construction works to widen the road carriageway to accommodate a footway/cycle lane is not considered to require specific additional unexploded ordnance risk assessment works, as the road was not constructed until the 1980s, at which time it would have been expected that any finds relating to unexploded ordnance would have been dealt with. The relatively low-impact nature of the construction works for this area of the EIA Site Boundary, combined with the date at which the area was developed, mean that further assessment of this area of moderate potential risk from unexploded bombs is not considered to be necessary.
- 5.73 Therefore, UXO risk to construction workers and future users is not considered to be significant and will not be considered further in the EIA or reported in the ES.

Effects on the Proposed Development due to natural geological hazards

- 5.74 Based on the information provided in the baseline section relating to natural geological hazards, the potential for effects on property or site occupiers from these hazards is discussed below:
- There is a potentially moderate risk of ground subsidence due to shrinking/swelling clays across the majority of the EIA Site Boundary (with areas of low risk in the north-western corner of the EIA Site Boundary, and in part of the north-east of the EIA Site Boundary). There would not be expected to be any effects from this potential hazard on construction workers. Potential effects on buildings, infrastructure or future site users could include subsidence issues and associated damage to buildings or infrastructure. These effects would be prevented or minimised by appropriate design of foundations based on geotechnical parameters determined by the intrusive site investigation works.
 - There is an area along the western EIA Site boundary and a small section of Templars Road (both associated with the presence of Alluvium) where there is the potential for running sand or compressible ground to be present. The risk associated with possible running sand is classified as low, while the risk

associated with compressible ground is classified as moderate. If present, running sands and compressible ground could cause stability issues during construction works, and affect the stability of the proposed buildings and infrastructure. Identifying locations where these deposits are present during the course of a geotechnical site investigation will ensure that such features can be appropriately dealt with both during construction, and with appropriate design of buildings/infrastructure to protect future site occupants.

- Potential risks from collapsible hazards are either very low or negligible within the EIA Site boundary; potential risks from ground dissolution due to soluble rocks are negligible; and potential risks from landslides are very low. This means that there are not expected to be any effects on construction workers, or on future buildings or site occupiers, as a result of collapsible hazards, ground dissolution or landslides, and these risks are not considered to require further assessment.

- 5.75 Intrusive site investigation work will be undertaken across the area within the EIA Site boundary in order to ensure that appropriate foundations are designed for the ground conditions that are recorded, and that other elements of the infrastructure are suitably designed for the ground conditions. This includes adherence with relevant standards and guidance, including but not limited to CIRIA Report C572: Treated ground engineering properties and performance, British Research Establishment document FB75: Building on Fill - Geotechnical Aspects, British Standard 6031:2009: Code of Practice for Earthworks; and Building Regulations Approved Document A – Structure.
- 5.76 As such, based on the information provided above in relation to the potential for natural geological hazards, the ground conditions within the EIA Site boundary would not be expected to present particularly difficult or complicated geotechnical conditions. As a result, effects relating to natural geological hazards are not considered to be significant and will not be considered further in the EIA or reported in the ES.

Lighting

Technical Baseline

- 5.77 The lighting baseline has been collated based on a desktop assessment with data gathered using resources including current Ordnance Survey maps, google maps and mapping from the Campaign for the Protection of Rural England (CPRE)²⁹. A baseline lighting survey of the EIA Site Boundary will be completed to identify key lighting sources on and around the EIA Site Boundary, albeit at this stage, results are yet to be received and analysed.
- 5.78 This section outlines the desktop assessment of the EIA Site Boundary undertaken prior to the proposed on-site surveys, and any relevant information gathered on the existing lighting characterisation and sky radiance mapping of light pollution.
- 5.79 The areas to the west and south of the EIA Site Boundary comprise mainly agricultural land and wooded land, while to the north and east there is a mix of residential properties and business parks. Different lighting applications have been adopted in the

²⁹ [England's Light Pollution and Dark Skies Map](#)

areas surrounding the EIA Site Boundary due to the assortment of residential and commercial developments.

- 5.80 The EIA Site Boundary is bordered by residential developments to the northwest and northeast, associated with Castle Lane and Templars Way. The current roads are adopted, meaning that the lighting design and maintenance adhere to Hampshire County Councils (HCC) local authority guidelines and standards³⁰, focusing on safety, visibility, and efficiency for both pedestrians and local traffic.
- 5.81 Hampshire Corporate Park is located to the east of the EIA Site Boundary with a further business park to the southeast. The business' light these areas, it is not known to what standard.
- 5.82 The EIA Site Boundary is within 1 km of Junction 14 of the M3 which is accessed via Chestnut Avenue. Carriageway lighting can be found illuminating the junction of this major carriageway. The road junction is maintained by National Highways. The illumination provided by National Highways adheres to BS 5489-1:2020³¹, ensuring consistent and adequate road lighting design for safety and efficiency.
- 5.83 The EIA Site Boundary currently has a number of buildings present on the southeastern boundary. The desktop study has identified that there are 3-4 floodlights present associated with these buildings, assumed for security usage due to the nature of the presence detector switching the luminaries on when an object passes.
- 5.84 The EIA Site Boundary is not adjacent to or located within any National Parks, National Landscape, or designated Dark Sky areas.
- 5.85 Skyward radiance mapping prepared by CPRE has informed the baseline light level assessment. Figure 5.2 indicates medium to low brightness levels of skyward radiance in the vicinity of the EIA Site Boundary. Further details are also provided in Chapter 10.
- 5.86 The skyward radiance levels range from 1-2 NanoWatts / cm² / sr in the west of the EIA Site Boundary increasing to 2-4 NanoWatts / cm² / sr in the centre of the EIA Site Boundary and further increasing to 4-8 NanoWatts / cm² / sr in the east of the EIA Site Boundary which is adjacent to residential properties and Hampshire Corporate Park.
- 5.87 This brightness level is likely a result of the EIA Site Boundary's proximity to surrounding residential development and the Hampshire Corporate Park, as well as the M3, where readings of 16-32 NW/Cm²/sr levels are recorded. This information provides a baseline understanding of the current sky glow and light pollution impact within the area of the EIA Site Boundary.
- 5.88 A summary of the potential sensitive receptors in the vicinity of the EIA Site Boundary is provided in Table 5.1.

³⁰ Hampshire County Council, Technical Guidance Note [TG13 - Street Lighting](#)

³¹ British Standards Institution (BSI), (2020). BS 5489-1:2020 Code of practice for the design of road lighting - Part 1: Lighting of roads and public amenity areas. London: BSI.

Table 5.1: Sensitive Receptors

Type of Receptor	Address / Name	Approximate Distance
Residential	Woodside	Adjacent to the southwestern boundary
Residential	Blenheim Close and Tansy Meadow	~170m from the northern boundary
Residential	North of Templars Way	~25m from the north-eastern boundary
Commercial	Hampshire Corporate Park	~70m from eastern boundary
Highway users of Transport Infrastructure	M3 junction 14 and M27 slip road	~850m south

Effects Unlikely/Not Significant

5.89 This section considers the potential effects arising from light spill, sky glow and glare on residential, commercial and highway receptors located in the vicinity of the EIA Site Boundary. Effects on ecological receptors and landscape and visual receptors are considered separately in Chapters 9 and 10, respectively.

Disturbance Due to Light Spill, Sky Glow, and Glare during Construction

5.90 During construction stage temporary artificial lighting may be required to support on-site activities with the introduction of on-site facilities offices, compound lighting and site access routes and gates used for the construction stage.

5.91 On-site construction activities would create lighting emissions due to the requirements for construction lighting required for security and construction activities during hours of darkness. The lighting emissions would result in temporary in nature and short-term light spill, sky glow and glare effects on the surrounding sensitive receptors. Temporary construction lighting will be managed and controlled through the CEMP and informed by the standalone external Lighting Assessment which will accompany the planning application and can be secured through an appropriately worded planning condition. This will include measures such as:

- Provision of general lighting sufficient to complete tasks without over lighting and low-level controlled task lighting for activities requiring higher illumination;
- Implementation of the Lighting Management Plan as part of the construction works for example including hours of scheduled work and lighting control covering aftermarket controls and the turning off of construction lighting;
- Directing lighting away from sensitive habitats in conjunction with and advice from a qualified ecologist (further details in Chapter 9); and
- Adherence to agreed start up and shut down times to ensure consistent control over obstructive effects for all construction activities.

- 5.92 These tertiary mitigation measures would be considered an integral part of the Proposed Development during the construction stage and considered as part of the CEMP.
- 5.93 Therefore, effects associated with light spill, sky glow, and glare during the construction stage on surrounding residential, commercial and highway sensitive receptors are not considered to be significant and will not be considered further in the EIA or reported in the ES.

Disturbance due to Light Spill, Sky Glow, and Glare during the Operation

- 5.94 During its operation, the Proposed development would introduce a new artificial lighting to the EIA Site Boundary to ensure a safe environment for activities such as driving, cycling, and walking (such as proposed access, internal circulation routes etc). Lighting would also be used to enhance the EIA Site Boundary's environment through decorative and focused illumination of specific areas, features, and buildings.
- 5.95 The introduction of new artificial lighting is likely to increase lighting emissions, which would have the potential to increase the disturbances from light spill, sky glow and glare effects on the surrounding residential, commercial and highway receptors during nighttime.
- 5.96 The EIA Site Boundary baseline indicates that there are medium to low levels of skyward radiance on-site and medium to high levels of skyward radiance at the locations of the surrounding receptors. As a result, these receptors are likely experiencing a level of effect from light spill, sky glow and glare. The increase in spill, sky glow and glare effects on sensitive receptors from the Proposed Development would likely be limited.
- 5.97 The new artificial lighting associated with the Proposed Development will be designed to comply with the relevant British Standards, guidance from the Institution of Lighting Professionals (ILP), and the Chartered Institution of Building Services Engineers (CIBSE), which specify required lighting levels.
- 5.98 The following standards and guidance will be considered within this lighting design:
- British Standard 12464-2:2024³²;
 - British Standard 13201³³;
 - British Standard 5489-1:2020 Code of Practice for the Design of Road Lighting³⁴;
 - Hampshire County Council, Technical Guidance Note TG13 – Street Lighting³⁵;
 - Institution of Lighting Professionals, Guidance Note 08/23 Bats and Artificial Lighting at Night³⁶;

³² British Standard 12464-2:2024 – Light and Lighting for Outdoor Workplaces

³³ British Standard 13201 – Road Lighting

³⁴ British Standard 5489-1:2020 Design Road Lighting

³⁵ Hampshire County Council, Technical Guidance Note [TG13 - Street Lighting](#)

³⁶ The Institution of Lighting Professionals, Guidance Note 08/23 Bats and Artificial Lighting at Night

- Institution of Lighting Professionals, Guidance Notes for the Reduction of Obtrusive Light³⁷;
- Institution of Lighting Professionals, Towards a Dark Sky Standard³⁸; and
- Chartered Institution of Building Services Engineers, Society of Light and Lighting (SLL) Code of Lighting 2022³⁹.

5.99 Lighting design will be developed collaboratively with the design team, project ecologist, and landscape consultant to ensure that lighting is appropriate for the public realm, ecological receptors and to limit disturbance to residential and commercial receptors in the EIA Site Boundary's surroundings. These measures will be detailed as part of the standalone external Lighting Assessment to be submitted as part of the planning application with mitigation measures incorporated into the design (where required) and secured via planning condition.

5.100 Therefore, effects associated with light spill, sky glow, and glare on surrounding residential, commercial and highway receptors are not considered to be significant and will not be considered further in the EIA or reported in the ES. An external Lighting Assessment will, however, be provided as a standalone document supporting the planning application.

5.101 The outline lighting strategy will be supported and informed by a baseline lighting survey that will be completed to identify key lighting sources on and around the EIA Site Boundary, and their contributions to the lighting at the Proposed Development.

Major Accidents and/or Disasters

Technical Baseline

5.102 There are Inner and Outer Health and Safety Executive (HSE) Consultation Zones⁴⁰ present across the west / southwest of the EIA Site Boundary, associated with two Southern Gas Networks. There are no Control of Major Accident Hazard (COMAH) sites⁴¹ within or adjacent to the EIA Site Boundary and none with recorded within a 3-mile radius of the EIA Site Boundaries postcode (SO53 3HF). As stated in 'Ground Conditions and Contamination' above, the EIA Site Boundary lies in an area predominantly classified as a low risk of uncovering Unexploded Ordnance (UXO) according to the Zetica map⁴². However, the eastern extents of both the southern access road and the northern access road (Templars Way) are within an area of land that is categorised as being at moderate risk from unexploded ordnance.

5.103 There is a 400kV OHL on the west - east alignment, high and intermediate-pressure gas mains, as well as potable water mains which also cross the EIA Site Boundary.

³⁷ The Institution of Lighting Professionals, Guidance Note 01/02 The Reduction of Obtrusive Light

³⁸ ILP's Towards a Dark Sky Standard, A Lighting Guide to Protect Dark Skies (2021)

³⁹ Chartered Institution of Building Services Engineers, 2022. Society of Light and Lighting (SLL) Code of Lighting

⁴⁰ <https://www.hse.gov.uk/landuseplanning/planning-advice-web-app.htm>.

⁴¹ <https://notifications.hse.gov.uk/COMAH2015/Search.aspx>

⁴² <https://zeticauxo.com/guidance/risk-maps/>

Effects Unlikely / Not Significant

5.104 A qualitative appraisal of major accidents and / or disasters considered relevant to the Proposed Development is presented in Table 5.2.

5.105 As part of the appraisal the factors that have been considered include the understanding of the likelihood of a risk event occurring, the consequence of such an event and the mitigation identified to control / manage risks to be 'As Low as Reasonably Practicable' (ALARP). ALARP describes the level to which stakeholders (such as the HSE) expect to see risks controlled, taking account of being 'reasonably practicable' (i.e. weighing a risk against the effort, time and money needed to control it).

Table 5.2: Appraisal of the risk of major accidents and / or disasters

Effect	Appraisal
Major accidents associated with nearby COMAH sites	The Proposed Development would not be classified as a COMAH site, nor is it within 3 miles of a registered COMAH site. Furthermore, there are stringent controls and management regimes in place COMAH sites noted above in line with legislative requirements. Therefore, the risk of major accidents from these sites is considered to be ALARP.
Major accidents associated with underground utilities	During the construction stage, working areas will be secured with restricted access so only suitably qualified personnel are present. As identified in Chapter 4, high and intermediate-pressure gas mains, as well as potable water mains, cross the EIA Site Boundary and will be appropriately offset from built development in accordance with statutory requirements that include 12.2m (high-pressure gas); 6.1m (intermediate-pressure gas); and 6m (potable water). To take account of these assets, good practice working measures will be put in place as part of the CEMP in line with the Construction (Design and Management) Regulations 2015 and other health and safety regulations, such as the preparation of specific method statements and making workers aware of the location of utilities and their easements where works are undertaken in proximity to utilities. In addition, relevant HSE guidance will be adhered to, including Avoiding danger from underground services ⁴³ . With such measures in place, the risk is considered to be ALARP.
Major accidents associated with overhead powerlines (OHLs)	The EIA Site Boundary is crossed by a 400kV OHL on a west to east alignment. During construction, safe working methods will be implemented and included in the CEMP. This will include adherence to relevant health and safety legislation, including GS6 Avoiding danger from overhead lines ⁴⁴ and ensuring construction workers are briefed on the appropriate methods

⁴³ HSE (2014) Avoiding danger from underground services HSG47.

⁴⁴ HSE (2013) GS6 Avoiding danger from overhead lines.

Effect	Appraisal
	of working and the easements. During operation, the OHL will be retained on its current trajectory, and no built development will be undertaken within the appropriate offsets (30m). With such measures in place, the risk is considered to be ALARP.
Major accidents associated with utility diversions	Any required diversions of utilities during construction will be undertaken by the relevant Distribution Network Operator (DNO) (or a third-party contractor appointed by the DNO), who will operate in line with standard good practice working measures, including accordance with the Construction (Design and Management) Regulations 2015 and other health and safety regulations. Any such works would include appropriate isolation of utilities as required. With such measures in place, the risk is considered to be ALARP.
Major accidents associated with fire	As part of the CEMP, construction works will be undertaken in line with Fire Prevention on Construction Sites: Joint Code of Practice ⁴⁵ . All buildings will be designed with appropriate fire prevention / control measures (e.g. fire doors, extinguishers, etc.) and all external facades and materials will meet the necessary fire resistance standards set out within relevant legislation (e.g. the Building Regulations). Fire management measures (including smoke detectors etc.) will also be installed within the Proposed Development. It is assumed that the final end-users/ building management company will have in place the required emergency procedures/ practices (i.e. Fire Emergency Evacuation Plan (FEEP) or apparatus/ instruments (i.e. smoke detectors/ sprinklers) required by law for commercial occupation. Furthermore, the Proposed Development will incorporate appropriate access arrangements and hose-reach provisions to ensure that fire engines can safely and effectively respond in the event of an emergency in line with Building Regulations ⁴⁶ . With such measures in place, the risk is considered to be ALARP.
Major accidents caused by ground subsidence and associated structural / building collapse	As part of the CEMP, good practice working measures and emergency measures will be put in place in accordance with the Construction (Design and Management) Regulations 2015. All earthworks and foundation design will be in accordance with relevant standards and guidance, including but not limited to CIRIA Report C572: Treated ground engineering properties and performance ⁴⁷ , British Research Establishment document FB75: Building on Fill - Geotechnical Aspects ⁴⁸ , British Standard

⁴⁵ RISC Authority and The Fire Protection Association (2022) Fire Prevention on Construction Sites: The Joint Code of Practice on the Protection from Fire of Construction Sites and Buildings Undergoing Renovation (10th Edition).

⁴⁶ Approved Document B Fire Safety. Build Regulations 2010. Available at: <https://www.gov.uk/government/publications/fire-safety-approved-document-b>

⁴⁷ J A Charles and K S Watts (2002). Treated ground - engineering properties and performance (C572).

⁴⁸ BRE (2015) FB75 Building on fill: geotechnical aspects (3rd edition).

Effect	Appraisal
	6031:2009: Code of Practice for Earthworks ⁴⁹ and Building Regulations Approved Document A - Structure ⁵⁰ . With such measures in place, the risk is considered to be ALARP.
Major accidents associated with risk of UXO on-site	The EIA Site Boundary is considered to have a predominantly low potential for previously undiscovered UXO to be present with the eastern extents of both the southern access road and the northern access road (Templars Way) within an area of land that is categorised as being at moderate risk. As detailed in 'Ground Conditions and Contamination' earlier in this chapter, given the low-impact nature and extent of works required within the higher risk zone (i.e. to accommodate footways/cycleways) it is not considered to require specific detailed UXO risk assessment works. Nevertheless, appropriate mitigation measures will be implemented as part of a CEMP, such as communication to all construction workers on UXO risks, safety training by a competent expert and the attendance of UXO supervisors during the groundworks (if appropriate). With such measures in place, the risk is considered to be ALARP.
Major accidents on the local road network	The management of construction vehicles in and out of the EIA Site Boundary and the enforcement of stringent safety standards reduces the risk of major accidents to a low level, both in terms of frequency and likelihood. With respect to non-motorised users of the local road network, where new pedestrian/ cycle infrastructure is anticipated as part of the Proposed Development, these too will accord with relevant standards. Furthermore, the PRoW [Ref:050/7/1] and bridleway [Ref 050/6/1] may be temporarily closed or diverted during construction, until a time where they are permanently re-opened along the same route. If continued use is deemed safe during construction, routes will be protected by fencing/ hoarding to allow for safe continued access. As such, pedestrian safety is considered to be well defined and controlled in line with standard highways / site requirements. The potential for major transport accidents during the construction stage will be mitigated by a construction logistics/traffic management plan as part of the CEMP. This will include measures such as a planned route(s) for construction traffic to reduce the risk to road users, restricting deliveries to certain periods and ensuring the vehicles are well maintained and roads are kept clean. The new accesses and vehicle circulation through the Proposed Development will all be designed in accordance with relevant guidance/standards.

⁴⁹ British Standard 6031:2009 Code of practice for earthworks.

⁵⁰ HM Government (2013) Approved Document A – Structure.

Effect	Appraisal
	With these measures in place, the risk is considered to be ALARP.
Major accidents as a result of malicious attacks (e.g. vandalism, arson or terrorism)	Due to its nature, the Proposed Development is unlikely to attract terrorist activities. Whilst targeted acts of vandalism or arson cannot be fully mitigated, the adoption of appropriate security measures at the construction stage and operational stages (such as security lighting and CCTV) will help to minimise the likelihood of such events occurring. It is also assumed that appropriate emergency planning has been undertaken by TVBC and local emergency services. Given this, the risk is considered to be ALARP.
Major accidents during construction works	All works will be undertaken in accordance with relevant legislation, standards and guidance, including the Construction (Design and Management) Regulations 2015 and HSE's health and safety in construction ⁵¹ . Appropriate method statements and risk assessments will be undertaken prior to the commencement of specific activities. With these measures in place, the risk is considered to be ALARP.

- 5.106 Based on the evidence provided within Table 5.2, although there is the potential for a wide range of major accidents and disasters that could occur, the risk is considered to be ALARP due to the management regimes required under established legislative requirements or mitigation committed to during the design process.
- 5.107 The EIA Regulations do not specify the need for the consideration of natural disasters. However, for completeness, this has been considered.
- 5.108 The probability, frequency and likelihood of natural disasters arising from climatic occurrences (i.e. hurricanes) are considered to be very low due to the natural climatic condition of the UK within the global climate system. Specific geological events (i.e. earthquakes, tsunamis, volcanic incidents, etc.) are also considered to be very low due to the general absence of required geological conditions (i.e. area of tectonic plate interaction) within or in proximity to the UK. Although earthquakes have occurred within the UK, the magnitude of such events has generally been low.
- 5.109 Therefore, effects related to the risk of major accidents and/or disasters are unlikely to be significant and will not be considered further in the EIA or reported in the ES.

Materials and Waste

Technical Baseline

5.110 Receptors, with regards to waste and material resources, are defined as:

- Landfill void capacity; and

⁵¹ HSE (2006) Health and safety in construction (HSG150).

- Material resources.

5.111 The baseline has been established through a desk-based review of regional and national data, based on the ISEP guidance⁵² and reference to the latest published minerals and waste planning information contained in the following sources:

- Test Valley Borough Revised Local Plan 2016⁵³;
- Eastleigh Borough Local Plan 2016-2036⁵⁴;
- The Mineral Products Association's Profile of the UK Mineral Products Industry – 2025 Edition⁵⁵;
- The Mineral Products Regional overview of construction and mineral products markets in Great Britain – 2024 edition⁵⁶;
- UK Steel – Key Statistics Guide 2025⁵⁷;
- The Environment Agency's Waste Data Interrogator 2024⁵⁸; and
- The Environment Agency's Remaining Landfill Capacity 2024⁵⁹.

Waste

5.112 The Environment Agency's (EA) Landfill Capacity tool provides information on waste management sites in England that are regulated by EA. Table 5.3 below provides the estimated regional (Southeast) and national landfill void capacity as of December 2024 (latest available data).

Table 5.3: Landfill void capacity (m³)

Landfill type	Void Capacity (Southeast)	Void Capacity (England)
Inert/Non-Hazardous	41,341,973	290,449,421
Hazardous	212,650	9,848,250

⁵² ISEP (2020), IEMA guide to: Materials and Waste in Environmental Impact Assessment - Guidance for a proportionate approach.

⁵³ Test Valley Borough Council (2016), Adopted Local Plan 2011-2029 <https://www.testvalley.gov.uk/planning-services/planningpolicy/local-development-framework/dpd> [Accessed: 01/12/2025].

⁵⁴ Eastleigh Borough Council (2022), Eastleigh Borough Local Plan (2016-2036) <https://www.eastleigh.gov.uk/media/11806/to-be-published-final-local-plan-april-2022-v4.pdf> [Accessed: 01/12/2025].

⁵⁵ Mineral Products Association (2025), Profile of the UK Mineral Products Industry https://mineralproducts.org/MPA/media/root/Publications/2025/Profile_of_the_UK_Mineral_Products_Industry_2025.pdf [Accessed: 01/12/2025].

⁵⁶ Mineral Products Association (2024), Regional overview of construction and mineral products market in Great Britain https://mineralproducts.org/MPA/media/root/Publications/2024/MPA_Regional_overview_of_construction_and_mineral_products_markets_in_GB_2024.pdf [Accessed: 01/12/2025].

⁵⁷ UK Steel (2025), Key Statistics Guide 2025 <https://www.uksteel.org/reports-and-publications> [Accessed: 02/12/2025].

⁵⁸ EA (2024), Waste data Interrogator <https://www.data.gov.uk/dataset/81f9d676-e77c-4d68-ab0c-b67e0b0b353e/2024-waste-data-interrogator> [Accessed: 01/12/2025].

⁵⁹ EA (2024), Remaining Landfill Capacity <https://www.data.gov.uk/dataset/237825cb-dc10-4c53-8446-1bcd35614c12/remaining-landfill-capacity1> [Accessed: 01/12/2025]

Material resources

- 5.113 The 2024 regional (Southeast and South of England) and national sales of primary (not recycled) materials are summarised in Table 5.4.
- 5.114 Materials identified in the table are based on the main construction materials estimated to be needed for the construction of the Proposed Development.
- 5.115 Given that the number, type and size of construction developments vary from year to year, the demand for materials also fluctuates. As such, this data should be considered representative.

Table 5.4: Primary materials baseline

Primary Material	Southeast (tonnes)	South (tonnes)	National (tonnes)
Crushed rock		26,300,000	
Sand and gravel	14,900,000		
Asphalt	1,900,000		
Ready-mixed concrete	7,680,000*		
Steel			4,000,000

* Using the standard density of concrete 2.4 tonnes per cubic metre conversion

Effects Unlikely/Not Significant

Depletion of Landfill void Capacity

- 5.116 During the construction stage, waste will be generated resulting in a permanent loss of landfill void capacity due the generation of wastes from construction activities such as excavated soils, concrete and bricks, and metals. The Proposed Development will be designed to minimise waste and a SWMP will be implemented to drive segregation, reuse and recycling and to minimise disposal to landfill. A MMP will be prepared (as appropriate) in accordance with the CL:AIRE Definition of Waste: Development Industry Code of Practice⁶⁰ to maximise on-site soil reuse and avoid unnecessary off-site disposal.
- 5.117 The operation of the Proposed Development will generate waste which will result in a permanent loss of landfill void capacity. An OWMS will be developed to maximise segregation, recycling and diversion of waste from landfill during operation of the Proposed Development. The OWMS will be developed in line with best practice and the requirements of TVBC⁶¹.
- 5.118 With the above measures in place, residual waste requiring disposal to landfill during construction and operation is expected to be minimal relative to regional capacity.

⁶⁰ CL:AIRE (2021). The Definition of Waste: Development Industry Code of Practice (DoWCoP).

⁶¹ Test Valley Borough Council (2017), Guidance Document for the Storage and Collection of Domestic Waste and Recycling for New and Existing Developments.

- 5.119 Therefore, depletion of landfill void during construction and operation of the Proposed Development is not considered to be significant and will not be considered further in the EIA or reported in the ES.

Consumption of material resources resulting in the degradation of the natural environment

- 5.120 The construction stage will lead to the consumption of resources (e.g., aggregates, concrete, steel and timber) which will lead to a temporary depletion of material resources. The small quantities of material resources required during construction for the Proposed Development are considered to have a negligible impact when considered in the context of the overall primary materials baseline.
- 5.121 The Proposed Development will be designed to minimise the use of resources and following established sustainability principles. Sustainable sourcing policies would be used to source materials such as timber.
- 5.122 Where possible demolition and excavation arisings will be re-used within the development. Value engineering and workshops to design out waste will be undertaken to minimise the material resources required. Imported fill materials would be sourced from recycled or secondary sources where possible and practicable to do so. The use of primary aggregate would be minimised within technical specifications.
- 5.123 The SWMP will detail measures undertaken to reuse materials where possible and reduce waste, and therefore the use of material resources.
- 5.124 Operational use of materials will be limited to maintenance, repair and replacement and is considered to be minimal.
- 5.125 Therefore, consumption of material resources during construction and operation of the Proposed Development is not considered to be significant and will not be considered further in the EIA or reported in the ES.

Minerals

Technical Baseline

- 5.126 Mineral Safeguarding Areas (MSAs) within Hampshire are defined by HCC in its role as the Minerals Planning Authority. The delineation of these areas is informed by the most up-to-date British Geological Survey (BGS) mineral resource data, which identifies the distribution and extent of known and potential mineral resources across the county. The purpose of MSAs is to safeguard economically important mineral resources from unnecessary sterilisation by non-mineral development.
- 5.127 A Review of the adopted HCC Mineral Safeguarding Plan⁶² confirms that a relatively small part of the EIA Site Boundary is affected by a mineral safeguarding designation. Approximately 4 hectares of the eastern part of the EIA Site Boundary fall within a Mineral Safeguarding Area for superficial sand and gravel, with the remainder of the EIA Site Boundary lying outside any safeguarding designation. The majority of the EIA Site Boundary lies outside of any mineral safeguarding designations.

⁶² <https://maps.hants.gov.uk/mineralsconsultationareas/>

- 5.128 As part of the technical baseline assessment, existing on-site and surrounding constraints have been identified which would affect any potential mineral recovery within the safeguarded area. These include the presence of existing residential properties along Templars Way and the presence of large-scale, high-voltage overhead power lines crossing and adjoining the EIA Site Boundary.
- 5.129 It is noted that such site-specific constraints are not taken into account when Mineral Safeguarding Areas are defined, which are instead based on the BGS data. These baseline considerations are therefore relevant in understanding the realistic potential for future mineral extraction within the safeguarded area.

Effects Unlikely/Not Significant

Mineral sterilisation

- 5.130 The potential effects of the Proposed Development on mineral sterilisation have been considered in the context of the identified MSA affecting a limited part of the Site. Having regard to the scale and nature of the Proposed Development, the extent of safeguarded land affected, and existing baseline constraints, the Proposed Development is not considered likely to result in significant mineral sterilisation.
- 5.131 Only a relatively small proportion of the EIA Site Boundary is subject to a Mineral Safeguarding designation, with approximately 4 hectares identified as being underlain by superficial sand and gravel. The majority of the EIA Site Boundary lies outside the MSA, thereby limiting the overall potential for mineral sterilisation arising from the Proposed Development as shown in Figure 5.3.
- 5.132 In addition, a substantial level of mineral sterilisation has already occurred as a result of existing surrounding development and infrastructure. The proximity of residential receptors significantly constrains the realistic potential for future mineral extraction. These receptors include properties backing onto Templars Way which take access from Montgomery Way, Highclere Way and Donnington Drive.
- 5.133 In accordance with Policy 10 of the Hampshire Minerals and Waste Plan⁶³, a minimum 100-metre buffer is required between mineral extraction activities and residential properties in order to protect residential amenity. In practice, and in line with approaches adopted by other Minerals Planning Authorities, buffer distances of up to 250 metres are often applied for sand and gravel extraction. The application of these buffers would sterilise a large proportion of the safeguarded resource irrespective of the Proposed Development.
- 5.134 The use of buffer zones between residential properties and mineral extraction schemes is a well-established principle within minerals planning. Such buffers are applied to limit the amenity impacts arising from mineral working activities, which typically involve the use of heavy plant and machinery, frequent vehicle movements, and soil handling operations. These activities have the potential to generate dust, noise and vibration, all of which can adversely affect nearby residential occupiers. Buffer distances are therefore used to ensure an appropriate separation between sensitive

⁶³ Page 60 of the HMWP

<https://documents.hants.gov.uk/mineralsandwaste/HampshireMineralsWastePlanADOPTED.pdf>

receptors and mineral operations, safeguarding residential amenity and health throughout the operational life of a mining scheme.

- 5.135 Further constraints arise from the presence of two parallel high-voltage overhead power lines crossing the EIA Site Boundary. A corridor of at least 30 metres would need to be maintained on either side of these structures, within which mineral extraction could not take place without the diversion or removal of the power lines. Given the scale of infrastructure involved and the limited extent of the safeguarded mineral resource, the relocation of these power lines would not be viable. As a result, a significant proportion of the mineral resource within the Site is already effectively sterilised.
- 5.136 Taking account of the existing baseline level of mineral sterilisation, the limited extent of safeguarded mineral resource within the EIA Site Boundary, and the additional constraints imposed by residential receptors and major infrastructure, the effect of the Proposed Development on mineral safeguarding is not considered likely to be significant. Accordingly, further assessment of mineral sterilisation through the EIA process is not required.
- 5.137 Therefore, the effect of the Proposed Development upon mineral sterilisation is not considered to be significant and will not be considered further in the EIA or reported in the ES.

Water Environment

Technical Baseline

Topography

- 5.138 Detailed Site- specific topography (as shown in Figure 10.7) for the EIA Site Boundary indicates ground levels across the EIA Site Boundary to be typically sloping from south to north, with notable exceptions associated with existing watercourses/ditches present across and adjacent to the EIA Site Boundary, where topography is indicated to rise and fall significantly from east to west. The highest elevation at the EIA Site Boundary is approximately 62.3 m AOD in the southwest whereas the lowest elevation is approximately 33 m AOD in the northeast.

Hydrological Setting/Surface Water Drainage

- 5.139 A number of watercourses are located within the EIA Site Boundary and in the surrounding areas. Mapping⁶⁴ indicates that existing field ditches are present in the central and eastern areas of the EIA Site Boundary, and that they discharge from the EIA Site Boundary at multiple locations.
- 5.140 A network of existing ditches drains the woodland areas to the south and west of the EIA Site Boundary and flow from this wider catchment area across the EIA Site Boundary.

⁶⁴ OS Ordnance Survey (October 2025) OS OpenMap – Local. Available at: <https://osdatahub.os.uk/data/downloads/open/OpenMapLocal> [Accessed December 2025].

- 5.141 Observations made on-Site and desktop assessment indicate at least three separate surface water discharge points leave the EIA Site Boundary along the northern/northeastern and eastern boundaries. Furthermore, a ditch along the southern boundary of the EIA Site Boundary directs flows through the EIA Site Boundary via the on-Site ditch network.
- 5.142 The Marl Brook, an Environment Agency (EA) Main River⁶⁵, receives flows from the east of the EIA Site Boundary before directing them into Monks Brook, another EA Main River, approximately 1.4 km east of the EIA Site Boundary. Flows from the north of the EIA Site Boundary are directed into an unnamed EA Main River, before also discharging into Monks Brook. Monks Brook discharges to the River Itchen approximately 3.7 km southeast of the EIA Site Boundary.

Geology and Soils

- 5.143 The British Geological Survey (BGS) Geology Viewer⁶⁶, indicates the underlying geology at the EIA Site Boundary to comprise the bedrock of the Earnley Sand Formation (sand, silt and clay), and the Wittering Formation (silt and clay). The Wittering Formation is the dominant bedrock across the EIA Site Boundary (comprising approximately 75%), with the Earnley Sand Formation found only in isolated areas in the northwest and northeast of the EIA Site Boundary (comprising approximately 25%). Superficial deposits are not recorded at the EIA Site Boundary on the BGS Geology Viewer.
- 5.144 Previous ground investigations undertaken at the EIA Site Boundary as part of winter groundwater monitoring between February and April 2025⁶⁷, describe the strata encountered at the EIA Site Boundary across five window sample boreholes to a maximum depth of 5.45 m Below Ground Level (BGL). Strata across the five boreholes was indicated to be a mixture of both sand and clay-based soil/geology.

Hydrogeology

- 5.145 The bedrock geology underlying the EIA Site Boundary is classified as a Secondary A Aquifer⁶⁸. BGS 1:625,000 hydrogeological mapping⁶⁹ indicates that the EIA Site Boundary is underlain by a moderately productive aquifer.
- 5.146 Based on information provided in the PRA (Appendix 5.3), the anticipated depth to the groundwater table is in the order of 1.75m below ground level (bgl) (estimated from British Geological Survey records). Shallow groundwater is anticipated to flow in a south-easterly direction, i.e. towards and in the direction of flow of the River Itchen. It is noted that shallow groundwater may also be present in any made ground deposits (if present) within the EIA Site Boundary.

⁶⁵ Department for Environment Food & Rural Affairs (11 January 2023) Statutory Main River Map. Available at: <https://environment.data.gov.uk/dataset/25dde009-ba7d-40de-8380-c5c3bb32ccdc> [Accessed December 2025].

⁶⁶ British Geological Survey, BGS Geology Viewer. Available at: https://geologyviewer.bgs.ac.uk/?_ga=2.95444572.1337826301.1660225239-549761679.1660225239 [Accessed December 2025].

⁶⁷ RSK Geosciences, 305395 L01 (00), (13 June 2025) Velmore Farm, Chandlers Ford, Winter Groundwater Monitoring (February – March 2025).

⁶⁸ Department for Environment Food & Rural Affairs, MAGIC. Available at: <https://magic.defra.gov.uk/MagicMap.html> [Accessed December 2025].

⁶⁹ British Geological Survey GeoIndex Onshore, Hydrogeology. Available at: <https://mapapps2.bgs.ac.uk/geoindex/home.html> [Accessed December 2025].

Flood Risk

5.147 According to the EA Flood map for planning⁷⁰, approximately 98 – 99% of the EIA Site Boundary is located within Flood Zone 1 (Low risk of fluvial flooding), with the remaining 1 – 2% located within Flood Zone 2 (Medium risk) and Flood Zone 3 (High risk). Areas within Flood Zones 2 and 3 within the EIA Site Boundary are located in areas within and adjacent to existing watercourses. The Flood Zones are defined as follows⁷¹:

- Flood Zone 1 – Land having a less than 0.1% (1 in 1,000) annual probability of flooding.
- Flood Zone 2 – Land having between a 0.1% - 1% (1 in 100 to 1 in 1,000) annual probability of flooding from rivers or between a 0.1% - 0.5% (1 in 200 to 1 in 1,000) annual probability of flooding from the sea, and accepted recorded flood outlines.
- Flood Zone 3 – Areas shown to be at a 1% (1 in 100) or greater annual probability of flooding from rivers or a 0.5% (1 in 200) or greater annual probability of flooding from the sea.

5.148 The EA additionally provides climate change data which shows how the combined extent of Flood Zones 2 and 3 could increase with climate change over the next century⁷². The percentage of the EIA Site Boundary affected by this area represents only a negligible increase when compared to the present-day Flood Zone 2 and Flood Zone 3 extents.

5.149 According to the EA long term flood risk mapping⁷³, adjusted for the potential impacts of climate change, approximately 96 – 97% of the EIA Site Boundary is assessed to be at a very low risk from surface water flooding. Areas considered to be at risk, totalling approximately 3 – 4% of the overall EIA Site Boundary area, are typically located in areas within and adjacent to existing ditches/watercourses, and isolated areas of localised low topography. The different surface water risk categories are defined as follows:

- High chance – More than a 3.3% chance each year.
- Medium chance – Between a 1% and 3.3% chance each year.
- Low chance – Between a 0.1% and 1% chance each year.

⁷⁰ GOV.UK, Flood map for planning. Available at: <https://flood-map-for-planning.service.gov.uk/map?seg=fz.fzcl&lyr=fd.mainr&cz=442355.7.119363.15.792611> [Accessed December 2025].

⁷¹ Department for Environment Food & Rural Affairs (28 November 2025) Flood Map for Planning – Flood Zones. Available at: <https://environment.data.gov.uk/dataset/04532375-a198-476e-985e-0579a0a11b47> [Accessed December 2025].

⁷² Department for Environment Food & Rural Affairs (27 November 2025) Flood Map for Planning – Flood Zones plus Climate Change. Available at: <https://environment.data.gov.uk/dataset/59065c43-257e-4867-8798-fd2366156a6b> [Accessed December 2025].

⁷³ GOV.UK, Check your long term flood risk. Available at: <https://check-long-term-flood-risk.service.gov.uk/information-for-planning> [Accessed December 2025].

- 5.150 The long term flood risk mapping^{Error! Bookmark not defined.} shows that the EIA Site Boundary is not considered to be at risk of flooding following a reservoir failure.
- 5.151 The EIA Site Boundary is identified in the TVBC Strategic Flood Risk Assessment (SFRA)⁷⁴ as having limited potential for groundwater flooding.
- 5.152 The EIA Site Boundary consists predominantly of undeveloped farmland, with Velmore Farm situated in the southeast of the EIA Site Boundary. Southern Water sewer records show that there are no public sewerage assets present in the EIA Site Boundary. Consultation with Southern Water has confirmed that the Woodside Chilworth pumping station (adjacent to the southwest boundary of the EIA Site Boundary) is currently performing at the expected level, and no improvements are required at present. As the only sewers upslope of the EIA Site Boundary are those serving a small residential area on 'Woodside', which are in connection to the Woodside Chilworth pumping station, the risk of sewer flooding is assessed to be very low.
- 5.153 The Hydrological Setting and Flood Risk at the EIA Site Boundary is presented in Figure 5.3.
- 5.154 It is noted that the EIA Site Boundary is located within both the 'Central Hants Bracklesham Group Water Body'⁷⁵, a groundwater body, and the catchment of the Monks Brook Water Body (Para 5.142), a river water body. Both these water bodies fall within the catchment of the River Itchen.

Foul Water Drainage/Nutrient Neutrality

- 5.155 The EIA Site Boundary is located within the Natural England (NE) 'Solent' Nutrient Neutrality Catchment⁷⁶. This Catchment represents the total surface water catchment area of the relevant downstream designated sites. Within the Solent catchment these include:
- Solent and Southampton Water Special Protection Area (SPA)/Ramsar.
 - Solent Maritime SAC.
- 5.156 Foul sewage from the EIA Site Boundary will require treatment at the Millbrook WWTW. Permitted nitrogen concentrations at the Millbrook WWTW are 10 mg TN/L.
- 5.157 The Woodside Chilworth pumping station, located at approximate OS Eastings/Northings: 441338E, 118883N, is located adjacent to the southern boundary of the EIA Site Boundary. It is proposed that foul sewage from the EIA Site Boundary is first pumped to this location before onward discharge to the Millbrook WWTW.
- 5.158 Consultation with Southern Water has confirmed that regarding foul sewerage connection, the only catchment the EIA Site Boundary will feed into is that of the

⁷⁴ Test Valley Borough Council (2023) Evidence Base – Environment. Available at: <https://testvalley.gov.uk/planning-services/planningpolicy/evidence-base/evidence-base-environment> [Accessed December 2025].

⁷⁵ Environment Agency, Catchment Data Explorer. Available at: <https://environment.data.gov.uk/catchment-planning/WaterBody/GB40702G500900> [Accessed February 2026].

⁷⁶ Natural England, Nutrient Neutrality Catchments. Available at: <https://naturalengland-defra.opendata.arcgis.com/datasets/Defra::nutrient-neutrality-catchments-england/explore?location=50.902840%2C-0.026867%2C7.41> [Accessed December 2025].

Millbrook WWTW. An upgrade for the Millbrook WWTW is planned for 2028 by Southern Water, with an investment of £12.3 million.

Water Framework Directive (WFD) Status

5.159 The EIA Site Boundary is located within the catchment of the Monks Brook Water Body⁷⁷, a heavily modified water body at a Moderate ecological status (2022) and a Fail chemical status (2019). The Water Body is located within the Itchen Operational Catchment and the Test and Itchen Management Catchment.

Water Resources

5.160 The EIA Site Boundary is not located within any Drinking Water Protected Areas, Drinking Water Safeguard Zones (Surface Water or Groundwater), or Source Protection Zones^{Error! Bookmark not defined.}, and is therefore not within an area where impacts to large potable water abstractions could occur. A water main is indicated to be present running approximately east to west in the south of the EIA Site Boundary, underneath the access road in the southeast of the EIA Site Boundary, before running adjacent to the southern boundary and turning south up Woodside⁷⁸.

Effects Unlikely/Not Significant

Increase in flood risk on and off-Site as a result of runoff from construction activities

- 5.161 Flood risk both on and off-Site, during the construction stage, will be controlled through the implementation of a CEMP that will include (but not be limited to) the following mitigation and management measures:
- Locating the construction compound, storage and plant outside the flood risk extents and any potential surface water drainage routes. Any required Flood Compensation Areas would be completed prior to any construction of structures;
 - Completion of a construction phase surface water management plan, with all necessary consents agreed with the relevant authorities prior to works commencing, and in accordance with the appropriate standards; and
 - The expectation is that surface water runoff during construction would be discharged to the existing watercourses/ditches on-Site, under consent to be obtained from the LLFA following the implementation of appropriate pollution prevention measures as detailed in 'Ground Conditions and Contamination'. An Ordinary Watercourse Consent (OWC) would additionally be obtained from the LLFA for discharges to ditches, as well as any proposed temporary or permanent modifications, such as culverts or diversions. This represents standard practice and is not anticipated to lead to any long term difficulties or significant effects on the basis that all appropriate standards are met.

⁷⁷ Environment Agency, Catchment Data Explorer. Available at: <https://environment.data.gov.uk/catchment-planning/WaterBody/GB107042016310> [Accessed December 2025].

⁷⁸ Southern Water, Clean Water Plan, 1881537 – 21, 441876E, 119288N, 17/09/25.

- 5.162 The requirement for a CEMP is expected to be conditioned were the application approved and, following approval by the LLFA and LPA, would address the management of flood risk and surface water runoff during the construction phase.
- 5.163 Therefore, the potential impact of increased flood risk and surface water runoff during the construction stage is not considered to be significant and will not be considered further in the EIA or reported in the ES.

Increased risk of flooding / change to hydrological regime on and off-Site during operation

- 5.164 It is noted from the Technical Baseline that upwards of 96% of the EIA Site Boundary is not considered to be at risk from both fluvial and surface water sources, and that those areas that are considered at risk are typically confined to areas within and adjacent to existing ditches/watercourses, and isolated areas of localised low topography. Furthermore, the EIA Site Boundary is not considered at risk of flooding from sewers, following a reservoir failure, and is additionally considered to have a limited potential for groundwater flooding.
- 5.165 Flood risk at the Proposed Development from all sources, including fluvial/tidal, surface water, groundwater, sewers, reservoirs and other artificial sources, will be assessed as part of a Flood Risk Assessment (FRA) for planning, to be submitted as a standalone planning document. The FRA will additionally assess risk to relevant off-Site areas downstream of the EIA Site Boundary and will be written in accordance with the latest National Planning Policy Framework (NPPF) regulations⁷⁹.
- 5.166 The FRA will assess flood risk at the EIA Site Boundary both now and in the future and will ensure that the Proposed Development will be safe from flood risk for the duration of its lifetime. Additionally, the FRA will set out measures to ensure that the Proposed Development will not lead to an increase in flood risk elsewhere. These will include the restriction of built development in areas deemed at risk of flooding. Furthermore, the proposed Surface Water Drainage Strategy will be designed to ensure no increase in flood risk both on and off-Site, as a result of the Proposed Development. Consultation with the LLFA and HCC Highways will be undertaken as part of the wider development process to ensure their agreement with the proposed strategy, with particular regard to off-Site flood risks.
- 5.167 Development would be directed to the areas of the EIA Site Boundary at the lowest risk of flooding (Flood Zone 1) as far as practical. Where this is not possible, such as with the access roads connecting the site, specific mitigation measures to ensure no increase in flood risk will be detailed. It is noted that watercourse crossings proposed in areas deemed at risk of flooding will be designed to be clear span and at a suitable level to not create or exacerbate flood risk. Any culverts required as part of the Proposed Development will be designed to be suitably large and will be considered water-compatible development. Specific mitigation measures will include, where necessary, design sketches of any proposed ditch/watercourse crossings, which will show how the proposed watercourse crossings will not create or exacerbate flood risk.

⁷⁹ GOV.UK (December 2024) National Planning Policy Framework. Available at: <https://www.gov.uk/government/publications/national-planning-policy-framework--2> [Accessed December 2025].

Were development proposed within areas assessed by regulatory mapping to be at an increased chance of flooding, the Exception Test would be applicable.

5.168 The following measures will form part of the Proposed Development:

- Management of surface water runoff in line with a Surface Water Drainage Strategy to be submitted at outline planning stage and further developed under reserved matters.
- Finished Floor Levels (FFLs) and threshold levels of all dwellings to be at least 150 mm above the surrounding ground, to manage future risk from surface water flooding and overland flow.
- Consideration of exceedance overland flow routes during extreme flood events, adopting the principles set out in CIRIA C635, Designing for Exceedance in Urban Drainage⁸⁰.
- Management of flood extents through a series of proposed surface water attenuation areas, connected by a network of proposed swales and surface water sewers to convey surface water runoff through the EIA Site Boundary.
- External gradients are to be designed to fall away from buildings where possible, so that any overland flow is channelled away from building entrances. Where this is not possible, linear interceptor drains will be located at all building entrances towards which there is a positive gradient for surface water to flow.
- Where individual areas of risk required further assessment and specific mitigation, this will be detailed, as standard, within the FRA. As noted above, consultation with the LLFA and HCC Highways will be undertaken as part of the wider development process to ensure their agreement with the proposed strategy.

5.169 Surface water at the EIA Site Boundary and the existing hydrological regime will be managed by a proposed Surface Water Drainage Strategy, which will be detailed as part of a Surface Water and Foul Water Drainage Strategy report, to be submitted as a standalone planning document, and developed in accordance with the latest National standards for sustainable drainage systems⁸¹.

5.170 The Surface Water Drainage Strategy will be suitably designed to achieve at the EIA Site Boundary a greenfield runoff rate equivalent to a 1 in 100 storm event with a 45% allowance for the potential impacts of climate change. Attenuation will be achieved through a series of proposed surface water attenuation areas, connected by a network of proposed swales and surface water sewers to convey surface water runoff through the EIA Site Boundary. The attenuation areas will be located strategically across the EIA Site Boundary in line with existing topography. Whilst initial Ground Investigation

⁸⁰ CIRIA (2006) Designing for exceedance in urban drainage – good practice (C635). Available at: https://www.ciria.org/CIRIA/Books/Free_publications/C635F.aspx [Accessed December 2025].

⁸¹ GOV.UK (July 2025) National standards for sustainable drainage systems. Available at: <https://www.gov.uk/government/publications/national-standards-for-sustainable-drainage-systems> [Accessed December 2025].

indicates that infiltration is unlikely to be feasible at the EIA Site Boundary, consideration could be given to the use of such measures in some areas dependent on variability in the geology and groundwater levels at the EIA Site Boundary. While a significant proportion of the EIA Site Boundary would remain in greenfield condition, the drainage strategy would take into account the sensitivity of the underlying groundwater resource and the potential for groundwater recharge to be affected.

- 5.171 The submission of a Flood Risk Assessment and Drainage Strategy alongside the EIA submission, means that the potential impact of flood risk to both the EIA Site Boundary and off-Site areas is not considered to be significant and will not be considered further in the EIA or reported in the ES.

Decrease in water quality as a result of the construction stage on local surface water and groundwater bodies

- 5.172 Construction activities leading to potential sediment and pollutant runoff into local water bodies (surface water and groundwater) will be controlled through the implementation of a CEMP to be secured by condition that will include (but not be limited to) the following mitigation and management measures:

- Regular maintenance of construction vehicles and plant.
- Refuelling construction vehicles suitably away from any water body.
- Ensuring spill kits are available in case of an accident and correct procedure is followed.
- Suitably locating above-ground storage tanks and temporary welfare facilities on designated areas of hardstanding away from potential surface water drainage routes.
- Storage of liquids such as degreasers, solvents, lubricants and paints in segregated, bunded enclosures.
- Ensuring any tanks storing significant volumes of oil on-Site have secondary bunding.
- Ensuring any construction drainage system is designed to and complies with the appropriate standards.
- Ensuring any stockpiles are suitably managed to ensure minimal surface runoff or windblown deposition of materials to local receptors.
- Locating the construction compound, storage and plant outside the flood risk extents.

- 5.173 The requirement for a CEMP, including the measure above, would therefore address the management of surface water runoff and pollution during the construction stage.

- 5.174 Therefore, the potential impact of a reduced water quality on local surface water and groundwater bodies at the construction stage is not considered to be significant and will not be considered further in the EIA or reported in the ES.

Decrease in water quality as a result of the operational stage

- 5.175 The Surface Water Drainage Strategy will be designed in line with the guidance outlined in the CIRIA SuDS Manual (C753)⁸², which details the 'Simple Index Approach' wherein each element of the Proposed Development (i.e., roofs, driveways) are assigned index numbers for Total Suspended Solids, Metals, and Hydrocarbons, before the proposed SuDS features (i.e., permeable pavement, swales, detention basins) are assigned their own index number which in total will equal or exceed the total for the various development elements, confirming satisfactory treatment. The various SuDS measures will need to be maintained appropriately to ensure they continue to function as intended. Details of required maintenance will be provided within the Surface Water Drainage Strategy.
- 5.176 The requirement to treat surface water to the standards detailed in the outline Surface Water Drainage Strategy will likely be conditioned as part of any application approval.
- 5.177 Therefore, the potential impact of a reduced water quality on local surface water and groundwater bodies at the operational stage is not considered to be significant and will not be considered further in the EIA or reported in the ES.

Increase demand of potable water use during construction and operation

- 5.178 The construction stage of the Proposed Development will present demands for water supply, including sanitary facilities for construction workers and water supply for wheel washing and washing down of construction areas. The completed Proposed Development will result in demand for potable water due to the needs of future site users. Therefore, there will be increase the demand on potable water supplies.
- 5.179 The Proposed Development will comply with current building regulations and with the Southern Water, Water Efficiency standards⁸³, which propose a maximum consumption rate of 110 L per person per day.
- 5.180 Therefore, the potential impacts surrounding water supply for the Proposed Development upon local existing private and public water supplies is not considered to be significant and will not be considered further in the EIA or reported in the ES.

Increased loading of existing drainage networks and Wastewater Treatment Works

- 5.181 The Proposed Development will lead to an increase in demand on existing foul water drainage networks and the nearby Wastewater Treatment Works as a result of the operational stage that has the potential to put the existing infrastructure at risk of flooding. As stated above, consultation with Southern Water has confirmed that connection from the Site would be to the catchment of the Millbrook WWTW via the Woodside Chilworth pumping station that is located adjacent to the southern boundary of the EIA Site Boundary.
- 5.182 Further detail will be provided in the Foul Water Drainage Strategy, which will be detailed as part of a Surface Water and Foul Water Drainage Strategy report submitted

⁸² CIRIA (2015) The SuDS Manual (C753). Available at:

https://www.ciria.org/CIRIA/Books/Free_publications/C753F.aspx [Accessed January 2026].

⁸³ Southern Water (February 2026) New Connections Services Charging Scheme 2026-27, Version 1. Available at: https://www.southernwater.co.uk/media/nedbsdtc/new-connection-charging-arrangements-26_27.pdf [Accessed February 2026].

separately as part of the Application. It is noted that Southern Water have an obligation to approve the strategy assuming all the appropriate standards are met, regardless of existing capacity both within the local sewer network and the receiving WWTW. Southern Water's duty to provide network capacity from the point of practical connection is mandated by the Water Industry Act 1991⁸⁴. Southern Water have already communicated an intention to upgrade existing works, where necessary, in line with any proposed build-out following a grant of planning permission.

- 5.183 As detailed further in Chapter 9, the effects on internationally designated ecological sites due to changes in nutrient levels will be assessed as part of the forthcoming Biodiversity ES Chapter and Nutrient Neutrality Assessment, to be prepared by EPR. This would not form part of the Surface Water and Foul Water Drainage Strategy report.
- 5.184 Therefore, the impact of increased foul water drainage upon local sewer networks and the receiving Woodside Chilworth pumping station is not considered to be significant and will not be considered further in the EIA or reported in the ES.

⁸⁴Legislation.gov.uk (1991) Water Industry Act. Available at: <https://www.legislation.gov.uk/ukpga/1991/56/contents> [Accessed January 2026].

6. Transport and Access

Technical Baseline

Site Baseline

- 6.1 The EIA Site Boundary is located to the south-west of Templar's Way, which is aligned to a north west to south east axis. Templar's Way is a two-way, single carriageway road subject to a 40mph speed limit. To the north-west, Templar's Way connects to the wider residential area and onwards west towards Romsey and the A27. To the south-east, Templar's Way provides a connection to Eastleigh and routes towards Junction 13 of the M3.
- 6.2 The nearest bus stops to the EIA Site Boundary are located along Templars Way to the south of the School Lane/Templars Way junction. The stops are served by number 5 bus service operated by BlueStar bus with services operating hourly on weekdays and every other hour on Saturdays.
- 6.3 The nearest railway station to the EIA Site Boundary is Chandler's Ford located approximately 1.9 kilometres to the north of the EIA Site Boundary within Chandler's Ford. The station is provided with 45 car parking spaces and 62 cycle parking spaces with CCTV. Hourly services operate to either Salisbury or Romsey.
- 6.4 National Cycle Network Route 24 is located to the north of the EIA Site Boundary and can be accessed at the Knightwood Road/Raglan Close/Castle Lane/Templars Way junction. The Cycle route operates between Bath and Eastleigh via Midsomer Norton, Frome, Warminster, Salisbury, Romsey and Chandler's Ford. Footpath 050/7/1 runs along the southern boundary of the EIA Site Boundary and connects to Bournemouth Road to the east of the EIA Site Boundary. Bridleway [Ref: 050/6/1] runs within the western portion of the EIA Site Boundary before providing access to Castle Lane to the north of the EIA Site Boundary and the A27 Chilworth Road to the south of the EIA Site Boundary.
- 6.5 The study area will include road links expected to have a high volume of traffic. Potential sensitive receptors will be identified once the study area is finalised as detailed in 'Assessment Methodology of Effects Likely/Significant' below.

Proposed Scope of Assessment

- 6.6 The below sets out the proposed scope of assessment based on an understanding of the characteristics of the Site, surrounding area and the Proposed Development (Chapter 4). Where environmental effects are considered unlikely to be 'significant', an appropriate evidence base has been provided to justify the 'scoping out' of these effects ensuring the EIA and ES only assess those effects considered 'likely' to be significant.

Effects Unlikely/Not Significant

- 6.7 The following effects are considered unlikely to be significant and therefore will not be considered further within the EIA or reported in the ES. A factual evidence base has been provided below to support this.

Effects as a result of abnormal and hazardous loads

- 6.8 Abnormal and hazardous loads are not anticipated during the construction or operational stages of the Proposed Development and thus associated effects are not considered to be significant and will not be considered further in the EIA or reported in the ES.

Effects Likely/Significant

- 6.9 Table 6.1 outlines the effects (and associated receptor[s]) that are considered to be likely and significant and therefore will be assessed within the EIA and reported in the ES.

Table 6.1: Potentially Significant Effects and Sensitive Receptors

Effect	Receptor(s)	Applicable Stage(s)
Severance of communities	Non-motorised users PRoW users	Construction / Operation
Road vehicle driver and passenger delay	Motorists and freight vehicles Public transport Emergency services	Construction / Operation
Non-motorised user delay	Non-motorised users PRoW users	Construction / Operation
Non-motorised user amenity	Non-motorised users PRoW users	Construction / Operation
Fear of intimidation	Motorists and freight vehicles Non-motorised users	Construction / Operation
Road Safety	Motorists and freight vehicles Non-motorised users	Construction / Operation

Assessment Methodology of Effects Likely/Significant

- 6.10 The following background surveys/studies have been/will be completed.

Table 6.2: Background Surveys/Studies

Survey/Study/Analysis/ Evaluation	Overview	Date of Completion
Completed		
Details of public transport services, including the availability of bus and train services	Review of available buses and rail services accessible within the vicinity of the EIA Site Boundary and the frequency of service to end destinations. The bus services	January 2026

Survey/Study/Analysis/ Evaluation	Overview	Date of Completion
	deemed accessible will be located within close proximity to the EIA Site Boundary whilst rail services will be those taken from Chandler's Ford railway station.	
Details of existing pedestrian and cycle routes, including Public Rights of Way	A review of the existing footway and cycle network will be completed through a site visit and desktop assessment. Key links to employment and amenity hubs will be focussed upon. PRoW review will be undertaken utilising HCC Maps of Public Rights of Way online resource.	January 2026
Personal Injury Accident data	A review of the most recently available 5-year period surrounding the site access and sensitive receptors will be undertaken. This will be undertaken by obtaining HCC Constabulary data.	January 2026
Pending		
Traffic counts on key links and junctions for traffic flow data	Obtaining traffic flows	March/April 2026
Automatic and manual traffic count survey data;	Completing surveys	March/April 2026
Traffic data obtained from the Department for Transport	Obtaining traffic flows	March/April 2026
Walking, Cycling, and Horse Riding Assessment (WCHAR) (submitted as a separate report)	Site visit to assess walking, cycling and horse riding provision	April 2026
A review of appropriate cumulative development sites and their associated traffic & transport studies (scope to be agreed through scoping with the local highway & planning authorities and neighbouring	Location of cumulative projects have been completed. An assessment of the impact of these projects on the EIA Site Boundary and the identified sensitive receptors will be undertaken against the predicted vehicle distribution associated to the Proposed Development.	March / April 2026

Survey/Study/Analysis/ Evaluation	Overview	Date of Completion
authorities, where appropriate)		
Motion Traffic Model	Local traffic model to determine modelling of key junctions provided by Motion as part of a Transport Assessment (TA) submission	With Application

- 6.11 The Transport and Access chapter of the ES will assess the transport impacts of the Proposed Development and the potential effects of the Proposed Development on the safety and operational characteristics of the surrounding highway and transport networks, as well as surrounding uses.
- 6.12 The ES will be predicted in accordance with the detailed guidance on the assessment of significant environmental effects in relation to road traffic set out in the Institute of Environmental Management and Assessment ('IEMA') (now known as ISEP) Guidelines: Environmental Assessment of Traffic and Movement document published in July 2023⁸⁵, referred to hereafter as the 'IEMA Guidelines'. The ES will also take full account of Sustainability and Environment section of the 'Design Manual for Road and Bridges' (DMRB)⁸⁶ for the entire assessment of transportation impacts on the strategic road network.
- 6.13 The traffic-generating potential of the Proposed Development (associated with construction and the completed development) will be compared with existing and forecast traffic flows on the surrounding highway network. The assessment scenarios will be:
- Baseline (2026);
 - Baseline (2026) plus Peak Proposed Development Construction traffic;
 - Opening Year (2038) with Cumulative Project Flows and without the Proposed Development traffic; and
 - Opening Year (2038) with Cumulative Project Flows and with the Proposed Development traffic.
- 6.14 Any links where a total or HGV flow increase in excess of 30% compared to baseline will be assessed. Links subject to flow increases in the 10-30% range will undergo further assessment, taking into account the sensitivity of the receptors and the magnitude of the impact to determine the scale, and thus, whether the effect is significant or not. This will determine whether links should be 'scoped in'.

⁸⁵ ISEP Guidelines: Environmental Assessment of Traffic and Movement document published in July 2023. Available at: <https://www.isepglobal.org/resources/blogs/2023/07/12/isep-guidance-ea-of-traffic-and-movement/>

⁸⁶ DMRB 2020. Available at: <https://www.standardsforhighways.co.uk/>

- 6.15 In relation to the sensitivity of a receptor, this can be defined by the vulnerability of the user groups who may use it, e.g. elderly people or children. A sensitive area may be where pedestrian activity is high, for example, in the vicinity of a station or where there is an existing accident issue. It should be noted that the sensitivity of the receptor is judged on the sensitivity of road users (primarily pedestrians). 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 because the high volumes of background traffic are unlikely to be materially changed as a proportion - when the baseline is low, then there is a greater sensitivity to change.
- 6.16 Based on IEMA Guidelines, changes in traffic flows of 30%, 60% and 90% can be regarded as producing small, medium and large impacts respectively and these levels will be used as the criteria against which the effect of the Proposed Development will be considered.
- 6.17 The assessment of likely significant effects to sensitive receptors will consider the sensitivity of the receptor (on a scale of high, medium, low and negligible) and the magnitude of change (on a scale of large, medium, small and negligible) to determine the level of effect on a scale of major, moderate, minor and negligible. Significant effects will be determined following this through professional judgment.
- 6.18 As well as the IEMA Guidelines, the ES transport chapter will take account of the following policy / guidance, alongside any new or emerging policy documents at the time of the assessment:
- National Planning Policy Framework (December 2024) paragraphs 115 to 118 and associated Planning Practice Guidance: Travel Plans, Transport Assessments and Statements (2014);
 - The Design Manual for Roads and Bridges LA series documents – Sustainability and Environmental Appraisal;
 - Hampshire County Council Local Transport Plan 4 (February 2024);
 - Test Valley Adopted Local Plan (January 2016); and,
 - Eastleigh Borough Council Local Plan (April 2022).

Limitations and Assumptions

- 6.19 To ensure transparency within the EIA process, the following limitations and assumptions have been identified:
- The assessment will rely on traffic data obtained from the Department for Transport and supplemented with ATCs once the scope of the assessment is agreed. It has been assumed that these datasets have been reported correctly;
 - The main limitation of the assessment relates to the baseline conditions presented and the precision of traffic counts. Such counts are recorded over a day or week and are subject to an accuracy of $\pm 10\%$;

- At this stage, detailed construction information is not available and therefore the preliminary possible impact of construction will be estimated; and,
- All future traffic forecasts include a degree of uncertainty and therefore have been taken of reasonable uncertainty when assessing the potential significant effects, with this approach conducted in line with industry best practice and guidance.

7. Air Quality

Technical Baseline

- 7.1 The EIA Site Boundary is not located within an Air Quality Management Area (AQMA). However, the Eastleigh AQMA No. 1, declared by EBC in 2005 due to a breach of the nitrogen dioxide (NO₂) annual mean air quality objective, is located approximately 750m north-east of the EIA Site Boundary.
- 7.2 Air quality monitoring in proximity to the EIA Site Boundary is undertaken by both TVBC⁸⁷ and EBC⁸⁸. During 2024, the latest year for which air quality monitoring data are available, the closest monitoring to the Proposed Development was undertaken adjacent to Chestnut Avenue and Chestnut Close (Monitor ID 'CC' – operated by EBC), located approximately 560m east of the EIA Site Boundary. An annual mean NO₂ concentration of 18.5 µg/m³ was recorded at this roadside location in 2024. Results from all local authority monitoring within 1km of the EIA Site Boundary indicates that annual mean NO₂ concentrations are well below the air quality objective (AQO) at the EIA Site Boundary.
- 7.3 Exceedance of the short term NO₂ objective at the EIA Site Boundary is unlikely as annual mean NO₂ concentrations at monitoring sites nearby are well below 60 µg/m³ and therefore in accordance with Defra guidance. The one-hour mean objective is also unlikely to be exceeded as these criteria are normally applied to roadside locations.
- 7.4 Defra background maps indicate that existing annual mean NO₂, PM₁₀ and PM_{2.5} concentrations are below long term AQOs at the EIA Site Boundary.
- 7.5 There are human health sensitive receptors close to the EIA Site Boundary and the surrounding road network. Potentially sensitive ecological habitats include the Valley Park Woodlands Local Nature Reserve (LNR), and the Spring Copse, Austins Copse, Hogtrough Wood, Misslebrooks Copse and Northend Copse ancient woodlands.

Proposed Scope of Assessment

- 7.6 The below sets out the proposed scope of assessment based on an understanding of the characteristics of the EIA Site Boundary, surrounding area and the Proposed Development (Chapter 4). Where environmental effects are considered unlikely to be 'significant', an appropriate evidence base has been provided to justify the 'scoping out' of these effects ensuring the EIA and ES only assess those effects considered 'likely' to be significant. Effects associated with air quality on ecological receptors are considered separately in Chapter 9 with this chapter focusing on human health.

Effects Unlikely/Not Significant

- 7.7 The following effects are considered unlikely to be significant and therefore will not be considered further within the EIA or reported in the ES. A factual evidence base has been provided below to support this. Where mitigation has been used to inform this

⁸⁷ TVBC, 2025. Test Valley Borough Council Air Quality Annual Status Report for 2024

⁸⁸ EBC, 2025. Eastleigh Borough Council Air Quality Annual Status Report for 2024

judgement, the identified mitigation has been captured within the PEMP provided in Appendix 2.1.

Increase in pollutant concentrations from the operation of the completed development from on-Site energy plant [existing and proposed residential receptors]

- 7.8 The Energy strategy for the Proposed Development is expected to be 100% electric. Therefore, the effect of increased pollutant concentrations from the operation of the completed development from proposed development energy plant on nearby residential receptors is not considered to be significant and will not be considered further in the EIA or reported in the ES.

Fugitive dust emissions from construction phase activities [existing residential and ecological receptors]

- 7.9 Construction activities have the potential to result in nuisance and or adverse health effects due to dust deposition arising from on-site construction activities, resulting in the soiling of surfaces; visible dust plumes and elevated PM₁₀ concentrations as a result of dust generating activities on-site. Dust and particulate matter emission produced during construction activities (from both mobile and immobile machinery) will be controlled through the implementation of a CEMP. This CEMP will be informed by the Institute of Air Quality Management (IAQM) 2024 guidance⁸⁹ and would include prevention measures and set out requirements for ongoing monitoring and liaison with the local community and TVBC.
- 7.10 As such, air quality effects of dust and emissions from construction activities is not considered to be significant and will not be considered further in the EIA or reported in the ES. Nevertheless, a Construction Dust Assessment will be completed and form an appendix to the ES chapter.

Effects Likely/Significant

- 7.11 Table 7.1 outlines the effects (and associated receptor[s]) that are likely and significant and therefore will be assessed within the EIA and reported in the ES.

Table 7.1: Potentially Significant Effects and Sensitive Receptors

Effect	Receptor(s)	Applicable Stage(s)
Increase in pollutant concentrations (NO ₂ , PM ₁₀ and PM _{2.5}) due to emissions from additional vehicles associated with the construction phase of the Development.	Human and ecological sensitive receptors located in proximity to the main road network identified as likely to be impacted by the Proposed Development in line with the IAQM guidance thresholds ⁹⁰ .	Construction
Increase in pollutant concentrations (NO ₂ , PM ₁₀	Human and ecological sensitive receptors located in	Operation

⁸⁹Institute of Air Quality Management, 2024. Guidance of the Assessment of dust from demolition and construction (Version 2.2).

⁹⁰Institute of Air Quality Management, 2024. Guidance of the Assessment of dust from demolition and construction (Version 2.2).

Effect	Receptor(s)	Applicable Stage(s)
and PM _{2.5}) due to emissions from additional vehicles movements associated with operational stage of the Development.	proximity to the main road network identified as likely to be impacted by the Proposed Development in line with the IAQM guidance thresholds ^{91, 92} .	

Assessment Methodology of Effects Likely/Significant

7.12 The following background surveys/studies have been/will be completed.

Table 7.2: Background Surveys/Studies

Survey/Study/Analysis/ Evaluation	Overview	Date of Completion
Completed		
Review of existing baseline air quality conditions	Air Quality data obtained from TVBC, EBC and Defra have been used indicate existing baseline conditions.	03/12/25
Pending		
Construction Dust Assessment	A qualitative assessment of the nature and scale of dust generating construction activities associated with the Proposed Development, to determine the dust control strategy and required mitigation. The qualitative assessment will be undertaken in accordance with IAQM guidance.	2026

7.13 Sufficient local authority monitoring information is available to allow the assessment to be completed without an EIA Site Boundary-specific air quality monitoring survey being undertaken.

Construction Phase Assessment

7.14 During the construction stage, the main potential impacts are dust emissions and the potential for nuisance dust. The impact of the construction phase on air quality will be determined by a qualitative assessment of the nature and scale of dust generating construction activities associated with the Proposed Development, to determine the

⁹¹Environmental Protection UK & the Institute of Air Quality Management, 2017. Land-Use Planning & Development Control: Planning for Air Quality.

⁹² Institute of Air Quality Management, 2020. A guide to the assessment of air quality impacts on designated nature conservation sites.

dust control strategy and required mitigation. The qualitative assessment will be undertaken in accordance with IAQM guidance.

- 7.15 Construction traffic data (from the peak year of construction activity) for the Proposed Development will be screened against IAQM screening criteria.
- 7.16 The potential for impacts on ecologically designated sites will be undertaken with reference to the IAQM 'Guide to the assessment of air quality impacts on designated nature conservation sites.
- 7.17 A detailed dispersion modelling assessment of construction stage vehicle emissions (NO_x, NO₂, PM₁₀ and PM_{2.5}) will be undertaken where IAQM screening criteria for human and or ecological receptors are met. The assessment will be undertaken in accordance with IAQM guidance.

Operational Phase Assessment

- 7.18 Operational phase traffic data will determine the extent of the network to be relevant to the assessment of air quality effects. The study area for assessment of vehicle exhaust emissions will be within 200m of all roads where the screening criteria are breached. The IAQM guidance suggests a detailed air quality assessment is required when:
 - A change of Light-Duty Vehicle (LDV) flows of: More than 100 annual average daily traffic (AADT) within or adjacent to an AQMA; More than 500 AADT elsewhere.
 - A change of Heavy-Duty Vehicles (HDV) flows of: More than 25 AADT within or adjacent to an AQMA; More than 100 AADT elsewhere.
- 7.19 The potential for impacts on ecologically designated sites will be undertaken with reference to the IAQM 'Guide to the assessment of air quality impacts on designated nature conservation sites. The guidance contains scoping criteria which have been used to determine the need for an ecological assessment, as follows:
 - Distance screen: Designated ecological sites more than 200 m from any roads, routes or other significant sources of air pollutants for which traffic data etc. are available will be excluded.
 - Effects of the project: Designated ecological sites will only be considered where the project leads to an increase in the AADT flow of >1,000 (inclusive of cumulative traffic flows).
- 7.20 A detailed dispersion modelling assessment of operational stage vehicle emissions (NO_x, NO₂, PM₁₀ and PM_{2.5}) using ADMS-Roads dispersion modelling software will be undertaken where IAQM screening criteria for human and or ecological receptors are met. The assessment will be undertaken in accordance with IAQM guidance.
- 7.21 The operational phase road traffic emissions detailed assessment will include three scenarios to be modelled:

- Base Year (2024/2025) for verification;
- Do-Minimum (fully Operational Year (2038) without the Proposed Development + Cumulative Projects); and
- Do-Something (fully Operational Year (2038) with the Proposed Development + Cumulative Projects).

7.22 The assessment of likely significant effects to sensitive receptors will consider the sensitivity of the receptor (on a scale of high, medium, low) and the magnitude of change (on a scale of large, medium, small and negligible) to determine the level of effect on a scale of major, moderate, minor and negligible. Significant effects will be determined in accordance with IAQM guidance and using professional judgment.

imitations and Assumptions

7.23 To ensure transparency within the EIA process, the following limitations and assumptions have been identified:

- The assessment will rely on data provided by TVBC, EBC and Defra to characterise baseline conditions of the study area. It has been assumed that these datasets have been reported correctly; and
- The Proposed Development traffic impacts will be assessed using predicted traffic flows provided by the Applicant's Transport Consultant and will rely on data published by Defra and local authorities. It will be assumed that these data have been reported correctly and the instruments used have been calibrated.

8. Noise and Vibration

Technical Baseline

- 8.1 The existing noise climate within the EIA Site Boundary and in the immediate locality is dominated by road traffic noise on the local road network, namely Templars Way and Castle Lane. Distant road traffic noise from the M3 and M27 motorways to the east and south, respectively, also contribute to the noise climate at the EIA Site Boundary. Other noise sources around the EIA Site Boundary may include activity and plant noise from the Hampshire Corporate Park, at the eastern EIA Site Boundary, and aircraft noise associated with Southampton Airport.
- 8.2 No substantial existing sources of vibration are deemed to be present on or around the EIA Site Boundary.
- 8.3 Baseline noise monitoring will be completed on and around the EIA Site Boundary to determine noise levels from dominant sources.

Proposed Scope of Assessment

- 8.4 The below sets out the proposed scope of assessment based on an understanding of the characteristics of the EIA Site Boundary, surrounding area and the Proposed Development (Chapter 4). Where environmental effects are considered unlikely to be 'significant', an appropriate evidence base has been provided to justify the 'scoping out' of these effects, ensuring the EIA and ES only assess those effects considered 'likely' to be significant.

Effects Unlikely/Not Significant

- 8.5 The following effects are considered unlikely to be significant and therefore will not be considered further within the EIA or reported in the ES. A factual evidence base has been provided below to support this. Where mitigation has been used to inform this judgement, the identified mitigation has been captured within the PEMP provided in Appendix 2.1.

Existing and future operational sources of vibration on existing and future sensitive receptors of the Proposed Development

- 8.6 No substantial sources of existing vibration have been identified on or around the EIA Site Boundary. Similarly, there are no known future vibration generating sources being introduced as part of the Proposed Development. Therefore, it is not expected that vibration would have potential to cause disturbance at existing sensitive receptors or within the completed Proposed Development.
- 8.7 Therefore, existing and future operational sources of vibration to existing and future sensitive receptors of the Proposed Development are not considered to be significant and will not be considered further in the EIA or reported in the ES.

Off-site construction traffic vibration

- 8.8 Vibration levels from construction traffic on the road network outside of the EIA Site Boundary are expected to be equal or similar to the vibration levels from heavy vehicles, e.g. buses, that already use the road network.
- 8.9 Where roads are free of irregularities and well maintained, vibration from construction traffic would not have the potential to result in any significant adverse effects.
- 8.10 Therefore, construction traffic vibration from outside of the EIA Site Boundary is not considered to be significant for existing and future sensitive receptors of the Proposed Development and will not be considered further in the EIA or reported in the ES.

Effects Likely/Significant

- 8.11 Table 8.1 outlines the effects (and associated receptor[s]) that are considered to be likely and significant and therefore will be assessed within the EIA and reported in the ES.

Table 8.1: Potentially Significant Effects and Sensitive Receptors

Effect	Receptor(s)	Applicable Stage(s)
Noise from construction activities	Existing receptors listed within Table 8.2 and future receptors of the Proposed Development.	Construction
Noise from construction traffic	Existing Receptors listed within Table 8.2. Future receptors of the Proposed Development.	Construction
Vibration from on-site construction activities, e.g. excavation, foundation works (where applicable), etc.	Existing receptors listed within Table 8.2 and future receptors of the Proposed Development	Construction
Internal noise levels in residential dwellings, due to all noise sources	Future receptors of the Proposed Development	Operation
External amenity noise levels	Future receptors of the Proposed Development	Operation
Road traffic noise as a result of the Proposed Development	Existing receptors listed within Table 8.2.	Operation
Plant noise emissions from the Proposed Development	Existing receptors listed within Table 8.2 and future receptors of the Proposed Development	Operation

Effect	Receptor(s)	Applicable Stage(s)
Noise emissions from the proposed education provision, e.g. from school playing fields	Existing receptors listed within Table 8.2 and future receptors of the Proposed Development	Operation

- 8.12 A summary of the potential sensitive receptors in the vicinity of the EIA Site Boundary is provided in Table 8.2 and spatially shown in Figure 8.1. In addition to the existing receptors identified in Table 8.2, sensitive receptors will include future residential receptors and the education provision introduced by the Proposed Development. Future sensitive receptors are not marked on the figure as they will be within the EIA Site Boundary.

Table 8.2: Sensitive Receptors

Receptor ID	Type of Receptor	Address / Name	Approximate Distance
NSR1	Residential	Woodside	Adjacent to the southern boundary
NSR2	Residential	Blenheim Close and Tansy Meadow	170m from the northern boundary
NSR3	Residential	North of Templars Way	25m from the north-eastern boundary
NSR4	Commercial	Hampshire Corporate Park	70m from the eastern boundary

Assessment Methodology of Effects Likely/Significant

- 8.13 The following background surveys/studies will be completed.

Table 8.3: Background Surveys/Studies

Survey/Study/Analysis/Evaluation	Overview	Date of Completion
Pending		
Baseline noise survey	Unattended and attended noise survey at and around the EIA Site Boundary during daytime and night-time periods. Locations would be representative of both the Proposed Development and nearby existing noise sensitive receptors to establish and quantify prevailing noise levels at and within the vicinity of the EIA Site Boundary.	Spring 2026

- 8.14 No baseline vibration survey has been or will be carried out as no major sources of vibration have been identified on or around the EIA Site Boundary.
- 8.15 The proposed assessment will consider the potential noise and vibration impacts and associated likely effects of the Proposed Development using the methodology set out below within the context of the policy framework and baseline conditions.
- 8.16 The noise and vibration assessments will be undertaken in accordance with relevant British Standards and other acoustics industry guidance documents, including the Calculation of Road Traffic Noise (CRTN)⁹³ method and World Health Organisation (WHO) Guidance for Community Noise (1999)⁹⁴.

Baseline Noise Survey

- 8.17 A baseline noise survey will be completed to identify key noise sources on and around the EIA Site Boundary, and their contributions to the noise climate at the Proposed Development.
- 8.18 It is expected that unattended monitoring will be completed at the northern, eastern and southern boundaries, to capture noise emissions from road traffic sources and the Hampshire Corporate Park. Attended monitoring would be completed, where deemed necessary, to supplement the unattended monitoring.

Overview of the Calculation of Noise Levels

- 8.19 The anticipated noise levels will be predicted by an assessment of:
 - Traffic data and estimates of development related traffic;
 - Fixed plant noise sources that are identified during the baseline noise surveys; and
 - Potential noise emissions from the education provision, e.g. from use of playing fields.

Construction Noise and Vibration Assessment (including Construction Traffic)

- 8.20 An assessment of potential noise and vibration effects from reasonable worst-case construction activities on surrounding existing and future sensitive receptors on and in the vicinity of the EIA Site Boundary will be undertaken in accordance with the following standards, guidance and methodologies where necessary and appropriate:
 - BS 5228-1:2009+A1:2014⁹⁵ for construction plant noise and traffic noise. Construction noise thresholds will be determined based on the baseline noise survey results. Construction noise emissions from typical activities such as excavation and superstructure works will be assessed against the set thresholds;

⁹³ The Department for Transport, 1988. Calculation of Road Traffic Noise.

⁹⁴ World Health Organization, 1999. Guidelines for Community Noise, Stockholm University & Karolinska Institute.

⁹⁵ British Standards Institution, 2014. BS 5228-1: 2009 + A1:2014 Code of practice for noise and vibration control on construction and open sites, BSI.

- BS 5228-2:2009+A1:2014⁹⁶ for construction vibration. Typical vibration levels from activities such as vibratory compaction (if applicable) will be assessed against outline thresholds for perceptibility at the nearest existing and future sensitive receptors. Detailed predictions of vibration levels at each receptor location will not be provided; and
- BS 6472-1:2008⁹⁷ for vibration effects on receptors in offices, where applicable. The effect of construction vibration on residential receptors will be in accordance with the methodology of BS 5228-2:2009+A1:2014, which considers construction vibration impacts in terms of Peak Particle Velocity (PPV). PPV is the most common parameter used for the assessment of construction vibration.

- 8.21 The assessment will consider noise from typical construction activities, including site clearance, substructure, superstructure, landscaping and road works. Construction traffic noise from the peak year of construction activity would be assessed, based on construction traffic data provided by the Applicant's transport consultant. Construction vibration would be assessed for activities that may give rise to perceptible levels of vibration at the nearest sensitive receptors.
- 8.22 Cumulative noise from other construction sites would not be considered, as cumulative projects are ≥ 0.7 km from the EIA Site Boundary. At these distances from site, construction noise levels would not be expected to be significant and BS 5228-1:2009+A1:2014 states that "at distances over 300 m noise predictions have to be treated with caution."
- 8.23 Potential noise impacts upon existing sensitive receptors arising from changes in road traffic flows associated with construction traffic would only be assessed if the relevant road links are subjected to at least a 20 % change in traffic flow. This change would result in a ≤ 1 dB change in road traffic noise, which is considered the upper threshold for negligible effects in the short term to LA111 (DMRB 2020)⁹⁸.

Operation

- 8.24 The assessment of noise on and from the Proposed Development will be undertaken in accordance with the following standards, guidance and methodologies:
- BS 8233:2014⁹⁹, ProPG¹⁰⁰ and WHO 'Guidance for Community Noise' 1999 for noise break-in and external amenity space noise. The Site suitability for residential development will be determined to the ProPG guidance. Noise break-in to residential accommodation will be predicted to BS 8233:2014 and WHO Guidelines for Community Noise;

⁹⁶ British Standards Institution, 2014. BS 5228-1: 2009 + A1:2014 Code of practice for noise and vibration control on construction and open sites, BSI.

⁹⁷ British Standards Institution, 2008. BS 6472-1 Guide to evaluation of human exposure to vibration in buildings, BSI.

⁹⁸ Highways England, 2020. Design Manual for Roads and Bridges LA111 Noise and Vibration Rev. 2, HE.

⁹⁹ British Standards Institution, 2014. BS 8233:2014 Guidance on sound insulation and noise reduction for buildings, BSI.

¹⁰⁰ Institute of Acoustics, Association of Noise Consultants and CIEH. 2017. ProPG: Planning & Noise 'New Residential Development, IoA.

- Building Regulations Approved Document O: Overheating (ADO) (2022)¹⁰¹ for the assessment of noise levels in residential units during overheating conditions. The measured and predicted noise levels at the Proposed Development façades will be compared to the requirements of ADO to determine the requirement for closed windows and alternate ventilation;
- DMRB LA 111 using the CRTN-methodology for the impact of operational road traffic noise as a result of the Proposed Development, using traffic data provided by the Applicant's transport consultant. Basic Noise Levels will be calculated for road links adjacent to the EIA Site Boundary. The magnitude of impacts will be assessed to DMRB LA 111 criteria. The changes in road traffic noise levels will not be predicted to each identified receptor but will be predicted based on the nearest road link to each identified receptor; and
- BS 4142:2014+A1:2019¹⁰² (BS 4142) for plant and commercial noise. Noise emissions from proposed fixed plant items at the Proposed Development will be assessed to BS 4142 where details of the plant items are known. Plant noise limits will be set to BS 4142 for the cumulative plant noise emissions from the Proposed Development. The impact of existing plant noise sources surrounding the EIA Site Boundary will be assessed to BS 4142 and BS 8233:2014.
- Building Bulletin 93 (2015)¹⁰³ and Acoustics of Schools: a design guide (2015)¹⁰⁴ will be used for the assessment of site suitability of the school and associated playing fields used for educational purposes.

8.25 The scenarios for assessment (where relevant) are summarised below:

- Baseline (2026);
- 1st Operation (year to be confirmed), with cumulative projects; and
- Full Operation (year 2038), with cumulative projects.

8.26 Where the identified impacts indicate a notable change in noise levels compared to the baseline assessment, appropriate additional mitigation measures will be recommended.

8.27 The assessment of likely significant effects to sensitive receptors will consider the sensitivity of the receptor (on a scale of high, medium, low and negligible) and the magnitude of change (on a scale of large, medium, small and negligible) to determine the level of effect on a scale of major, moderate, minor and negligible. Significant effects will be determined following this through professional judgment.

¹⁰¹ Department for Levelling Up, Housing and Communities, June 2022. The Building Regulations 2010. Approved Document O. HMSO.

¹⁰² British Standards Institution, 2014 and 2019. BS 4142: 2014 + A1: 2019 Methods for rating and assessing industrial and commercial sound, BSI.

¹⁰³ Building Bulletin 93 2015. Acoustic design of schools: performance standards, Department for Education

¹⁰⁴ Acoustics of Schools: a design guide. November 2015, Institute of Acoustics and the Association of Noise Consultants.

Limitations and Assumptions

8.28 To ensure transparency within the EIA process, the following limitations and assumptions have been identified:

- Road traffic and plant noise levels will be assessed based on the measured noise levels of the baseline noise survey.
- Details of fixed plant noise installations that will be required as part of the Proposed Development will not be finalised at the time of writing the EIA. Therefore, the plant noise assessment will be limited to setting plant noise limits in accordance with BS 4142:2014+A1:2019. It is expected that compliance with these limits would be secured via suitably worded planning conditions.
- The predictions for future road traffic noise levels at the Proposed Development and existing sensitive receptors would be based on the traffic flow predictions provided by the Applicant's transport consultant.

9. Biodiversity

Technical Baseline

- 9.1 The ecological baseline has been collated based on a series of surveys undertaken between 2023 and 2024. Data gathered during the course of these surveys has been used in conjunction with the results of a desktop study to assess the baseline. The desktop study used a range of resources (including the Multi-agency Geographic Information for the Countryside (MAGIC¹⁰⁵), aerial photos, current Ordnance Survey maps, historical maps and local records) to gather contextual information with respect to the Zone of Influence (Zol) and the wider area.
- 9.2 Surveys covered the EIA Site Boundary, with the exception of land along Templars Way, which is largely comprised of the highway. Update surveys are due to be undertaken in 2026, which will include Templars Way where features of potential ecological interest are noted.

Important Ecological Features

Internationally Designated Sites

- 9.3 Designated under the Conservation of Habitats and Species Regulations 2017 (as amended)¹⁰⁶, four Special Areas of Conservation (SAC) and three Special Protection Areas (SPAs) are present within the potential Zone of Influence (Zol) of the Proposed Development. Two of these sites are afforded further protection as Ramsar sites. These sites are detailed in Table 9.1 and shown in Figure 9.1.

Table 9.1: International Sites Considered to be Within the Potential Zone of Influence of the Proposed Development

Designated Site	Qualifying Features	Zone of Influence	Approximate Distance to Site
River Itchen SAC	Presence of Annex I habitats: Water courses of plain to montane levels with R. fluitantis Presence of Annex II species: Atlantic Salmon Salmo salar; Brook Lamprey Lampetra planeri; Bullhead Cottus gobi; Otter Lutra lutra; Southern Damselfly Coenagrion mercurial; and White-clawed	Test & Itchen Management Catchment	3.2km

¹⁰⁵ Multi-Agency Geographic Information for the Countryside (MAGIC): Available at: <http://www.natureonthemap.naturalengland.org.uk/magicmap.aspx> Accessed (October 2023)

¹⁰⁶ Her Majesty's Stationery Office (HMSO) The Conservation of Habitats and Species Regulations 2017. HMSO, London.

Designated Site	Qualifying Features	Zone of Influence	Approximate Distance to Site
	Crayfish <i>Austropotamobius pallipes</i> .		
Emer Bog SAC	Presence of Annex I habitats: Transition mires and quaking bogs.	Up to 3.7km radius	2.5km
The New Forest SPA, SAC and Ramsar	Presence of multiple Annex I habitats. Presence of Annex II species: Southern damselfly <i>Coenagrion mercurial</i>; Stag beetle <i>Lucanus cervus</i>; Great crested newt <i>Triturus cristatus</i>. Presence of Annex I species: Dartford warbler <i>Curruca undata</i>; Hen harrier <i>Circus cyaneus</i>; Hobby <i>Falco Subbuteo</i>; Honey buzzard <i>Pernis apivorus</i>; Nightjar <i>Caprimulgus europaeus</i>; Wood warbler <i>Phylloscopus sibilatrix</i>; Woodlark <i>Lullula arborea</i>. Presence of valley mires and wet heathlands Supports important assemblages of wetland invertebrates and plants.	Up to 13.8km radius	9.7km
Solent Maritime SAC	Presence of multiple Annex I habitats. Presence of Annex II species: Desmoulin's whorl snail <i>Vertigo moulinsiana</i>	Test & Itchen Management Catchment	6.0km
Solent and Dorset Coast SPA	Presence of Annex I species: Common tern <i>Sterna Hirundo</i> ; Little tern <i>Sterna albifrons</i> ; Sandwich tern <i>Thalasseus sandvicensis</i> .	Test & Itchen Management Catchment	3.8km
Solent and Southampton	Presence of multiple Annex I species.	Up to 5.6km radius	6.0km

Designated Site	Qualifying Features	Zone of Influence	Approximate Distance to Site
Water SPA and Ramsar	Important waterbird assemblage, both breeding and wintering. Supports important assemblages of wetland invertebrates and plants.	Test & Itchen Management Catchment	

9.4 Due to the protections afforded to them, these sites are of international importance.

Nationally Designated Sites

9.5 A total of five Sites of Species Scientific Interest (SSSI) are located within a 5km radius of the Site. These are Ratlake Meadows SSSI; Southampton Common SSSI; Trodds Copse SSSI; River Itchen SSSI; and Baddesley Common SSSI. The closest of these is Baddesley Common SSSI, located approximately 2.3km to the north-west of the Site.

9.6 Of these the River Itchen SSSI and Baddesley Common SSSI form the component SSSI's of the River Itchen SAC and Emer Bog SAC, respectively.

9.7 The Site falls within an Impact Risk Zone for SSSI's whereby residential development of 100 units or more is considered likely to affect a SSSI. Due to the overlapping contours of the risk zones, it is not possible to accurately determine which SSSI's this specifically relates to.

9.8 Due to the protections afforded to them, these sites are of National importance.

Non-statutory Designated Sites

9.9 A total of 29 Sites of Importance for Nature Conservation (SINC) are located within a 2km radius of the EIA Site Boundary and of these sites, two lie partly within the EIA Site Boundary (Figure 9.2).

9.10 The Rough SINC is located at the western end of the EIA Site Boundary, where approximately half of the designation falls within the EIA Site boundary. The Rough SINC is designated due to the presence of unimproved grasslands and areas of heathland vegetation.

9.11 Additionally, a small part of the Austin's Copse Chilworth SINC falls within the western boundary. This SINC is designated due to the survival of elements associated with ancient semi-natural woodlands and characteristics associated with ancient woodlands. Despite this the woodland is not included within the Provisional Ancient Woodland Inventory (PAWI).

9.12 Whilst located outside of the EIA Site Boundary, Hut Wood SINC lies to the immediate south of the boundary. Hut Wood SINC is designated due to the presence of ancient semi-natural woodland elements/characteristics, wet woodlands, pasture woodlands and wooded commons, heathlands which have afforested or succeeded to woodlands and the presence of one or more species which are notable for Hampshire.

Furthermore, the SINC designation includes ancient woodland habitats, although Hut Wood is now included within the PAWI.

- 9.13 These sites are considered to be of at least County importance.

Habitats

- 9.14 Habitats within the EIA Site Boundary are shown on Figures 9.3 and 9.4.
- 9.15 Currently within agricultural use, the majority of the EIA Site Boundary is comprised of botanically low-value grasslands which are species-poor, intensively grazed by cattle and /or horses. As such, they are subject to increased levels of fertilisation and appear to have been treated with herbicides. Species recorded in these grasslands include Perennial Rye Grass *Lolium perenne*, Creeping Buttercup *Ranunculus repens* and Broad-leaved Dock *Rumex obtusifolius*.
- 9.16 Other habitats recorded within the EIA Site Boundary include those listed as Habitats of Principle Importance under the Natural Environment and Rural Communities (NERC) Act 2006 (as amended)¹⁰⁷. These comprise: Purple Moor Grass and Rush Pasture; Hedgerows; Lowland Mixed Deciduous Woodland and Wood Pasture and Parkland.
- 9.17 Habitats of Principal Importance are considered to be of at least Local importance.

Fauna

Invertebrates

- 9.18 An invertebrate scoping survey was undertaken within the EIA Site Boundary in May 2024.
- 9.19 A total of 71 species of invertebrate were recorded. The grazed pasture fields are species-poor, with limited potential except for dung frequenting species. The SINC habitats and immediate surrounds provide the most notable habitats for invertebrates.
- 9.20 A full invertebrate survey will be undertaken during 2026.
- 9.21 Precautionarily, the invertebrate assemblage is considered to be of at least Local importance.

White-clawed Crayfish

- 9.22 White-clawed Crayfish *Austropotamobius pallipes* are known to inhabit the River Itchen which is hydrologically connected to the watercourses within the EIA Site Boundary, although no records were returned within a 2km range of the boundary.
- 9.23 The watercourses within the boundary sit over a bedrock of clay and appear to be fed by watercourses oversitting similar geologies (i.e. not chalk). Furthermore, several of the watercourses are ephemeral, and only seasonally wet, thereby not providing suitable habitats for White-clawed Crayfish.

¹⁰⁷ His Majesty's Stationery Office (HMSO) (2006), Natural Environment and Rural Communities Act. HMSO, London.

- 9.24 A habitat assessment to determine the suitability of the permanently wet watercourses to support White-clawed Crayfish is due to be undertaken in early 2026.

Great Crested Newt

- 9.25 Three waterbodies were identified within a 250m radius of the EIA Site Boundary (Figure 9.5), all of which were located in private landholdings. Access was permitted to two of these ponds. Of these, no evidence of a permanent waterbody was found for the first pond. The second pond was subject to a Habitat Suitability Index (HSI) assessment, and water samples were collected for eDNA analysis.
- 9.26 The HSI determined the pond to be 'excellent' suitability to support Great Crested Newt *Triturus cristatus*, although a subsequent eDNA survey returned negative results for the presence of Great Crested Newt.
- 9.27 Comprised arable land and grazed pasture, the EIA Site Boundary largely provides sub-optimal terrestrial habitats for Great Crested Newt, although the presence of hedgerows, scrub, woodlands and ditches may provide more optimal terrestrial habitats.
- 9.28 Great Crested Newt will use terrestrial habitats within a 250m radius of a pond and potentially up to 500m where the habitats are optimal¹⁰⁸.
- 9.29 Therefore, based on the availability of suitable waterbodies within a 250m radius of the EIA Site Boundary and a lack of suitable terrestrial habitats Great Crested Newt are considered as likely absent.

Reptiles

- 9.30 The majority of the EIA Site Boundary is unsuitable for reptiles, comprising tightly grazed pasture and arable land. There are exceptions to this, notably along hedgerows and woodland edges where transitional interfaces provide suitable habitats.
- 9.31 During the course of the reptile surveys, Slow Worm *Anguis fragilis* were the only species recorded with a peak count of two individuals found within The Rough SINC (Figure 9.6).
- 9.32 The reptile assemblage is therefore limited and of no more than Zone of Influence level importance.

Breeding Birds

- 9.33 Breeding bird surveys were completed in line with the guidance released by the Bird Survey and Assessment Steering Group¹⁰⁹.

¹⁰⁸ English Nature (now Natural England) (2001) Great Crested Newt Mitigation Guidelines. English Nature: Peterborough.

¹⁰⁹ Bird Survey & Assessment Steering Group (2025), Bird Survey Guidelines for assessing ecological impacts, <https://birdsurveyguidelines.org>

- 9.34 A total of 52 bird species were recorded throughout the breeding bird survey, of which 47 are considered to be 'breeding' species. This included seven red-listed Birds of Conservation Concern¹¹⁰ (BoCC), 12 amber-listed BoCC and nine Species of Principle Importance under the NERC Act 2006 (as amended).
- 9.35 Nightjar were recorded singing, to the south of the EIA Site Boundary within Hut Wood, although were not recorded in the EIA Site Boundary itself.
- 9.36 The breeding bird assemblage is considered to be of District level importance.
- 9.37 Additionally, a Barn Owl survey was undertaken on the buildings within the Site to determine whether they were being used by roosting and/or nesting Barn Owl. No evidence of presence was found in any of the buildings.

Wintering Birds

- 9.38 Wintering bird surveys were completed in line with the guidance released by the Bird Survey and Assessment Steering Group.
- 9.39 A total of 53 bird species were recorded during the breeding bird survey. This included 10 red-listed BoCC, 13 amber-listed BoCC and eight Species of Principle Importance under the NERC Act 2006 (as amended).
- 9.40 The wintering bird assemblage is considered to be of District level importance.

Bats

- 9.41 Bat surveys were completed in line with Good Practice Guidelines¹¹¹, including night-time bat walkover surveys, static detector surveys, preliminary roost assessments and emergence surveys.

Roosts

- 9.42 A total of 21 buildings were assessed for their suitability to support roosting bats. Of these: three were considered to have high suitability; six moderate suitability; nine low suitability; and three were considered to have negligible suitability (Figure 9.7).
- 9.43 Emergence surveys identified eight of the buildings as currently supporting day roosts for low numbers of Common Pipistrelle *Pipistrellus pipistrellus* and Soprano Pipistrelle *Pipistrellus pygmaeus* (Figure 9.8).
- 9.44 Roosting bats are therefore considered to be of Local level importance.

Foraging and Commuting Bats

¹¹⁰ Stanbury, A., Eaton, M., Aebischer, N., Balmer, D., Brown, A., Douse, A., Lindley, P., McCulloch, N., Noble, D. and Win, I (2021), The status of our bird populations: the fifth Birds of Conservation Concern in the United Kingdom, Channel Islands and Isle of Man and second IUCN Red List assessment of extinction risk for Great Britain. *British Birds* 114, 723-747

¹¹¹ Collins, J. (ed). (2023), *Bat Surveys for Professional Ecologists - Good Practice Guidelines*. 4th Edition. Bat Conservation Trust, London.

- 9.45 Night-time bat walkover surveys have identified six species of bat across the EIA Site Boundary, including: Common Pipistrelle; Soprano Pipistrelle; Long-eared species Plecotus sp; Myotis sp Myotis sp; Serotine Cnephaeus serotinus; and Nathusius' Pipistrelle Pipistrellus nathusii.
- 9.46 Activity was concentrated along the hedgerows and woodland edges. In particular, the southern and eastern boundaries had a lot of foraging activity, likely due to being connected to adjacent woodland.
- 9.47 In addition to the species outlined above, the automated static detector surveys identified an additional three species, which were: Leisler's bat Nyctalus leisleri; Noctule Nyctalus noctule; and Barbastelle Barbastella barbastellus.
- 9.48 Foraging and commuting bats are considered to be of Local importance.

Hazel Dormice

- 9.49 Hazel Dormouse surveys were undertaken within the EIA Site Boundary in 2024 in line with the Dormouse Conservation Handbook¹¹². A total of 55 tubes and five nest boxes were deployed in habitats considered suitable to support Dormice Muscardinus avellanarius.
- 9.50 No Dormice, or evidence of Dormice, have been identified within the EIA Site Boundary and are currently considered to be likely absent.

Water Vole

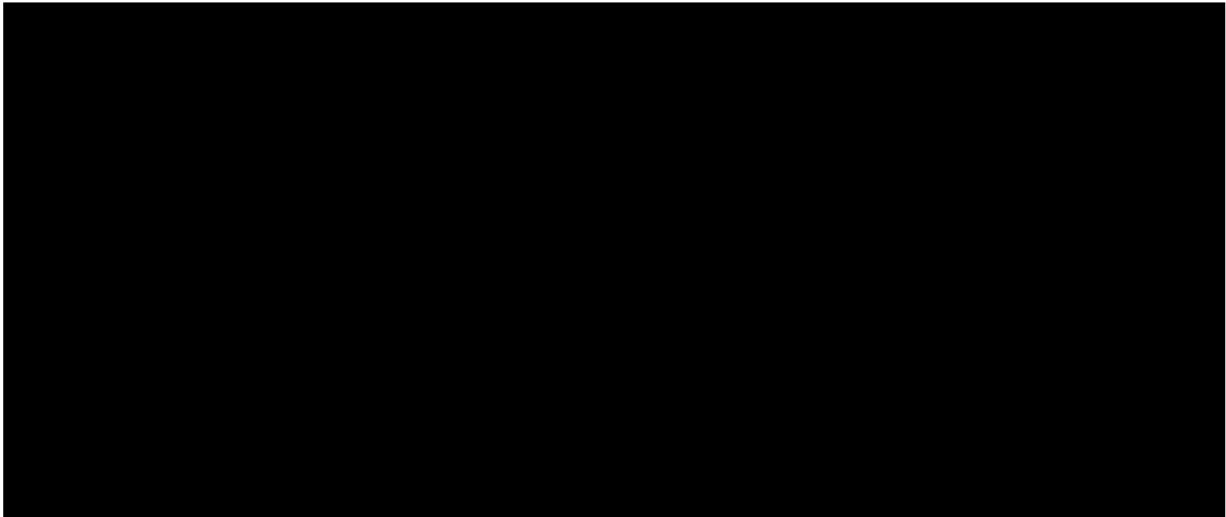
- 9.51 The watercourses within the EIA Site Boundary were considered for their suitability to support Water Vole Arvicola amphibious. Several of the watercourses are ephemeral drainage ditches which will not provide suitable Water Vole habitats for the majority of the year.
- 9.52 The remaining watercourses include low, unvegetated banks with a shallow gradient which are not suitable for supporting Water Vole. Additionally, for much of the year the depth of the watercourses would not allow for underwater entrances to burrow systems.
- 9.53 The EIA Site Boundary therefore does not provide suitable Water Vole habitat and as such they are considered as likely absent.

Otter

- 9.54 The suitability of the watercourses within the EIA Site boundary to support Otter was considered. As outlined above, the watercourses within and immediately adjacent to the EIA Site boundary are largely shallow and/or ephemeral.

¹¹² Bright, P.; Morris, P. & Mitchell-Jones, T. (2006), Dormouse Conservation Handbook 2nd Edition. English Nature, Peterborough.

- 9.55 It is considered that the watercourse network could be used on occasion by commuting Otter, but it does not provide suitable habitat for foraging, or to support an Otter holt.
- 9.56 Otter are therefore considered as likely absent from within the EIA Site Boundary.



Proposed Scope of Assessment

- 9.59 The below sets out the proposed scope of assessment based on an understanding of the characteristics of the EIA Site Boundary, surrounding area and the Proposed Development (Chapter 4). Where environmental effects are considered unlikely to be 'significant', an appropriate evidence base has been provided to justify the 'scoping out' of these effects ensuring the EIA and ES only assess those effects considered 'likely' to be significant.

Effects Unlikely/Not Significant

- 9.60 The following effects are considered unlikely to be significant and therefore will not be considered further within the EIA or reported in the ES. A factual evidence base has been provided below to support this. Where mitigation has been used to inform this judgement, the identified mitigation has been captured within the PEMP provided in Appendix 2.1.

Habitat damage/degradation due to waterborne pollutants during the construction stage to the River Itchen SAC; Solent Maritime SAC; Solent and Dorset Coast SPA; and Solent and Southampton Water SPA and Ramsar

- 9.61 A watercourse present within the EIA Site Boundary flows into Monks Brook, a tributary of the River Itchen, which discharges into the Solent. Therefore, should any pollutants enter the watercourse during the construction stage, it is possible that this could cause habitat degradation/damage to internationally designated sites located downstream of the EIA Site Boundary.
- 9.62 A CEMP will be implemented during the construction phase of the development, to be secured via a planning condition. The CEMP will include measures to prevent waterborne pollution, such as silt protection, surface water drainage measures, suitable storage of chemicals and materials and stocking of spill kits. These measures



will prevent water pollution of the on-site watercourse, thereby ensuring no negative effects downstream. Further details are provided in 'Water Environment' Chapter 5.

- 9.63 Therefore, habitat damage/degradation arising from waterborne pollutants to the River Itchen SAC, Solent Maritime SAC, Solent and Dorset Coast SPA and Solent and Southampton Water SPA and Ramsar is not considered to be significant and will not be considered further in the EIA or reported in the ES.

Habitat damage/degradation due to an increase in recreational pressure during the operational phase on Ratlake Meadows SSSI

- 9.64 Ratlake Meadows SSSI, located approximately 4km to the north of the EIA Site Boundary, is a privately owned site. There are no public footpaths within the SSSI, and no public access is permitted. As such, an increase in visitation as a result of the Proposed Development will not occur.
- 9.65 As such, habitat damage/degradation arising from recreational pressure on Ratlake Meadows SSSI is not considered to be significant and will not be considered further in the EIA or reported in the ES.

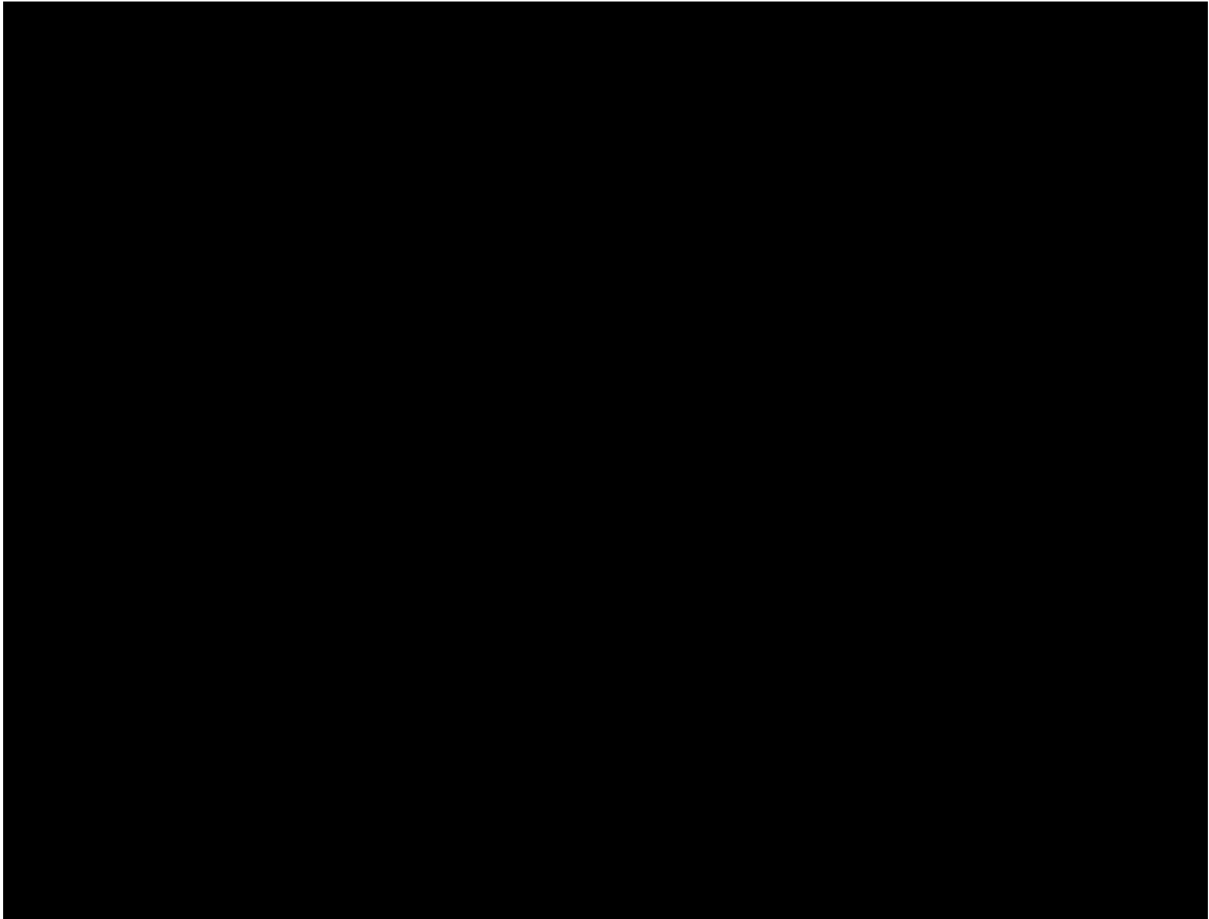
Damage to retained habitats during the construction phase on The Rough SINC; St Austins Copse SINC; Hut Wood SINC; and Habitats of Principle Importance

- 9.66 During the construction stage, poor construction practices could negatively impact the retained habitats within the EIA Site Boundary, and immediately adjacent to the boundaries, through the introduction of pollutants and dust. Furthermore, inappropriate machinery use/access could cause physical damage to habitats, as well as cause soil compaction which would negatively impact the roost systems.
- 9.67 The implementation of the CEMP will address impacts commonly arising as a result of construction works that may otherwise have negative impacts on The Rough SINC, St Austins Copse SINC, Hut Wood SINC and Habitats of Principal Importance.
- 9.68 The CEMP will prescribe measures to prevent and mitigate dust and other forms of pollution (as stated in Chapter 7). It will ensure compliance with regulatory requirements and good practice protocols relating to storage, transportation and disposal of chemicals, materials and waste. Such measures are likely to include: dust control measures, such as dampening down or covering of loose materials; silt protection measures such as the installation of geotextile silt fencing; storage of compounds at least 10m from watercourses, on perversion bases.
- 9.69 The Rough SINC and St Austins Copse SINC are located within the proposed SANG and therefore will not be within close proximity of the proposed construction works. With the Proposed SANG located between the SINC's and the closest areas of proposed construction, physical damage arising from inappropriate machinery use/access would not occur.
- 9.70 A 20m offset will also be applied from the boundary of Hut Wood SINC and protective fencing will be installed along the perimeter of Hut Wood SINC to prevent accidental damage. Protective fencing will also be erected around retained Habitats of Principle Importance where they fall adjacent to or within construction areas to prevent

accidental damage arising from inappropriate machinery use/access. Such measures would be set out within the CEMP.

- 9.71 Therefore, damage to The Rough SINC, St Austins Copse SINC, Hut Wood SINC and retained Habitats of Principle Importance is not considered to be significant and will not be considered further in the EIA or reported in the ES.

Disturbance (noise, vibration, lighting) during the construction phase on Invertebrates; Breeding birds; Wintering Birds; Bats (Roosting); Bats (Foraging and commuting); and



Direct harm to protected/notable species and loss of bat roosting opportunities

- 9.76 The proposed demolition works to buildings which are known to support roosting bats have the potential to result in injury or death to individuals. Given that roosts within the EIA Site Boundary support minor day roosts for low numbers of individual bats, death to individuals would not result in a change in the conservation status of the local bat assemblage. It would, however, constitute an offence under the Wildlife and Countryside Act 1981 (as amended) and the Conservation of Habitats and Species Regulations 2017 (as amended).
- 9.77 Any works to a building supporting a confirmed roost will be undertaken under a European Protected Species Licence (EPSL) from Natural England. The licence application will include a detailed mitigation strategy, developed in accordance with best practice guidance, that will be adopted to avoid detrimental impacts on bats.

¹¹⁴ Bat Conservation Trust (2023): Guidance Note on Bats and Artificial Lighting at Night (Guidance Note 08/23)

Although full details of the mitigation strategy will be agreed with Natural England through the licensing process, the principal elements will include:

- Sensitive timing of works (bats are most vulnerable during the maternity season and the hibernation period);
- A pre demolition/felling emergence survey;
- A pre demolition/felling inspection;
- The supervised soft strip of building features; and
- Provision of appropriate compensatory roosting (for example, bat boxes, recessed bat bricks, external wall mounted boxes, tree mounted boxes or pole mounted boxes).

9.78 Therefore, direct harm to roosting bats, and/or the loss of roosting opportunities is not considered to be significant and will not be considered further in the EIA or reported in the ES.

9.79 Furthermore, additional roosting features, above and beyond the minimum requirement of the mitigation licence, will be provided through the inclusion of bat boxes in/on new buildings and retained trees within suitable greenspace.

Harm to individuals/destruction of nests of Breeding birds and Wintering birds

9.80 Vegetation removal and building demolition undertaken during the construction stage of the Proposed Development has the potential to injury and/or kill birds, and if undertaken during the breeding season (March-August inclusive) damage or destroy nests. This could result in the loss of eggs and injury/death to chicks.

9.81 The majority of the EIA Site Boundary comprises tightly grazed pasture, which does not provide suitable nesting/roosting habitats for the majority of breeding birds. The EIA Site Boundary does support low numbers of ground-nesting birds within these habitats, including Skylark *Alauda arvensis* of which approximately 4-5 territories were recorded in 2024.

9.82 Based on the extent of suitable nesting/roosting habitat (i.e. hedgerows and scrub) available within the footprint of the Proposed Development, harm to individual birds/nests is unlikely to result in a change to the conservation status of the bird assemblage, so is not considered to be significant.

9.83 Harm to birds and their nests would, however, constitute an offence under the Wildlife and Countryside Act 1981 (as amended). Legal offences would be avoided by the inclusion of suitable measures within the CEMP, such as nesting bird checks to be undertaken by a suitability qualified ecologist.

9.84 Therefore, harm to individual birds and/or the destruction of nests is not considered to be significant and will not be considered further in the EIA or reported in the ES.

Effects during the construction/operation stage on Great Crested Newts; Reptiles; Dormice; Water Vole; Otter; [REDACTED]

9.85 Great Crested Newt, Dormice, Water Vole and Otter are all considered as likely absent from within the EIA Site Boundary. As such effects arising during the construction and/operational phase will not occur and these receptors are not considered further within this assessment.

9.86 Whilst reptiles are present within the EIA Site Boundary, they fall below the threshold for assessment in line with the Guidelines for Ecological Impact Assessment¹¹⁵ (as detailed below). They will therefore not be considered further in this assessment. Given their legal protection, reptiles [REDACTED] will be subject to a separate assessment in respect of relevant legislative requirements to be included within respective species reports appended to the Biodiversity Chapter of the ES. These reports will include (where necessary) suitable mitigation measures for reptiles [REDACTED] during site clearance and construction of the Proposed Development to prevent killing or injury and ensure legal compliance.

Effects Likely/Significant

9.87 Table 9.2 outlines the effects (and associated receptor[s]) that are considered to be likely and significant and therefore will be assessed within the EIA and reported in the ES.

Table 9.2: Potentially Significant Effects and Sensitive Receptors

Effect	Receptor(s)	Applicable Stage(s)
Loss of habitats	Habitats of Principal Importance	Construction
Loss of foraging/nesting/commuting habitats	Invertebrates; Breeding birds; Wintering birds; Bats (foraging and commuting)	Construction
Changes in air quality	New Forest SPA, SAC and Ramsar; Emer Bog SAC; Solent Maritime SAC; Solent and Southampton Water SPA and Ramsar; Valley Park Woodlands Local Nature Reserve; Northend Copse (east and west of flyover) SINC; Hut Wood SINC; Freespace Hicknor Hill SINC;	Construction / Operation

¹¹⁵ CIEEM (2018) Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine version 1.3 updated September 2024. Chartered Institute of Ecology and Environmental Management, Ampfield.

Effect	Receptor(s)	Applicable Stage(s)
	Small Profits SINC; Ramalley Piece/Badgers's Copse SINC; Knight Wood/Clothier's Copse SINC; Zionshill Copse SINC; East of Great Covert SINC; Great Covert SINC; Castle Lane Meadow SINC; South of Great Covert SINC; Wren's Copse SINC; Rounds Copse Ancient Woodland; Buxey Wood (east) SINC; and FC Site 614 Chilworth SINC.	
Increase in recreational pressure (disturbance, trampling)	The New Forest SPA, SAC and Ramsar; Solent Maritime SAC; Solent and Dorset Coast SPA; Solent and Southampton Water SPA and Ramsar; Southampton Common SSSI; Trodds Copse SSSI; River Itchen SSSI; Baddesley Common SSSI; The Rough SINC, Austins Copse SINC; Hut Wood SINC; and other publicly accessible SINC's.	Operation
Changes in nutrient levels	River Itchen SAC; Solent Maritime SAC; Solent and Dorset Coast SPA; and Solent and Southampton Water SPA and Ramsar.	Operation
Damage, degradation, loss and/or fragmentation of habitats (e.g. through trampling, fouling, fly-tipping,	The Rough SINC; Austins Copse SINC; Hut Wood SINC; and Habitats of Principal Importance.	Operation

Effect	Receptor(s)	Applicable Stage(s)
introduction of non-native species, arson);		
Increased levels of predation	Breeding birds and Wintering birds	Operation
Noise/light/visual disturbance	Breeding birds; Wintering birds; and Bats.	Operation

Assessment Methodology of Effects Likely/Significant

9.88 The following background surveys/studies have been/will be completed.

Table 9.3: Background Surveys/Studies

Survey/Study/Analysis/ Evaluation	Overview	Date of Completion
Completed		
Preliminary Ecological Appraisal	High level habitat mapping to UKHabs Level 3 and assessment of suitability of the Site to support protected and/or notable species.	October 2023
Preliminary Roost Assessment for Bats	An inspection of structures on Site to determine their suitability to support roosting bats. Completed in line with Good Practice Bat Survey Guidelines.	March 2024
Barn Owl Survey	Survey of buildings/barns on Site to determine whether they are (or are capable of) supporting roosting/nesting Barn Owl.	March 2024
Breeding Bird Surveys	To determine the assemblage of breeding birds on-Site, and how they are using the habitats. Completed in line with the Bird Survey Guidelines.	March – July 2024
Dormouse Surveys	To assess presence/likely absence of Hazel Dormice. Completed in line with the Dormouse Conservation Handbook (2 nd Edition).	March – September 2024

Survey/Study/Analysis/ Evaluation	Overview	Date of Completion
Automated Static Detector Surveys	Used to identify the bat assemblage within the Site and usage of habitats. Completed in line with Good Practice Bat Survey Guidelines.	April – October 2024
Habitat Suitability Index Assessment	An assessment of ponds to determine their suitability to support Great Crested Newt.	May 2024
eDNA Analysis	Analysis of water samples to test for the presence of Great Crested Newt DNA.	May 2024
Reptile Survey	To assess presence/likely absence of reptiles on-Site, and population size where applicable.	May – June 2024
Invertebrate Scoping Survey	An initial visit to determine the suitability of the Site to support an important assemblage of invertebrates.	May 2024
Night-time Bat Walkover Survey	Used to identify the bat assemblage within the Site and usage of habitats. Completed in line with Good Practice Bat Survey Guidelines.	May, July & September 2024
Botany Surveys	To further classify habitats to the highest possible UKHabs level and identify any notable flora.	June 2024
Bat emergence survey	To confirm whether structures on-Site support roosting bats. Completed in line with Good Practice Bat Survey Guidelines.	June – September 2024
Winter Bird Survey	To determine the assemblage of wintering birds on-Site, and how they are using the habitats. Completed in line with the Bird Survey Guidelines.	November 2024 – February 2025
Pending		
Ground level tree assessment	An assessment of trees to determine their suitability to support roosting bats, and where necessary inform the need for further survey.	Early 2026

Survey/Study/Analysis/ Evaluation	Overview	Date of Completion
White-clawed Crayfish habitat assessment	An assessment of watercourses to determine their suitability to support White-clawed Crayfish	Early 2026
Invertebrate surveys	A full survey to assess the Site's value for invertebrates.	April – September 2026
Update surveys	Updates of the previously completed surveys (as outlined above) to ensure an up-to-date ecological baseline.	March – October 2026
Information for Habitat Regulations Assessment	Provision of information (to be provided as an Appendix to the Biodiversity ES chapter) to allow the competent authority to undertake a HRA of the Proposed Development to determine if it is likely to have a significant effect on the New Forest SPA, SAC and Ramsar, River Itchen SAC, Solent Maritime SAC, Solent and Dorset Coast SPA, Solent and Southampton Water SPA and Ramsar.	Early 2026

- 9.89 The approach to Ecological Impact Assessment (EcIA) to be utilised within the Ecology Chapter of the ES takes account of guidance provided by CIEEM within the Guidelines for Ecological Impact Assessment v1.3¹¹⁶. The methodology underpinning the assessment of air quality effects on receptors, summarised in Table 9.2, is fully detailed in Chapter 7 Air Quality and will be undertaken in line with the relevant IAQM guidance¹¹⁷.
- 9.90 In accordance with the above guidance, the following step-wise approach to EcIA will be undertaken.
- 9.91 Important Ecological Features (IEFs) within the EIA Site Boundary will be identified utilising the data gathered through desktop and field surveys, as outlined above. IEFs are features within the EIA Site boundary whereby the ecological importance is valued at the Local geographical level or above. To determine whether an ecological feature is of Local value or higher, an assessment will be made using the relevant guidance, knowledge and local information for the ecological feature. For example, the national and local distribution and/or abundance of a species/habitat within the landscape will affect its ecological importance. In some instances, guidelines are available against

¹¹⁶ CIEEM (2018) Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine version 1.3 updated September 2024. Chartered Institute of Ecology and Environmental Management, Ampfield.

¹¹⁷ Institute of Air Quality Management, 2020. A guide to the assessment of air quality impacts on designated nature conservation sites.

which to measure an IEF, such as the standard evaluation method used for bird assemblages developed by Fuller.

- 9.92 Activities associated with the delivery and operation of the Proposed Development that are likely to result in biophysical changes will be identified, where these activities are considered likely to lead to significant effects (either beneficial or adverse) upon the IEFs.
- 9.93 The ZoI is the area over which these biophysical changes will impact upon the identified IEFs. The size will be dependent upon the activity and the sensitivity of the ecological receptor to the anticipated biophysical changes.
- 9.94 An effect is considered to be significant if it is likely to change the structure and function of defined sites and ecosystems or the conservation status of habitats and/or species. Professional judgement about significance is informed by conservation objectives for the affected feature, where available (for example conservation objectives set by Natural England for European designated sites, or in habitat and species action plans). The 'conservation status' (habitats and species) or the degree to which a feature is exhibiting 'integrity' in terms of structure, function and condition (defined sites or ecosystems) is also considered. The predicted effect of natural and man-made trends in the absence of development is also taken into account in determining the conservation status or integrity of a feature and in considering whether otherwise insignificant effects may contribute to a significant cumulative effect.
- 9.95 The conservation status of habitats is determined by considering the cumulative influences on a habitat that may impact upon its 'extent, structure and functions' alongside its distribution and species composition. The conservation status of species is determined by considering the cumulative influences that may impact upon the abundance and distribution. Some habitats and/or species may have a known conservation status, with objectives and targets against which the impact can be considered. For other habitats/species, a professional judgement must be made using available data, in agreement with the relevant statutory nature conservation body.
- 9.96 Once significant impacts on IEFs have been determined, refinement of the Proposed Development will be made to avoid impacts, and/or mitigate measures for negative impacts on IEFs. Opportunities to provide enhancements will also be identified, such as habitat creation to increase the cover of biodiverse habitats, which will in turn provide opportunities for faunal IEFs on the Site.
- 9.97 An assessment of significant residual effects on IEFs will also be undertaken, with additional compensation proposed where necessary.
- 9.98 The temporal scope of the ecological assessment will cover the construction and operational phases of the Proposed Development.
- 9.99 Temporary effects are those which are considered to be reversible, although the exact duration will be defined in relation to specific ecological characteristics (e.g. the lifespan of a species), alongside human timeframes. Permanent effects are those which

are non-reversible, or effects are likely to last beyond a reasonable timeframe when taking into consideration specific ecological characteristics.

- 9.100 Whilst the EcIA will be undertaken in line with the CIEEM Guidelines, as outlined above, an alternative terminology has been utilised to ensure conformity with the wider ES, in line with the assessment methodology set out in Chapter 2. Within the EcIA Guidelines, when considering alternative approaches the guidelines state:

“A matrix approach is commonly used in EIA by disciplines other than ecology to assign significant residual effects to categories (e.g. major, moderate, minor). [...] If using this approach, it is very important to make a clear distinction between evidence-based and value-based judgments so that decision-makers and other stakeholders are aware of the level of subjective evaluation that has been used. Spurious quantification should be avoided in which numerical scores or significance rankings/categories are used without a clear definition of the criteria and thresholds that underpin them. These Guidelines avoid and discourage use of the matrix approach and categorisation.”

- 9.101 A translocation matrix with reference to the required EIA terminology and CIEEM’s EcIA Guidelines is set out in Table 9.4 below.

Table 9.4: EcIA Terminology Translation

CIEEM Geographical Importance	Level of Effect
International	Major
National	Major
Regional	Moderate
County	Moderate
District	Moderate
Local	Minor
Zone of Influence	Negligible

- 9.102 Given the above, the assessment of likely significant effects to sensitive receptors will consider the sensitivity of the receptor (on a scale of high, medium, low and negligible) and the magnitude of change (on a scale of large, medium, small and negligible) to determine the level of effect on a scale of major, moderate, minor and negligible. Significant effects will be determined following this through professional judgment.

Limitations and Assumptions

- 9.103 To ensure transparency within the EIA process, the following limitations and assumptions have been identified:

- Ecological surveys have, to date, not been undertaken along the Templars Way highway network. These will be completed in 2026, and where necessary in the absence of a full dataset a precautionary approach will be adopted.
- Full invertebrate surveys to assess the importance of the assemblage have not been undertaken to date. It has therefore been precautionarily assumed that the invertebrate assemblage will be included within the scope of the impact assessment.
- Access could not be obtained for all off-Site ponds, therefore one pond within the ZOI was not assessed for the presence of Great Crested Newt.
- Minor survey constraints and limitations may have been encountered during individual surveys, although unless stated are not considered to present a significant constraint that would have impacted the overall findings of the surveys.

10. Landscape and Visual

Technical Baseline

Landscape-Related Planning Designations

10.1 The EIA Site Boundary is not within or close to any national designations for valued landscapes, such as National Landscapes or National Parks.

10.2 Other designations in the locality that inform the landscape context of the EIA Site Boundary are summarised below and shown on Figure 10.1 Landscape Related Designations Plan:

- Trees within The Rough woodland, located adjacent to the northwestern edge of the draft housing allocation, were made subject to a provisional Tree Preservation Order (TPO) by TVBC in August 2025.
- Hut Wood, located immediately south of the EIA Site Boundary, is owned by the Forestry Commission. Informal public access is available from Bournemouth Road.
- Valley Park Woodlands to the north of Castle Lane comprises a series of accessible woodlands, around 40 hectares in size, that are also designated as a Local Nature Reserve (LNR). The woodlands are divided by suburban housing at the western edge of Chandlers Ford. The TVBC website also notes that the Valley Park Community Orchards¹¹⁸ have been planted as part of a trail by local schools and the council, to embed the value of freshly grown and local produce within the community.
- Hut Wood (adjacent to the EIA Site Boundary), The Rough and Austin's Copse (partially within the EIA Site Boundary) and Valley Park Woodlands to the north of it, are all designated as Sites of Importance for Nature Conservation (SINC).
- A Scheduled Monument titled 'Section of Roman road 250yds (230m) long SW of Titlark Farm' is located within the suburban area of Chandlers Ford. It lies around 330m northeast of the EIA Site Boundary at the nearest point.
- There is a Conservation Area designation at Chilworth Old Village, around 510m distance southwest of the EIA Site Boundary at the nearest point. Much of the remaining area of Chilworth to southwest of the EIA Site Boundary is designated by TVBC as a Residential Area of Special Character.
- There are no listed buildings in close proximity to the EIA Site Boundary.

¹¹⁸ Test Valley Borough Council (2025) Valley Park Community Orchards. Available at: <https://testvalley.gov.uk/communityandleisure/parksandgreenspaces/valley-park-community-orchards> [Accessed: November 2025].

- 10.3 It is noted that the assessment will only consider heritage assets where they contribute to landscape value or are distinct local landscapes or visitor attractions, or where views to and from these assets are an important contributory factor to the experience. Effects on the heritage assets are considered in 'Built Heritage' Chapter 5, and themselves are outside of the scope of this chapter.
- 10.4 The Access Land designated under the Countryside and Rights of Way Act 2020 (CRoW), public rights of way (PRoW) and published cycle routes are shown on Figure 10.6 Landscape Accessibility Plan. Those located in close proximity to the Site are set out below:
- The Rough woodland is designated as CRoW Access Land¹¹⁹.
 - Public Footpath 050/7/1¹²⁰ runs east-west. It crosses the southeastern part of the Site. However, to the west of the farm buildings, this footpath lies outside of the EIA Site Boundary, running parallel with and immediately south of, the EIA Site Boundary. .
 - Public Bridleway 050/6/1 runs north-south. It crosses the southwestern part of the Site. However, at the southeastern edge of The Rough, this bridleway lies outside of the EIA Site Boundary. It continues north, parallel with the EIA Site Boundary and the remainder of the draft housing allocation area.
 - Public Bridleway 050/6/2 runs south from the junction of footpath 050/7/1 and bridleway 050/6/1, near the southwestern corner of the Site.
 - National Cycle Network (NCN) Route 24¹²¹ follows an off-road asphalt path, parallel with the northern carriageway of Castle Lane. A break in the vegetation located between the path and Castle Lane, allows users to cross the road from Public Bridleway 050/6/1, in order to access NCN Route 24. It is noted that there are no road markings, beacons or signals to indicate this crossing.

Landscape Baseline

- 10.5 This section reviews the landscape baseline for the EIA Site Boundary, including published landscape character. The distribution of the National, County and Borough landscape and townscape character types and areas are shown in Figures 10.2 to 10.5. The EBC landscape character areas are not considered in this chapter, as none are predicted to be subject to significant direct or indirect effects. This early conclusion is made due to the high level of existing physical and visual enclosure of the EIA Site Boundary. The desk study and initial site visit provide strong evidence of the contained nature of the EIA Site Boundary.

¹¹⁹ Department for Environment, Food and Rural Affairs (DEFRA) (2025) MAGIC online geographic information. Available at: https://magic.defra.gov.uk/Magic_redirect.htm?aspxerrorpath=/MagicMap.aspx [Accessed: November 2025].

¹²⁰ Hampshire County Council (2025) Map of Public Rights of Way. Available at: <https://maps.hants.gov.uk/rightsofwaydefinitivemap/>. [Accessed: November 2025].

¹²¹ Wheel, Walk Cycle Trust (formerly Sustrans) (2025) National Cycle Network. Available at: <https://www.walkwheelecycletrust.org.uk/national-cycle-network/>. Map available at: <https://www.walkwheelecycletrust.org.uk/> <https://explore.osmaps.com/?lat=50.97301&lon=-1.38817&zoom=13.5047&overlays=os-ncn-layer&style=Standard&type=2d> [Accessed: November 2025].

National Landscape Character
Natural England National Character Areas

10.6 At a National scale, the EIA Site Boundary and the majority of the area surrounding it, within 5km radius of its centre point, lie within National Character Area (NCA) 128 South Hampshire Lowlands. The key characteristics described for NCA 128 on Natural England's website¹²², relevant to the EIA Site Boundary and its context, include the following:

- Low-lying, gently undulating plain drained by chalk rivers in wide, open valleys, including the Itchen;
- Mixed agricultural landscape dominated by pasture with pockets of arable;
- Fields vary in size and pattern and are generally bounded by mixed-species hedgerows or woodland;
- Very urban in parts, and fragmented by major transport links including the M3 and M27; and
- The more rural hinterland is characterised by small, loosely clustered or dispersed settlements, intermixed with isolated farmsteads.

County Landscape and Townscape Character Types
Hampshire Integrated Character Assessment (HICA) (2010-2012)

10.7 The Hampshire Integrated Character Assessment (HICA) (2010-2012)¹²³ shows the EIA Site Boundary and surrounding landscape to the south, west and northwest, as located within HICA Landscape Type (LT) Lowland Mosaic Heath Associated (Final 2011). This type is truncated to the east by HICA LT Settlement (2010), which encompasses Eastleigh and Chandlers Ford. These character types are illustrated in Figure 10.2 National and County Landscape Character Plan.

10.8 Key described characteristics of HICA LT Lowland Mosaic Heath Associated, relevant to the EIA Site Boundary and its context are summarised below:

- Often abuts large settlements and conurbations, and typically has higher levels of housing development than other lowland landscapes, with urban fringe character to the adjoining rural areas;
- Low agricultural grade land, widespread horse grazing and urban fringe uses.
- Woodland cover and thick hedgerows provide intimacy and seclusion.

¹²² Natural England (2025) National Character Area 128 South Hampshire Lowlands. Available at: <https://nationalcharacterareas.co.uk/South-Hampshire-Lowlands/> [Accessed: November 2025].

¹²³ Hampshire County Council (2010-2012) Hampshire Integrated Character Assessment. Available at: <https://www.hants.gov.uk/landplanningandenvironment/environment/landscape/integratedcharacterassessment> [Accessed: November 2025].

- 10.9 Urban character types are also described in the HICA. The draft housing allocation area and parts of the EIA Site Boundary, abut the HICA LT Settlement to the north and east. The respective HICA Townscape Character Types (TCT) are illustrated on Figure 10.3 County Townscape Character Types Plan. Settlement to the north and northeast of the EIA Site Boundary falls within HICA TCT 08: Residential Post 1945 – Present (Houses Bungalows and up to 3 storey flats). Within this, there are pockets of HICA TCT 27: Open Space (Green Corridor/Area), including an area beneath the overhead (OH) power lines immediately east of the EIA Site Boundary. Also abutting the EIA Site Boundary to the east, are HICA TCT 13: Business Park 1980 – Present, which covers Hampshire Corporate Park, and HICA TCT 11: Large Retail 1950 – Present, which includes the Asda supermarket. Additionally, a small area of TCT 15: Industrial – 1945 – Present, lies on the north side of TCT 13. Key characteristics of these TCT are set out below.
- 10.10 The characteristics of HICA TCT 08: Residential Post 1945 – Present (Houses Bungalows and up to 3 storey flats) include the following:
- Range of distinctive housing estate styles built between the 1950s to 1980s and 90s, with twisting networks of roads giving access to cul-de-sacs. Rear gardens enclosed by fencing or walls often fronting main access routes; and
 - No locally distinctive architectural styles, but reproduction local material detailing and finishes present. Two storey and bungalow development present.
- 10.11 The characteristics of HICA TCT 13: Business Park 1980 – Present include the following:
- Offices with generally higher quality architecture, materials and landscaping; and
 - Include brick, structural glass and flat or very low pitch roofs.
- 10.12 The characteristics of HICA TCT 27: Open Space (Green Corridor/Area) include the following:
- Informal open spaces within areas of development due to features such watercourses, mature trees and hedgerows or a public right of way; or created a buffer; and
 - Quality of spaces and public accessibility varies.
- 10.13 The characteristics of HICA TCT 11: Large Retail 1950 – Present, include the following:
- Large scale modern retail units including supermarket development of low architectural quality; and
 - Large scale surface car-parking often forms the setting to these buildings.
- 10.14 The characteristics of HICA TCT 15: Industrial – 1945 - Present, include the following:
- Large scale buildings, often of profiled metal sheet; and

- Large expanses of open space between buildings for working yards, storage and parking.

County Landscape and Townscape Character Areas

10.15 The Site and a large part of the surrounding landscape, excluding the larger towns and villages, lie within HICA Landscape Character Area (LCA) 2D Romsey to Eastleigh Wooded Lowland Mosaic (2012), as shown on Figure 10.2 National and County Landscape Character Plan. HICA LCA 2Ds is described as follows:

“Bounded to the east and west by the Test and Itchen river valleys, this landscape is well wooded...It represents the former extent of the Forest of Bere Astley – which had a different landscape evolution...by the fact of its early disafforestation in the 14th century. This character area extends as far north as the chalk and south to...Southampton.

A predominantly wooded assart landscape of mid medieval origin fragmented and significantly altered by 18th and 19th century enclosures, conifer plantation and extensive expansion northwards of Southampton in the latter half of the 20th century.”

10.16 Additional key characteristics of HICA LCA 2D that are relevant to the Site and its context are as follows:

- Moderately undulating topography and sense of elevation above adjoining landscapes;
- Predominantly improved grassland, but also a significant amount of semi-natural ancient woodland. Many SINCs and two LNRs, including Valley Park Woodlands;
- A landscape of short views across fields to layered wooded horizons and woodland edges. Longer distant views from locally prominent areas;
- The rights of way network often comprises short lengths of paths linked to the rural road network. Accessible land is mainly within woodland;
- Doorstep greenspace is quite well provided in the form of remnant areas of open and wooded common, e.g. Valley Park Woodlands; and
- A pervading sense of rural urban fringe; and a branch railway line with stations at Eastleigh and Chandlers Ford.

10.17 Urban character areas are also described in the HICA. The existing housing areas north of the EIA Site Boundary and draft housing allocation area fall within HICA Townscape Character Area (TCA) EAST07: Valley Park environs. HICA TCA EAST10 incorporates Hampshire Corporate Park and further employment and retail areas east of the EIA Site Boundary. These are illustrated on Figure 10.4 County Townscape Character Areas Plan and further details are set out below.

10.18 The characteristics of HICA TCA EAST07: Valley Park environs include the following:

- Late-twentieth century housing estates, that are compact and high density:

- Very enclosed; and whilst bordering open countryside to the west, views out of the character area are rare due to the nature of development and topography; and
- Open green space, footpath networks, landscape planting and extensive tree cover including retained ancient semi-natural assart woodland.

10.19 The characteristics of HICA TCA EAST10: Retail Park and Hampshire Corporate Park include the following:

- Wide mix of retail, office and commercial late-twentieth century uses within dominant road network.
- Coarse, open-grain layout. Most buildings are equivalent to two and a half to three storeys in height; and
- Large areas of surface level parking and very limited public realm. However, Hampshire Corporate Park has a treed setting, buildings set into slopes with good landscaping, and good public realm to circulation routes.

Borough Landscape Character Type

Test Valley Borough Landscape Character Assessment 2004 (updated 2018 by Terra Firma)

10.20 The Test Valley Borough Landscape Character Assessment 2004 (updated 2018 by Terra Firma)¹²⁴ shows that the Site is located within TVBC Landscape Character Type (LCT) 2 Pasture and Woodland Associated with Heathland, as shown on Figure 10.5 Borough Landscape Character Plan. TVBC LCT 2 extends some distance from the Site, albeit it is truncated by the 'Urban Areas' at Chandlers Ford and Eastleigh to the north and east of the EIA Site Boundary.

10.21 The TVBC LCT 2 is described as “an enclosed landscape with pockets of low intensity grazed pasture in a well-wooded setting.” The settlements “are characteristically found to have an open but nucleated settlement pattern.” The document goes on to refer to ancient woodland, pockets of wet woodland, a high proportion of improved grassland and localised arable use on more favourable soils. In addition, there are smaller watercourses, wet flushes and damp grassland in valley bottoms. Footpaths provide recreational opportunities.

Borough Landscape Character Area

10.22 At a more granular level, the EIA Site Boundary lies within TVBC Landscape Character Area 2B North Baddesley to Chilworth Woodland Mosaic, as shown on Figure 10.5 Borough Landscape Character Plan. The characteristics include “large areas of woodland including plantations, predominantly along the northern edge of Southampton, with open areas of arable land, and rough grassland with heathland located to the west of Chandler’s Ford. The areas of arable farmland have generally poor quality hedgerows, with fields collectively forming larger open areas that are contained within the woodland framework.” Additionally, there are “pockets of higher

¹²⁴ Test Valley Borough Council (2004, updated 2018) Test Valley Borough Landscape Character Assessment. Available at: <https://testvalley.gov.uk/planning-services/landscape/landscape-character-assessment-documents>. [Accessed: November 2025].

density residential development adjacent to Southampton and Chandler's Ford", as well as business parks near the motorways and golf courses near North Baddesley. The ground is gently undulating and its location within the River Itchen and Test catchments results in numerous streams and ponds.

10.23 The stated "key valued characteristics" of LCA2B include:

- "Pockets of gently undulating pasture and arable fields within a strong framework of hedgerows and woodland cover, including plantation;
- Wooded character of Chilworth;
- Retained mature former hedgerow trees within business parks;
- Woodland and generous woodland belts provide containment to suburban residential development;
- Views are generally short, mostly to the next field boundary or woodland edge; and
- Pattern of fields separating Ampfield and Chandler's Ford / Valley Park / North Baddesley".

10.24 Regarding 'remoteness and tranquillity', TVBC LCA 2B North Baddesley to Chilworth Woodland Mosaic is stated as having "a more urban character"; with the M27 and associated slip roads and junctions, and "large scale commercial buildings (that)...impact on levels of tranquillity within the adjacent area." Nevertheless, "areas of woodland away from traffic noise still offer some sense of remoteness and tranquillity."

10.25 The overall 'Landscape Strategy' for TVBC LCA 2B is to restore a dominant wooded and heathland character. The land use, development and management guidelines include:

- "Avoid loss of separate identity of well-defined settlements through coalescence and homogeneous design;
- Avoid deterioration in the urban fringe landscape arising from poor design and intrusive development;
- Maintain the wooded separation of areas of residential development;
- Improve management of the landscape around settlements;
- Protect and enhance the important green spaces around and within the settlement fringe and their contribution to green infrastructure, links with the wider countryside, nature conservation, the setting of the settlement and breaking up the built form";
- Safeguard historic features and their settings;

- Restore the continuity and quality of field hedgerows, including new planting using locally native species; and
- Maintain and strengthen woodland cover.

Borough Landscape Sensitivity

Test Valley Landscape Studies, Landscape Sensitivity Study: Final report to Test Valley Borough Council (2024)

- 10.26 In January 2024, TVBC published the Test Valley Landscape Studies, Landscape Sensitivity Study¹²⁵. Part One sets out the purpose and methodology for the study, and is accompanied by Annexe 1: Residential sites assessments for Test Valley. This includes the Landscape Sensitivity Assessment: Valley Park 4 – Land at Velmore Farm (Includes Land at Castle Lane). Bold is added to the following text for emphasis.
- 10.27 The landscape sensitivity assessment for Velmore Farm includes the whole of the draft housing allocation land area. It judges the landscape value of the draft housing allocation land to be “at the Local level”. Elements stated as enhancing value are the “long views to the north and east from PRow and the sense of elevation within the south-western part of the site, with views across the undulating landform and open countryside towards woodland on the horizon (albeit with pylons in view)”; as well as the nearby woodland which provides “a notable landscape framework to the site and enhanced value due to increased sense of naturalness and remoteness in those areas”. The factors reducing landscape value are stated as the pylons crossing the site, which “reduce the sense of remoteness for most parts of the site”; and the infrastructure and urban fringe influences to the north, associated with the busy Castle Lane/Templars Way.
- 10.28 The analysis of Landscape susceptibility refers to “a relatively complex landscape pattern”, except to the northern and eastern edges; “a relatively strong sense of tranquillity, and relative remoteness within the western and south-western areas”; the wooded context and large gardens that “limit relationship with the settlement edge” to the north; skylines that “appear as undeveloped, with naturalistic and open qualities”; and, the contrast between “open, expansive views with extensive visibility” to the southwest, and the “more contained and enclosed” views and lower intervisibility to the north and east.
- 10.29 The study therefore judges that “much” of the draft residential allocation land is highly susceptible to change arising from the development scenario, referencing in particular “the elevated and open land in the south-west, the localised undulating landform and historic Roman Road, and the experience of relative remoteness along PRow. The considerable openness and intervisibility, prominent topography, historic landscape interest and levels of remoteness combine to elevate susceptibility overall.” However, it goes on to state that the “lower lying and visually contained land to the north and east,

¹²⁵ Prepared by Stephenson Halliday, an RSK Company, with RSK ADAS (January 2024) Test Valley Landscape Studies, Landscape Sensitivity Study: Final report to Test Valley Borough Council, Annexe 1: Residential sites assessments for Test Valley. Available at: <https://www.testvalley.gov.uk/planning-services/planningpolicy/local-development-framework/draft-local-plan-2042?chapter=3>. [Accessed: November 2025].

where the landscape is influenced by infrastructure/urban fringe elements has lower, Moderate-High susceptibility to the change scenario.”

- 10.30 The study combines its landscape value and susceptibility analyses to judge that the landscape of the draft residential allocation land is of “High overall sensitivity”. This arises from the elevated, open landscapes to the west, northwest, southwest and centre; the experience of relative remoteness and sense of place provided by the landscape pattern; and the route of the Roman Road. However, it does acknowledge that there is variation in overall landscape sensitivity; so that even with the presence of the former Roman Road, the north, northeast, east and southeast edges of the site have a “lower, Moderate-High sensitivity” due to “their lower elevation and reduced prominence and the greater influence of modern infrastructure in the landscape.”
- 10.31 On these bases, guidance and recommendations are set out including:
- Reduce development densities at the edges, where urban and rural areas interface, relating this to semi-natural greenspace provision and native screening buffers, and contributing to maintaining the integrity of the Local Gap;
 - “Retain and enhance areas of strong and distinctive landscape structure such as the mature hedgerows and woodland edges, which provide legible boundaries in the local landscape”;
 - The former Roman Road to inform potential development layout and act as a focus for semi-natural greenspace provision; and
 - Create new structure planting. This should visually and physically connect with existing vegetation; contribute to new areas of semi-natural greenspace; provide defensible boundaries integrating the settlement edge; and contribute to the setting and recreational experience of the PROW.

Artificial Lighting

- 10.32 There is no lighting within the EIA Site Boundary itself, other than that associated with the buildings at the existing farmstead. Street lighting is to be found on Bournemouth Road, Templars Way and a short section of Castle Lane on the approach to the junction with Templars Way. Varying scales of lighting column are also found within Hampshire Corporate Park and the Asda car park.
- 10.33 The CPRE publish online light pollution and dark night skies data¹²⁶. The CPRE interactive maps were produced with satellite images captured at 1.30 am throughout September 2015. The detailed map illustrates the level of lighting shining up into the night sky across 9 colour bands, with reds, oranges and yellows denoting more urban areas, yellows and greens indicating suburban levels of lighting, and light to dark blues denoting dark skies. The online map shows the majority of the draft housing allocation area and the EIA Site Boundary falling in the yellow and orange ‘brighter’ zones; with only a limited area to the west and southwest within the green zone, which is one step darker than yellow on the colour band scale distinguishing artificial light levels. The

¹²⁶ CPRE and Natural (2016) England England’s Light Pollution and Dark Skies Map. Available at: <https://www.cpre.org.uk/what-we-care-about/nature-and-landscapes/dark-skies/englands-light-pollution-dark-skies-map/>. [Accessed: November 2025].

urban areas north and east of the EIA Site Boundary, and around the A27 and M27 corridors further to the south, fall within orange, pink and red colour brighter zones. Undeveloped and wooded areas west and further northwest of the EIA Site Boundary fall within green and blue colour zones, respectively. None of the areas surrounding the EIA Site Boundary fall within the 'darkest' zone.

Landscape Receptors

10.34 Following site survey and a review of the published documents and online data, the following landscape receptors to be considered have been determined:

Character of the Site

10.35 The northern, eastern and southeastern areas of the EIA Site Boundary include undulating ground, but also some more gently sloping areas, used for agricultural grazing. There are influences of the pylons within the EIA Site Boundary, the busy roads to the north, residential areas to the north and employment areas to the east. The limited internal boundary hedgerows, other vegetation bordering the EIA Site Boundary, and grazing animals contribute to a remnant sense of rurality. Nevertheless, tranquillity and peacefulness are limited by the various human influences associated with the settlement edge. However, there is a general sense of enclosure to the EIA Site Boundary due to surrounding mature trees.

10.36 The southern and southwestern areas of the EIA Site Boundary also comprise agricultural grazing, but retain a more scenic and rural character, with level and undulating ground, the buildings and some 'horsey' infrastructure around the farmstead, and a strong backdrop of mature woodland and conifer plantation at Hut Wood to the south. From the higher ground to the southwest, there are long views across part of the EIA Site Boundary and beyond, across mature vegetation and buildings within the neighbouring settlement to the north and northeast. The pylons and overhead cables crossing the EIA Site Boundary form part of these views. To a lesser extent, housing and commercial development in the northern area of Chilworth is perceived from the junction of the PRoW near the southwestern corner of the EIA Site Boundary. This is more apparent with reduced leaf cover to deciduous vegetation surrounding the EIA Site Boundary. The greatest sense of rural character and tranquillity is achieved when views to the pylons are partly obscured by landform.

TVBC Landscape Character Area 2B North Baddesley to Chilworth Woodland Mosaic

10.37 This is the wider landscape context to the EIA Site Boundary, which within its zone of visual influence includes well-vegetated residential development to the north and employment areas to the east; the northern extent of the dense Hut Wood to the south; the northern extents of the wooded village of Chilworth to the southwest; a limited extent of undulating, grazed farmland to the west; and the woodland of The Rough and to a lesser extent, Austin's Copse to the northwest. Whilst existing urban areas will be taken into consideration as part of this landscape character context, these will also be considered in more detail as the individual published townscape character areas, as listed below.

HICA Townscape Character Area EAST07: Valley Park environs

10.38 The existing, predominantly late-twentieth century housing estates at Valley Park to the north of the EIA Site Boundary. While these are quite compact and high density in

close proximity to the EIA Site Boundary, they have as broadly unifying characteristics, a relatively high level of mature vegetation and sense of enclosure, with limited views in or out. Nevertheless, to the east by Templars Way, some housing areas are less well vegetated and enclosed. Tranquillity is reduced for existing housing by the busy Castle Lane and, in particular, by Templars Way.

HICA Townscape Character Area EAST10: Retail Park and Hampshire Corporate Park

10.39 The assessment will consider primarily, the adjacent Hampshire Corporate Park to the east of the EIA Site Boundary, with its high specification office suites and associated landscaped areas and retained mature trees; as well as the builders merchants and offices to the southwest, where there are variations in the built form and external space aesthetics. The Asda supermarket east of Bournemouth Road has no obvious fenestration on the western elevation, and a car park that sits partly below road level. It is therefore further separated from the EIA Site Boundary by landform, intervening built areas and additional trees and hedges on the east side of Bournemouth Road. There is a degree of tranquillity within the designed, partly sunken 'parkland' space of the Corporate Park. However, activities associated with movement of large scale goods at the builders merchants is a source of noise locally. Additionally, the extensive Asda car park, moving vehicles and petrol fuelling station, as well as traffic on Bournemouth Road and the nearby busy roundabout, the adjacent tall hotel and large car park, and other nearby employment sites, together noticeably reduce tranquillity.

10.40 The individual landscape elements and features to be assessed would be as set out below.

Site landform

10.41 The sloping and undulating fields of the EIA Site Boundary, including relative elevation at the settlement edge of Chandlers Ford and Eastleigh. The landform of the EIA Site Boundary and study area is shown in Figure 10.7 Topography Plan.

Large scale arable fields of the Site

10.42 The existing large-scale arable fields, with a homogenous cover of improved grassland used for grazing animals. There is limited hedgerow vegetation and associated hedgerow trees; with post and wire fencing at the boundaries and associated modern field gates.

Hedgerows and trees within and around the Site

10.43 The existing hedgerows that divide the EIA Site Boundary into large scale fields, and which include a limited number of hedgerow trees. Additionally, whilst located within highway authority land, the existing vegetation at the northern edges of the EIA Site Boundary would be considered, alongside off-site woodland to the west and south.

10.44 The aesthetic and perceptual aspects to be assessed would be as set out below.

Simplicity with some diversity from adjacent settlement and woodland edges

10.45 Given the primarily undeveloped and enclosed nature of the EIA Site Boundary, the range of colours, textures, sounds and movement is generally limited. However, the EIA Site Boundary is influenced by the pylons and OHLs within it, the mature woodland to the south, and the settlement edges to the north and east. These introduce other

materials, forms, scale, texture, colour and sounds to the EIA Site Boundary and its immediate context.

Generally enclosed nature of the Site

- 10.46 The relative sense of enclosure would also be considered, taking into account topography, built elements and internal vegetation and bordering woodland and highway planting. As a whole, the EIA Site Boundary is well enclosed by the surrounding mature vegetation.

Some tranquillity and remoteness but with influence of existing built form and movement

- 10.47 Audible tranquillity would be considered using a qualitative approach. At present, this is lowest in the northern areas of the Site, where noise from moving traffic on Castle Lane and Templars Way is more perceptible. Audible tranquillity is greatest to the southwest, and to some extent to the west, close to existing woodland.

- 10.48 Visual tranquillity would consider the presence, scale and form of built development and infrastructure elements. At present, visual tranquillity is reduced by the large, high-voltage pylons and overhead cables within the EIA Site Boundary and crossing woodland to the west. It is also reduced by other infrastructure near the southwestern area of the EIA Site Boundary, which includes cable termination units, and a wastewater pumping station; and by moving traffic and artificial light on the roads to the north, and in the commercial areas east and southeast of the EIA Site Boundary. Visual tranquillity is greater where the pylons are less dominant in views, and in proximity to woodland bordering the EIA Site Boundary to the west and south, particularly where long views north across and beyond the EIA Site Boundary become available, and the relationship of the EIA Site Boundary to the skyline is more apparent.

Visual Baseline

- 10.49 Desk top study and the initial site visits have indicated that the extent of theoretical visibility of the Proposed Development would be limited; constrained by a combination of undulating landform, the built development at Chandlers Ford and Eastleigh to the north and east, and by the well-established areas of existing vegetation immediately surrounding the EIA Site Boundary and located within and close to the nearby settlements. Principal areas of visibility would therefore be concentrated to the EIA Site Boundary itself, and locations in its immediate vicinity; with potential scattered areas of visibility in the surrounding landscape and townscape. The areas of theoretical visibility include the following:

- Castle Lane and NCN Route 24 northwest of the EIA Site Boundary;
- Templars Way to the north and northeast of the EIA Site Boundary;
- Settlement edge of Chandlers Ford north of the EIA Site Boundary;
- Limited parts of the existing employment areas east of the EIA Site Boundary;
- A small section of Bournemouth Road, to the east of the EIA Site Boundary;
- The existing farm access track from Bournemouth Road;

- Public Footpath 050/7/1 running alongside the southwest and southern edges of the Site, and crossing the southeastern area of the EIA Site Boundary;
- A limited number of properties on Woodside, at the northern extents of Chilworth Village, southwest of the EIA Site Boundary;
- A short section of Public Bridleway 050/6/2 through the northern extents of Chilworth Village, southwest of the EIA Site Boundary; and
- Public Bridleway 050/6/1, crossing the southwestern part of the Site and running alongside its northwestern edge.

10.50 Fifteen representative viewpoints, as shown in Figure 10.8 Viewpoint Location Plan, have been initially identified within the study area, based on the findings of the desk top study, and site visits. The objective in selecting these locations has been to represent the range of views of the Proposed Development that would be available and capture the worst-case scenario of visibility. These viewpoints are also set out in Table 10.1, below. Preliminary photographs have been taken from these fifteen viewpoints, as shown in Figures 10.9 to 10.23 to support agreement on the assessment viewpoint locations with TVBC. As the representative viewpoints have formally been agreed with TVBC, photography will be re-taken in two contrasting seasons, using a digital single lens reflex (SLR) camera fitted with a 50mm fixed focal length (FFL) lens (see Table 10.3). Any sensitive locations which are not publicly accessible, but which may also be affected by the Proposed Development, will also be considered; however, understandably there will be no representative viewpoint photographs taken from within private properties.

10.51

10.52 A digital Zone of Theoretical Visibility (ZTV) model will be prepared, based on the built form parameters, in order to further inform the assessment of visual effects.

Table 10.1: Preliminary viewpoints assessed in late summer site visits

Preliminary viewpoint		Grid reference		Purpose of viewpoint and key receptors
1	View from Bournemouth Road opposite the existing farm access track	442830E	118837N	Experience of those using Bournemouth Road and nearby employment and retail areas at the existing settlement edge; and assessment of the Southampton – Eastleigh Local Gap. Vehicle users. Cyclists and wheeled users. Pedestrians. Workers.
2	View from the existing farm access track	442550E	118928N	Experience of those using the farm access track to access Public Footpath 050/7/1.

Preliminary viewpoint	Grid reference	Purpose of viewpoint and key receptors
		Recreational walkers. Cyclists and wheeled users.
3	View from Public Footpath 050/7/1 in the southeastern area of the Site	442371E 118957N
		Experience of recreational users; and assessment of the Southampton – Eastleigh Local Gap.
		Recreational walkers.
4	View from Public Footpath 050/7/1 by the southern area of the Site	441969E 118957N
		Experience of recreational users; and assessment of the Southampton – Eastleigh Local Gap.
		Recreational walkers.
5	View from Public Footpath 050/7/1 by the southwestern area of the Site	441574E 118900N
		Experience of recreational users; and assessment of the Southampton – Eastleigh Local Gap.
		Recreational walkers.
6	View from Public Footpath 050/7/1 near the junction with Public Bridleways 050/6/1 and 050/6/2	441432E 118882N
		Experience of recreational users and residents at the northern edge of Chilworth village; and assessment of the Southampton – Eastleigh Local Gap.
		Recreational walkers. Horse riders. Cyclists and wheeled users. Residents.
7	View west from the southern section of Public Bridleway 050/6/1	441429E 118978N
		Visual experience of recreational users; and assessment of the Southampton – Eastleigh Local Gap.
		Recreational walkers. Horse riders. Cyclists and wheeled users.
8	View east from the southern section of Public Bridleway 050/6/1	441477E 119109N
		Visual experience of recreational users; and assessment of the Southampton – Eastleigh Local Gap.
		Recreational walkers. Horse riders. Cyclists and wheeled users.

Preliminary viewpoint		Grid reference		Purpose of viewpoint and key receptors
9	View east from the northern section of Public Bridleway 050/6/1	441503E	119465N	Visual experience of recreational users; and assessment of the Southampton – Eastleigh Local Gap. Recreational walkers. Horse riders. Cyclists and wheeled users.
10	View from NCN Route 24 by Castle Lane	441563E	119635N	Visual experience of those using Castle Lane, NCN Route 24 and residents at the existing settlement edge; and assessment of the Southampton – Eastleigh Local Gap. Vehicle users. Cyclists and wheeled users. Pedestrians. Residents.
11	View from Templars Way, west of School Lane	442059E	119624N	Visual experience of those using Templars Way and residents at the existing settlement edge; and assessment of the Southampton – Eastleigh Local Gap. Vehicle users. Cyclists and wheeled users. Pedestrians. Residents.
12	View from Templars Way, near the junction of Templars Way and School Lane	442284E	119490N	Visual experience of those using Templars Way and residents at the existing settlement edge; and assessment of the Southampton – Eastleigh Local Gap. Vehicle users. Cyclists and wheeled users. Pedestrians. Residents.
13	View from Templars Way, between School Lane and Montgomery Way	442402E	119365N	Visual experience of those using Templars Way and residents at the existing settlement edge; and assessment of the Southampton – Eastleigh Local Gap. Vehicle users. Cyclists and wheeled users. Pedestrians. Residents.
14	View from Templars Way, east of Montgomery Way	442497E	119228N	Visual experience of those using Templars Way and residents at the existing settlement edge; and

Preliminary viewpoint		Grid reference		Purpose of viewpoint and key receptors
				assessment of the Southampton – Eastleigh Local Gap.
				Vehicle users. Cyclists and wheeled users. Pedestrians. Residents.
15	View from road through Hampshire Corporate Park	442610E	119076N	Visual experience of those using Hampshire Corporate Park; and assessment of the Southampton – Eastleigh Local Gap.
				Vehicle users. Cyclists and wheeled users. Pedestrians. Workers.

Proposed Scope of Assessment

- 10.53 The below sets out the proposed scope of assessment based on an understanding of the characteristics of the Site, surrounding area and the Proposed Development (Chapter 4). Where environmental effects are considered unlikely to be ‘significant’, an appropriate evidence base has been provided to justify the ‘scoping out’ of these effects, ensuring the EIA and ES only assess those effects considered ‘likely’ to be significant.

Effects Unlikely/Not Significant

- 10.54 The following effects are considered unlikely to be significant and therefore will not be considered further within the EIA or reported in the ES. A factual evidence base has been provided below to support this. Where mitigation has been used to inform this judgement, the identified mitigation has been captured within the PEMP provided in Appendix 2.1.

Construction effects on landscape character and visual amenity

- 10.55 Change of the EIA Site Boundary from agricultural land to a construction site has the potential to give rise to adverse landscape and visual effects. The construction effects of the Proposed Development, would be temporary, forming part of the process to achieve an operational scheme. There would be more built form and more movement across the EIA Site Boundary in the operational scheme, than at the construction stage, and these changes would be permanent. The operational effects would be greater than the construction effects and therefore the scope of the operational stage assessment in Table 10.2 would be a proxy for construction stage effects on the same receptors. Furthermore, as part of the CEMP, effects will be further reduced, for example, through the use of site hoardings that may also screen views. Therefore, given the temporary nature of the construction effects, and the direct association with the subsequent operational phase, the construction phase landscape and visual effects are not considered significant and will not be considered further in the EIA or reported in the ES.

Potential for change to national landscape character as a result of change of the Site from agricultural land use to a mixed use built development with open spaces and planting [National Character Area 128 South Hampshire Lowlands]

10.56 Change of the EIA Site Boundary from agricultural land to mixed use development has the potential to give rise to adverse landscape effects. The entire EIA Site Boundary and all of the study area is within NCA 128 South Hampshire Lowlands. Due to the large geographical scale of the NCA in relation to the EIA Site Boundary and considering the limited geographical extent of visibility of the EIA Site Boundary, the Proposed Development does not have the potential to result in significant changes to the landscape or aesthetic and perceptual qualities of the NCA.

10.57 Therefore, changes to national landscape character as a result of change of the EIA Site Boundary from agricultural land use to a mixed use built development with open spaces and planting, within NCA 128 South Hampshire Lowlands, are not considered to be significant and will not be considered further in the EIA or reported in the ES.

Potential for change to county level [HICA] landscape character as a result of change of the Site from agricultural land use to a mixed use built development with open spaces and planting [Hampshire Landscape Type Lowland Mosaic Heath Associated and Landscape Character Area 2D Romsey to Eastleigh Wooded Lowland Mosaic]

10.58 Change of the EIA Site Boundary from agricultural land to mixed use development has the potential to give rise to adverse landscape effects. The entire EIA Site Boundary and a large part of study area lie within Hampshire Landscape Type Lowland Mosaic Heath Associated and Landscape Character Area 2D Romsey to Eastleigh Wooded Lowland Mosaic. Due to the large geographical scale of the county character type and area in relation to the EIA Site Boundary, and considering the limited geographical extent of visibility of the EIA Site Boundary, the Proposed Development does not have potential to result in significant changes to the character typology, or the landscape or aesthetic and perceptual qualities of the character area.

10.59 Therefore changes to county landscape character as a result of change of the EIA Site Boundary from agricultural land use to a mixed use built development with open spaces and planting, within Hampshire Landscape Type Lowland Mosaic Heath Associated and Hampshire Landscape Character Area 2D Romsey to Eastleigh Wooded Lowland Mosaic, are not considered to be significant and will not be considered further in the EIA or reported in the ES.

Potential for change to county level [HICA] townscape character types as a result of change to the Site from agricultural land use to a mixed use built development with open spaces and planting [Hampshire Townscape Character Types 08: Residential Post 1945 – Present (Houses Bungalows and up to 3 storey flats), 13: Business Park 1980 – Present, TCT 27: Open Space (Green Corridor/Area), 11: Large Retail 1950 - Present and 15: Industrial – 1945- Present]

10.60 Change of the EIA Site Boundary from agricultural land to mixed use development has the potential to give rise to adverse landscape effects. The EIA Site Boundary lies adjacent to four Hampshire townscape character types, however, the Proposed Development would not change the fundamental character typologies of these areas.

10.61 Therefore changes to county townscape character types as a result of change of the EIA Site Boundary from agricultural land use to a mixed use built development with

open spaces and planting, within Hampshire Townscape Character Types 08: Residential Post 1945 – Present (Houses Bungalows and up to 3 storey flats), 13: Business Park 1980 – Present, TCT 27: Open Space (Green Corridor/Area), 11: Large Retail 1950 - Present and 15: Industrial – 1945- Present, are not considered significant and will not be considered further in the EIA or reported in the ES.

Potential for change to borough level [TVBC] landscape character type as a result of change to the Site from agricultural land use to a mixed use built development with open spaces and planting [TVBC LCT 2 Pasture and Woodland Associated with Heathland]

10.62 Change of the EIA Site Boundary from agricultural land to mixed use development has the potential to give rise to adverse landscape effects. The Proposed Development would not change the fundamental character typology of this area.

10.63 Therefore, changes to borough landscape character type as a result of the change of the EIA Site Boundary from agricultural land use to a mixed use built development with open spaces and planting, within TVBC LCT 2 Pasture and Woodland Associated with Heathland, are not considered significant and will not be considered further in the EIA or reported in the ES.

Effects Likely/Significant

10.64 Table 10.2 outlines the effects (and associated receptor[s]) that are considered to be likely and significant and therefore will be assessed within the EIA and reported in the ES.

Table 10.2: Potentially Significant Effects and Sensitive Receptors

Effect	Receptor(s)	Applicable Stage(s)
Effects on the landscape character of the Site	Character of the Site	Operation (integrating associated construction stage effects)
Effects on the landscape elements and features of the Site	Site landform Large scale arable fields of the Site Hedgerows and trees within and around the Site	Operation (integrating associated construction stage effects)
Effects on the aesthetic and perceptual aspects of the Site	Simplicity with some diversity from adjacent settlement and woodland edges Generally enclosed nature of the Site Some tranquillity and remoteness but with influence of existing built form and movement	Operation (integrating associated construction stage effects)

Effect	Receptor(s)	Applicable Stage(s)
Direct and indirect effects on the Test Valley Borough landscape character area, within which the Site lies	TVBC LCA 2B North Baddesley to Chilworth Woodland Mosaic	Operation (integrating associated construction stage effects)
Indirect effects on Hampshire County townscape character areas adjacent to the Site	HICA TCA EAST07: Valley Park environs HICA TCA EAST10: Retail Park and Hampshire Corporate Park	Operation (integrating associated construction stage effects)
Effects on views from immediately east of the Site	Visual receptors using Hampshire Corporate Park [Viewpoint 15]. Vehicle users. Cyclists and wheeled users. Pedestrians. Workers.	Operation (integrating associated construction stage effects)
Effects on views from southeast of the Site, and from further east of the Site	Visual receptors using employment areas southeast of the Site, and using Bournemouth Road and Asda Supermarket east of the Site [Viewpoint 1]. Vehicle users. Cyclists and wheeled users. Pedestrians. Workers.	Operation (integrating associated construction stage effects)
Effects on views from the existing farm access track, due to the introduction of Proposed Development to the Site	Visual receptors using the existing farm access track which leads to Footpath 050/7/1 [Viewpoint 2]. Cyclists and wheeled users. Pedestrians.	Operation (integrating associated construction stage effects)
Effects on views from the Public Right of Way within and adjacent to the southern area of the Site	Visual receptors using Public Footpath 050/7/1 [Viewpoints 3, 4, 5, 6]. Recreational walkers.	Operation (integrating associated construction stage effects)
Effects on views from the Public Right of Way southwest of the Site	Visual receptors using Public Bridleway 050/6/2 [Viewpoint 6]. Recreational walkers. Horse riders. Cyclists and wheeled users.	Operation (integrating associated construction stage effects)

Effect	Receptor(s)	Applicable Stage(s)
Effects on views from existing settlement southwest of the Site	Visual receptors in the northern area of Chilworth Village [Viewpoint 6]. Residents.	Operation (integrating associated construction stage effects)
Effects on views from the Public Right of Way within and adjacent to the western area of the Site	Visual receptors using Public Bridleway 050/6/1 [Viewpoints 7, 8, 9]. Recreational walkers. Horse riders. Cyclists and wheeled users.	Operation (integrating associated construction stage effects)
Effects on views from the road/cycleway northwest of the Site	Visual receptors using Castle Lane and NCN Route 24 [Viewpoint 10]. Vehicle Users. Cyclists and wheeled users. Pedestrians.	Operation (integrating associated construction stage effects)
Effects on views from existing settlement northwest of the Site	Visual receptors north of Castle Lane [Viewpoint 10]. Residents.	Operation (integrating associated construction stage effects)
Effects on views from the road north and northeast of the Site	Visual receptors using Templars Way [Viewpoints 11, 12, 13, 14]. Vehicle Users. Cyclists and wheeled users. Pedestrians.	Operation (integrating associated construction stage effects)
Effects on views from existing settlement north and northeast of the Site	Visual receptors north and northeast of Templars Way [Viewpoints 11, 12, 13, 14]. Residents.	Operation (integrating associated construction stage effects)

Assessment Methodology of Effects Likely/Significant

10.65 The following background surveys/studies have been/will be completed.

Table 10.3: Background Surveys/Studies

Survey/Study/Analysis/Evaluation	Overview	Date of Completion
Completed		
Initial site visit and preliminary photography using mobile smart phone	Walking Bournemouth Road to the east of the EIA Site Boundary; the existing farm access track from Bournemouth Road; Public Footpath 050/7/1; Public Bridleway 050/6/1;	08/10/2025

Survey/Study/Analysis/ Evaluation	Overview	Date of Completion
	and the northern end of Public Bridleway 050/6/2; NCN Route 24 by Castle Lane; Templars Way to the north of the site; and the public footway through Hampshire Corporate Park.	
Pending		
Winter photography using digital SLR camera fitted with fixed focal length 50mm lens, from viewpoints agreed with TVBC.	Walking publicly accessible locations to take assessment photography, when deciduous vegetation has minimal leaf cover.	27/03/2026
Summer photography using digital SLR camera fitted with fixed focal length 50mm lens, from viewpoints agreed with TVBC.	Walking publicly accessible locations to take assessment photography, when deciduous vegetation has leaf cover.	15/05/2026

- 10.66 The main objectives of the assessment will be to establish the landscape and visual baseline and associated receptors that may be impacted by the Proposed Development, and to determine whether any of the resultant effects are significant. The assessment will concentrate on those baseline receptors within the study area that are anticipated to incur significant effects.
- 10.67 The full methodology for this Chapter is provided in Appendix 10.1 Methodology for Assessing Landscape and Visual Effects. This is based upon the following:
- Guidelines for Landscape and Visual Impact Assessment (GLVIA3)¹²⁷;
 - An Approach to Landscape Character¹²⁸;
 - Technical Guidance Note (TGN) 06/19 Visual Representation of Development Proposals,¹²⁹

¹²⁷ The Landscape Institute and Institute of Environmental Management and Assessment (2013) Guidelines for Landscape and Visual Impact Assessment (GLVIA3) Third Edition. [Accessed: November 2025].

¹²⁸ Natural England (October 2014) An Approach to Landscape Character Assessment. Available at: <https://www.gov.uk/government/publications/landscape-character-assessments-identify-and-describe-landscape-types>. [Accessed: November 2025].

¹²⁹ Landscape Institute Technical Guidance Note (TGN 06/19) (September 2019) 'Visual Representation of Development Proposals'. Available at: https://landscapeinstitute.org/wp-content/uploads/2019/09/LI_TGN-06-19_Visual_Representation-1.pdf. [Accessed: November 2025].

- Technical Guidance Note 02/21 Assessing landscape value outside national designations¹³⁰; and
 - Technical Guidance Note 01/24 'Notes and Clarifications on GLVIA3'¹³¹.
- 10.68 GLVIA3 states (para. 1.1) that "Landscape and Visual Impact Assessment (LVIA) is a tool used to identify and assess the significance of and the effects of change resulting from development on both the landscape as an environmental resource in its own right and on people's views and visual amenity." It goes on to state (para. 1.3) that "LVIA may be carried out either formally, as part of an Environmental Impact Assessment (EIA), or informally, as a contribution to the 'appraisal' of development proposals and planning applications. Both are important and the broad principles and the core of the approach is similar in each case". Furthermore, LVIA applies to all projects that could require a formal EIA and is carried out within the framework of the European Union EIA Directive and United Kingdom Country Regulations, together with guidance documents produced by government and professional bodies. At paragraph 2.23, GLVIA3 states that "Professional judgement is a very important part of LVIA."
- 10.69 The process followed will conform to the recommendations of GLVIA3 as well as the landscape assessor's own professional experience, focusing on likely significant effects. This will allow the determination of the key residual impacts resulting from the Proposed Development.
- 10.70 The study area is illustrated on Figure 10.1 Landscape Related Designations Plan. In line with paragraph 5.2 of GLVIA 3, the study area includes "the site itself and the full extent of the wider landscape around it which the proposed development may influence in a significant manner". To determine the study area for the Proposed Development a combination of desk top analysis of plans, aerial photographs and the nature of the Proposed Development was carried out, followed by a site assessment. The study area is larger than the potential area of visibility, for the purposes of providing landscape context. The study area may be further refined subject to consultation with the local planning authority on proposed representative viewpoints. Viewpoint photography will be undertaken and presented, considering the Landscape Institute's TGN 06/19.
- 10.71 The assessment will be carried out by an experienced Chartered Landscape Architect. All judgements will be discussed and agreed with a Chartered Landscape Architect in accordance with best practice and reviewed by another experienced Chartered Landscape Architect. The main objectives of the assessment will be to establish the landscape and visual baseline and associated receptors that may be impacted by the Proposed Development, and to determine whether any of the resultant effects are significant. The assessment will concentrate on those baseline receptors within the study area that are anticipated to incur significant effects.

¹³⁰ Landscape Institute Technical Guidance Note (TGN 02/21) (2021) Assessing landscape value outside national designations. Available at: <https://www.landscapeinstitute.org/technical-resource/assessing-landscape-value-outside-national-designations/>. [Accessed November 2025].

¹³¹ Landscape Institute (August 2024) Technical Guidance Note LITGN-2024-01 Notes and Clarifications on Aspects of Guidelines for Landscape and Visual Impact Assessment Third edition (GLVIA3). Available at: <https://www.landscapeinstitute.org/technical-resource/li-technical-notes/>. [Accessed November 2025].

- 10.72 The assessment will be based upon a desk top review of published landscape character assessments and a borough level landscape sensitivity study, Ordnance Survey (OS) maps and aerial photographs. It will also involve a number of thorough assessments of the EIA Site Boundary on the ground, the most recent of which were carried out in October and November 2025, and February 2026.
- 10.73 Landscape, as defined in the European Landscape Convention¹³², is “an area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors”, (Council of Europe, 2000). Landscape does not apply only to special or designated places, nor is it limited to countryside. Visual effects are the effects of change and development on the views available to people and their visual amenity. Visual receptors are the people whose views may be affected by the Proposed Development.
- 10.74 The assessment of likely significant effects to sensitive receptors will consider the sensitivity of the receptor (on a scale of high, medium, low and negligible) and the magnitude of change (on a scale of large, medium, small and negligible) to determine the level of effect on a scale of major, moderate, minor and negligible. Significant effects will be determined following this through professional judgment.
- 10.75 It is important to note that it is best practice in landscape and visual assessment to conclude that the introduction of built form to a green field site will result in adverse landscape and visual effects. However, notwithstanding this, it is possible that good design of the proposed building and landscaping could still create successful places with attractive scenic qualities. It will therefore be important to consider placemaking and design alongside the conclusions of the assessment.
- 10.76 Given the presence of the existing EIA Site Boundary within a defined settlement gap, the assessment will also include an additional section to consider this gap. This will take into account the ‘Eastleigh Criteria’. These criteria were first devised in 1998 by the Inspector for the Eastleigh Local Plan Inquiry, and they were subsequently quoted in a report prepared by the Office of the Deputy Prime Minister (ODPM) in 2001, titled Strategic Gap and Green Wedge Policies in Structure Plans: Main Report¹³³.
- 10.77 Fundamentally, the criteria recognise that the robustness of a gap depends on much more than the physical distance between settlements, or visibility between settlements. Instead, the key is a perception of separation, or a sense of leaving one place, travelling through an intermediate landscape, and then arriving somewhere different. The Local Plan Inspector recognised that this perception relies on an interplay of a number of potential factors, as follows:
- “Distance;
 - Topography;

¹³² Council of Europe Landscape Convention (ETS No.176), as amended by the 2016 Protocol (CETS No. 219). Available at: <https://www.coe.int/en/web/landscape> [Accessed November 2025].

¹³³ Office of the Deputy Prime Minister (January 2001) Strategic gap and green wedge policies in structure plans: main report. Available at: <https://new.sthelens.gov.uk/media/331756/cd-2239-odpm-strategic-gap-and-green-wedges-policies-in-structure-plans-2001-10.pdf>. [Accessed: November 2025]

- Landscape character/type;
- Vegetation;
- Existing uses and density of buildings;
- Nature of urban edges;
- Inter-visibility (the ability to see one edge from another);
- Intra-visibility (the ability to see both edges from a single point);
- The sense of leaving a place” [and arriving somewhere else].

Limitations and Assumptions

10.78 To ensure transparency within the EIA process, the following limitations and assumptions have been identified:

- The landscape and visual impact assessments will be based on tested methodology and professional judgements of a qualified landscape architect, with peer advice;
- The assessment of landscape and visual effects will be based on the assumption of construction works occurring across the whole Site simultaneously, and a completed development across the whole Site;
- Photography will be taken from publicly accessible locations only;
- The assessment of effects ‘without mitigation’ during operation will consider the ‘Year 1’ scenario, when landscape planting provides minimal to no landscape integration or containment, or visual screening. The assessment of residual effects ‘with mitigation’ during operation will consider the ‘Year 15’ scenario, when trees planted as 30-60cm transplants would have reached a height of between 7 and 8 metres, and shrubs would have reached a height of between 3 and 5 metres. An outline landscape and environmental/ecology management plan (LEMP) would be prepared as part of the outline planning application. It is expected that TVBC would include a condition on the planning permission for a full LEMP to be prepared, which should be in accordance with the outline LEMP.

11. Socio-Economics and Human Health

Technical Baseline

- 11.1 The majority of the EIA Site Boundary is located within the local authority of TVBC, with only access arrangements (S278 works) overlapping into the adjacent EBC area. Therefore, for the purposes of the Socio-Economics and Human Health assessment, as all built development associated with the Proposed Development is located within TVBC. The borough of Test Valley is therefore defined as the 'Local Impact Area'.
- 11.2 The county of Hampshire, which incorporates EBC, is defined as the 'Wider Impact Area' for the purposes of the assessment. As such, whilst direct on-Site impacts will therefore be attributable to the Local Impact Area of Test Valley, indirect impacts or impacts resulting from cross-boundary catchments (for example, in terms of employment, education and health) that could occur in the neighbouring borough of Eastleigh will be accounted for within the consideration of the Wider Impact Area.
- 11.3 The total resident population of Test Valley is c. 81,000. At 60% in both Test valley and the county of Hampshire, the proportion of residents who are of working age (aged 16-64)¹³⁴ is slightly lower than the national (63%) rate.
- 11.4 Over the 12 months to September 2025, the average economic activity rate amongst the working-age resident population of Test Valley (73%) was lower than the county (82%) and national (79%) rates¹³⁵. Working-age employment rates were also lower locally (71%) than in Hampshire (79%) and nationally (76%).
- 11.5 As of December 2025, there were c. 1,520 people claiming out-of-work benefits in Test Valley principally for the reason of being unemployed¹³⁶. Analysis of the Office for National Statistics (ONS) Jobseeker's Allowance (JSA) claimant data¹³⁷ – a subset of the overall claimant count presented above – indicates that 10 people were specifically seeking employment in construction-related trades in Test Valley in November 2025, rising to c. 150 across Hampshire.
- 11.6 The ONS' 2024 Business Register & Employment Survey (BRES) estimated that there were 61,450 workforce jobs in Test Valley¹³⁸. Key employment sectors in Test Valley include professional, scientific & technical industries, which accounts for 11% of local employment, slightly exceeding the county (9%) and national (10%) rates. The manufacturing and the transport & storage sectors are also well-represented in Test Valley, each accounting for 10% of local employment, exceeding their representation in Hampshire (respectively 7% and 5%) and nationally (also respectively 7% and 5%).

¹³⁴ ONS via Nomis (2025) Population estimates - local authority based by single year of age: 2024

¹³⁵ ONS via Nomis (2025) Annual Population Survey – July 2025 – June 2025.

¹³⁶ ONS via Nomis (2025) Claimant Count: November 2025.

¹³⁷ ONS via Nomis (2025) Jobseeker's allowance: November 2025.

¹³⁸ ONS via Nomis (2025) Business Register and Employment Survey: 2024.

- 11.7 Test Valley supported 3,500 jobs in the construction sector, equating to 6% of total employment locally, which is broadly in line with the sector's representation in Hampshire (6%) and nationally (5%).
- 11.8 A number of early years education providers are present in the locality of the EIA Site Boundary to the west of the settlement in Eastleigh. The closest providers are Mulberry Corner Nursery & Preschool (situated immediately north of the EIA Site Boundary), and Dragonflies Day Nursery (situated 0.5 miles travel distance to the north of the EIA Site Boundary). Further early years provision is available in the town of Eastleigh as well as in the settlement of Chilworth to the south of the EIA Site Boundary.
- 11.9 The closest primary school to the EIA Site Boundary are St Francis CofE Primary School in Chandlers Ford (c. 0.3 miles travel distance to the north of the EIA Site Boundary) with further provision including Nightingale Primary School in Eastleigh (c. 1.1 miles to the east) and Knightwood Primary School in Chandlers Ford (c. 1.4 miles to the north). Further provision is accessible from the EIA Site Boundary elsewhere in Chandlers Ford and Eastleigh. There is a degree of surplus capacity at each of the aforementioned schools (e.g. 21 available places at St Francis CofE Primary School, 44 available places at Nightingale Primary School and 15 available places at Knightwood Primary School), which is also reflective of wider provision in the locality.
- 11.10 The closest secondary schools to the EIA Site Boundary are The Toynbee School (c. 1.6 miles travel distance to the east of the EIA Site Boundary in Eastleigh) and Crestwood Community School (c. 2.1 miles to the east, also in Eastleigh). Capacity at each of these schools appears relatively constrained, with The Toynbee School operating at 44 places over its capacity of 1,050, and with Crestwood Community School having just 11 available places against its total capacity of 1,500.
- 11.11 There are a number of schools providing for Special Educational Needs (SEN) in Chandlers Ford and Eastleigh, including resourced provision within mainstream primary and secondary schools and dedicated Special Schools. For example, Hiltingbury Infant School in Chandlers Ford provides 12 SEN places for children of primary school age, and the aforementioned Crestwood Community School provides 8 secondary SEN places. Lakeside School in Chandlers Ford is a dedicated Special School with 97 places for children aged 10-16; the school currently has 100 pupils on roll, and is therefore operating slightly over capacity.
- 11.12 The NHS 'Find a GP' online search tool¹³⁹ identifies that the closest GP surgeries to the Site are St Francis Surgery and The Knightswood Surgery (c. operating in locations in close proximity to one another, 0.3 and 0.4 miles, respectively, travel distance to the north), with further provision existing elsewhere in Eastleigh. St Francis Surgery is a branch of Park Surgery (located in Eastleigh), and The Knightswood Surgery is a branch of North Baddesley Surgery, located in the nearby settlement of North Baddesley.
- 11.13 As outlined in the NHS Healthy Urban Development Unit (HUDU) guidance¹⁴⁰, the Royal College of GPs recommends that a ratio of one GP (assumed Full Time Equivalent

¹³⁹ NHS (2025) 'Find a GP' [Online]. Available at: <https://www.nhs.uk/service-search/find-a-gp>

¹⁴⁰ Healthy Urban Development Unit (2009) HUDU Planning Contribution Model: Guidance Notes

(FTE¹⁴¹) per 1,800 registered patients is a suitable benchmark to consider the capacity of primary healthcare facilities¹⁴². Data¹⁴³ suggests that both Park Surgery (inclusive of St Francis Surgery) and North Baddesley Surgery (inclusive of The Knightswood Surgery) are operating at a patient per GP ratio in excess of guideline benchmarks; respectively at c. 2,320 and 1,890 patients per FTE¹⁴⁴. This suggests that capacity is constrained to a greater degree at Park Surgery (inclusive of St Francis Surgery) than at North Baddesley Surgery (inclusive of The Knightswood Surgery).

11.14 The Government's Office for Health Improvement & Disparities (OHID) reports¹⁴⁵ on various indicators regarding health outcomes in Test Valley in comparison to regional and national benchmarks, a summary of which are presented below:

- Life expectancies for men (83.0 years) in Test Valley are higher than in wider Hampshire county (81.8) and nationally (79.5). Female life expectancies in the area (85.5) are also higher than the county (85.0) and national (83.6) averages.
- A higher proportion of adults are classified as overweight or obese in Test Valley (70%) than in Hampshire (66%) and England (65%). Childhood obesity is, however, slightly lower in Test Valley (where 31% of Year 6 children are obese) than in Hampshire (32%) and England as a whole (36%).
- A lower percentage of adults are physically active¹⁴⁶ in Test Valley (68%) than in Hampshire (71%), albeit the rates in both areas are slightly higher than in England as a whole (67%).
- As a wider determinant of health, the proportion of children in relative low-income families¹⁴⁷ in Test Valley (11%) is lower than the county (13%) and national (22%) rates.

Proposed Scope of Assessment

11.15 The below sets out the proposed scope of assessment based on an understanding of the characteristics of the Site, surrounding area and the Proposed Development (Chapter 4). Where environmental effects are considered unlikely to be 'significant', an appropriate evidence base has been provided to justify the 'scoping out' of these effects ensuring the EIA and ES only assess those effects considered 'likely' to be significant.

Effects Unlikely/Not Significant

11.16 The following effects are considered unlikely to be significant and therefore will not be considered further within the EIA or reported in the ES. A factual evidence base has

¹⁴¹ FTE is a unit measuring an employee's workload, where 1 FTE job equals a standard full-time position (e.g. 35-40 hours per week), allowing consolidation of full-time, part-time and other staff into a single, comparable number.

¹⁴² Note that this is only an indicative measure of healthcare capacity, and cannot account for Site-specific factors, such as the floorspace, age, quality and configuration of individual facilities.

¹⁴³ NHS Digital (2025) General Practice Workforce: November 2025

¹⁴⁴ Note that disaggregated data for branch surgery sites is not available.

¹⁴⁵ Office for Health Improvement & Disparities (2025). Local Authority Health Profiles: Test Valley.

¹⁴⁶ Defined as undertaking a minimum of 150 minutes of moderate physical activity (e.g. brisk walking; cycling for travel or leisure; playing individual or team sports; gym exercises; gardening) per week.

¹⁴⁷ 'Relative low-income households' defined as those with income below 60% of the median in that year.

been provided below to support this. Where mitigation has been used to inform this judgement, the identified mitigation has been captured within the PEMP provided in Appendix 2.1.

Social cohesion, inclusive design and access to community facilities

- 11.17 Developments should connect with existing communities (for example, through layouts and access points which avoid physical barriers and severance), whilst land use and spaces should encourage social interaction, taking into account principles of inclusive and age-friendly design.
- 11.18 The EIA Site Boundary currently consists predominantly of multiple arable fields, along with a small cluster of existing buildings associated with Velmore Farm. These buildings are proposed to be demolished as part of the Proposed Development, which will require the current users to relocate. However, given the limited scale, the Proposed Development will not result in the displacement of existing residential communities to an extent which is considered significant at the level of the wider settlement of Eastleigh and surrounds. The EIA Site Boundary's location close to the town of Eastleigh (adjoining the EIA Site Boundary to its north-east) and to the smaller settlement of Chilworth (adjoining the EIA Site Boundary to its south-west), will enable coherent integration with existing residential and commercial areas, and social infrastructure.
- 11.19 The Proposed Development will provide land for education purposes, land for employment / a community hub, as well as SANG, public open space, allotments and landscaping enhancements, which will be accessible to future residents of the Proposed Development and other potential users (such as workers, visitors and existing neighbouring communities). These uses should foster social interaction and provide a focal point for community activities.
- 11.20 New public realm will be implemented with a strong consideration of principles related to inclusive design, taking account of guidance¹⁴⁸ regarding best practice for ensuring that developments can be accessed and used by all in a way that effectively fosters social connections, recognising and accommodating differences in the way people use the built environment as a result of factors such as age and disability. The new public realm will therefore further support local social cohesion and accessibility. Additionally, off site highway works will provide new crossing points to facilitate accessibility between the Proposed Development and the wider locality.
- 11.21 Therefore, given the new on-site and existing local provision, social cohesion, inclusive design and access to community facilities for the Proposed Development's residents, workers, visitors and existing local communities is not considered to be significant and will not be considered further in the EIA or reported in the ES.

Crime reduction and community safety

- 11.22 Sites should be kept secure during construction to ensure that the potential for crime and anti-social behaviour is minimised. Site security arrangements during the

¹⁴⁸ Ministry of Housing, Communities and Local Government (2019) Planning Practice Guidance: Housing for older and disabled people – Inclusive Design (para 017)

construction stage will be in line with the requirements set out in the Construction (Design and Management) Regulations 2015¹⁴⁹.

- 11.23 Once operational, developments should incorporate design elements and site management measures to help 'design out' crime to help people feel secure, again, minimising the potential for crime and anti-social behaviour. The design of the Proposed Development will be informed by 'Secure by Design' principles and appropriate design, and site management measures (personnel and CCTV) will be implemented to ensure that the potential for crime and anti-social behaviour is minimised.
- 11.24 New lighting will be installed at the EIA Site Boundary access, along internal routes, within parking and servicing areas associated with the commercial uses, and around pedestrian pathways where required. All future lighting installations will be designed to ensure appropriate levels of illumination across the Site, avoiding dark spots and promoting a safe and welcoming environment. As confirmed in 'Lighting' (Chapter 5), artificial lighting will be implemented to ensure a safe environment for activities such as driving, cycling, and walking.
- 11.25 Therefore, crime reduction and community safety for the Proposed Development's residents, workers and visitors and existing local communities is not considered to be significant and will not be considered further in the EIA or reported in the ES.

Access to healthy food for the Proposed Development's residents, workers and visitors and existing local communities

- 11.26 Access to healthy and nutritious food can improve diet and prevent chronic diseases related to obesity. Healthy food options should be available and easily accessible to those using and working at new developments to enable and promote healthy lifestyles.
- 11.27 The Proposed Development will deliver new on-site allotments, which will provide opportunities for residents, and potentially members of the wider neighbouring community, to grow their own healthy food.
- 11.28 There are also a number of large supermarkets, including Asda and Aldi located in Eastleigh (c. 0.6 miles travel distance to the east of the Site in Eastleigh) which can be accessed by the new residents of the Proposed Development.
- 11.29 Therefore, access to healthy food for the Proposed Development's residents, workers and visitors and existing local communities is not considered to be significant and will not be considered further in the EIA or reported in the ES.

Access to training opportunities

- 11.30 Employment and income are key determinants of personal, societal socio-economic and physical and mental health, so access to training is key to ensuring people are able to access fulfilling future employment opportunities over the long term. New development can improve people's access to training opportunities through, for

¹⁴⁹ Secretary of State (2015) Construction (Design and Management) Regulations 2015.

example, delivering apprenticeships and other employment and training programmes during the construction stage and on-Site once operational.

- 11.31 Whilst the Proposed Development could deliver opportunities for people to access training (such as apprenticeships and/or placements during construction, and at on-Site employment uses, which will be dependent on construction contractors and the Proposed Development's future occupiers), it is considered that these are likely to comprise only a limited proportion of the total jobs supported during the construction and operational stages. Whilst a beneficial effect which could help meet local needs for apprenticeship and other training opportunities, their delivery is anticipated to be of a scale which would be unlikely to be significant.
- 11.32 Therefore, access to training opportunities for the labour force are unlikely to be significant and will not be considered further in the EIA or reported in the ES.

Access to employment opportunities during operation

- 11.33 As noted above, employment and income are key determinants of personal, societal socio-economic and physical and mental health. New development can create long-term job opportunities through provision of new commercial and other non-residential floorspace uses.
- 11.34 The Proposed Development will support new jobs through the provision of land for new employment / community hub uses and land for educational purposes. The exact nature and scale of job creation will be dependent on the occupation of the employment floorspace that is to be confirmed. However, whilst a beneficial effect which could contribute towards meeting local employment needs, the number of new operational stage jobs is anticipated to be of a scale which would be unlikely to be significant.
- 11.35 Therefore, employment opportunities during operation for the labour force are unlikely to be significant and will not be considered further in the EIA or reported in the ES.

Access to active travel and sustainable transport options

- 11.36 Active travel and sustainable travel options should be accessible to those living and working within, and otherwise using, new developments to enable and promote healthy and sustainable lifestyles, through facilitating physical activity and zero / low emissions transport, such as walking, cycling and public transport options.
- 11.37 The Proposed Development will incorporate new pedestrian and cycle access routes that will provide both access within the Proposed Development as well as wider connectivity across Templars Way and Bournemouth Road to local amenities. It is also envisaged that the PRoW and bridleway that run along the boundary of the Site will be retained on their current alignment and enhanced as part of the Proposed Development.
- 11.38 These measures and the EIA Site Boundary's accessible location will contribute to maximising the local residential population's access to active travel and sustainable travel options, which will be beneficial and facilitate enhancement of the health and wellbeing of future Site users (i.e. residents, visitors and workers). It is, however,

acknowledged that the number of people affected is likely to be relatively low at the scale of the total population in the local and wider impact areas. It is also noted that the topic of Transport and Accessibility has been considered in detail in this EIA Scoping Report (see Chapter 6).

- 11.39 Therefore, access to active travel and sustainable transport options for the Proposed Development's residents and existing local communities are unlikely to be significant and will not be considered further in the EIA or reported in the ES in the context of the topic of socio-economics and human health.

Access to open space and sports & recreation facilities

- 11.40 Providing secure, convenient and attractive open / green space, public amenity space and facilities for sports and leisure activities can lead to increased levels of physical activity and reduce levels of heart disease, strokes and other ill-health problems that are associated with both sedentary occupations and stressful lifestyles. There is also a growing body of evidence to suggest that access to open spaces and facilities for exercise is important in helping to maintain and / or improve mental health¹⁵⁰.
- 11.41 The Proposed Development will provide strategic green infrastructure and open space of a range of typologies and uses, both formal and informal. The Proposed Development will include a SANG located in the south western part of the EIA Site Boundary covering an extensive area that will provide recreational opportunities for future residents of the Proposed Development and for existing neighbouring communities, including walking routes. Across the remainder of the EIA Site Boundary, the Proposed Development will provide new publicly accessible open space and green infrastructure of a range of types, including play provision for children and young people.
- 11.42 A variety of open space and recreation provision already exists in the Site's surrounding area, including Fleming Park and Lakeside Country Park to the east of the EIA Site Boundary in Eastleigh. Existing local built provision includes Knightwood Leisure Centre (providing gym, sports hall, and tennis courts) and Place Leisure Centre (providing gym, swimming pools, fitness studios, sports halls, courts and soft play). Further open space and recreation provision is available elsewhere in Eastleigh and the surrounding area, to meet the full range of needs.
- 11.43 Therefore, access to open space & recreation facilities for the Proposed Development's residents, workers, visitors and existing local communities will not be considered further in the EIA or reported in the ES.

Effects Likely/Significant

- 11.44 Table 11.1 outlines the effects (and associated receptor[s]) that are considered to be likely and significant and therefore will be assessed within the EIA and reported in the ES.

¹⁵⁰ NHS Healthy Urban Development Unit (2019) Rapid Health Impact Assessment Tool (4th Edition)

Table 11.1: Potentially Significant Effects and Sensitive Receptors

Effect	Receptor(s)	Applicable Stage(s)
Employment generated during construction	Labour force	Construction
Provision of new housing	People requiring housing	Operation
Access to education facilities (early years, primary, secondary and SEN)	Local education facilities and pupils	Operation
Access to primary healthcare facilities	Local primary healthcare facilities and patients	Operation

Assessment Methodology of Effects Likely/Significant

11.45 The following background surveys/studies have been/will be completed.

Table 11.2: Background Surveys/Studies

Survey/Study/Analysis/Evaluation	Overview	Date of Completion
Completed		
Desk based study of publicly accessible socio-economic and human health data	Data obtained to understand prevailing socio-economic and human health conditions	February 2025
Pending		
Economic Impact Modelling	Modelling conducted to establish level of magnitude and inform significance of effect	February - April 2026
Further desk-based study of publicly accessible socio-economic and human health data	Data obtained to understand prevailing socio-economic and human health conditions	February - April 2026

11.46 Appropriate study areas will be defined, which – in the absence of formal guidance – will be based on an understanding of relevant local and wider economic geographies and a consideration of the extent to which socio-economic and human health effects are likely to be contained therein. A local impact area will be defined to cover the administrative area of Test Valley, with a wider impact area defined to cover the county of Hampshire. These are established geographical areas that also reflect existing patterns of labour force containment, recorded by the 2021 Census¹⁵¹.

¹⁵¹ ONS (2021) Census 2021

- 11.47 Best practice and methodological guidance will be drawn upon as appropriate to inform key elements of the assessment, including the Additionality Guide¹⁵² and Employment Density Guide¹⁵³ produced by the Homes and Communities Agency (HCA, now known as Homes England) and ISEP guidance for the effective scoping of human health¹⁵⁴ and determining significance in EIA¹⁵⁵. Net additional economic impacts will be presented, accounting for a range of economic additionality factors such as leakage¹⁵⁶, displacement¹⁵⁷ and multiplier effects¹⁵⁸.
- 11.48 The sensitivity of receptors will be determined by way of observed change in receptors locally compared to local, regional and national trends. Through observation of a receptor's capacity for change relative to wider comparator areas and / or national standards, the sensitivity of receptors locally will be observed. Consideration will also be given to the priority attributed to specific receptors in strategy and policy terms, particularly in the case of qualitative receptors and those where quantitative evidence is not available. The assignment of sensitivity will be based on professional judgement.
- 11.49 Once the sensitivity of the receptor has been identified, the change attributable to the Proposed Development will be benchmarked against the observed rate of change in the corresponding social, economic or health-related baseline. This will allow for a relative assessment of the magnitude of change that is attributable to the Proposed Development to be conducted.
- 11.50 The assessment of likely significant effects to sensitive receptors will consider the sensitivity of the receptor (on a scale of high, medium, low and negligible) and the magnitude of change (on a scale of large, medium, small and negligible) to determine the level of effect on a scale of major, moderate, minor and negligible. Significant effects will be determined using this assessment through professional judgment.

Limitations and Assumptions

- 11.51 To ensure transparency within the EIA process, the following limitations and assumptions have been identified:
- The assessment is desk-based and therefore reliant on data and information obtained from a variety of official published sources, such as the ONS's 2021 Census and BRES¹⁵⁹. No further verification of these sources will be undertaken (unless otherwise stated in the ES). Each data source has methodological

¹⁵² Homes & Communities Agency (2014. Additionality Guide (4th Edition)

¹⁵³ Homes & Communities Agency (2015) Employment Densities Guide (3rd Edition)

¹⁵⁴ Institute of Environment and Sustainability Professionals (ISEP), first published as Institute of Environmental Management and Assessment (IEMA) (2022) Effective Scoping of Human Health in Environmental Impact Assessment

¹⁵⁵ ISEP, first published as IEMA (2022) Determining Significance for Human Health in Environmental Impact Assessment

¹⁵⁶ The measure of the extent to which impacts (such as employment) will occur outside of the defined local and wider impact areas.

¹⁵⁷ The measure of the extent to which the Proposed Development will lead to existing businesses or employees within the defined local and wider impact areas relocating activities to the Proposed Development, as opposed to the attraction of new investment and employment arising from the Proposed Development.

¹⁵⁸ The measure of further economic activity (such as employment, expenditure or income) associated with supply chain expenditure, additional local income (from employment) and longer-term expenditure effects.

¹⁵⁹ ONS via Nomis (2025) Business Register and Employment Survey: 2024

limitations related to data collection and surveys which only represent the socio-economic context at a specific point in time;

- The future baseline will draw upon employment forecasts produced by Experian¹⁶⁰. There are known uncertainties to using such trend-based forecasts (especially in the current context of economic uncertainty), however, the use of such forecasts is considered appropriate for drawing conclusions about how the economy and labour market might change in the future; and
- Where necessary, professional and realistic assumptions will be made and applied, such as those relating to the economic additionality factors of leakage, displacement and multiplier effects.

¹⁶⁰ Experian (2025) Local Market Forecasts Quarterly: October 2025

12. Climate Change

Technical Baseline

12.1 This section presents the technical baseline conditions relevant to the Proposed Development, including both existing and future baseline information. The existing baseline describes the current environmental and operational conditions at the EIA Site Boundary, considering climate change resilience (CCR) and greenhouse gas (GHG) emissions. The future baseline presents anticipated changes over the operational life of the Proposed Development, reflecting projected climate trends, policy-driven decarbonisation, and local planning requirements.

Existing Baseline

Climate Change Resilience

- 12.2 Data on the climate baseline for the EIA Site Boundary has been derived from publicly available sources, including historical meteorological records from the Meteorological Office.
- 12.3 The Met Office Climate Data presents a set of 30-year averages covering the period 1961-2020 for a range of parameters. It also provides information about average monthly climate data for Southampton, Mayflower Park climate station (approximately 7.8 km south from the EIA Site Boundary) for the period 1991-2020¹⁶¹. Key monthly climate variables are summarised in Table 12.1.

Table 12.1: Average Monthly Climate Data for Southampton, Mayflower Park climate station

Month	Maximum Temperature (°C) 7.98	Minimum Temperature (°C)	Days of air frost (days)	Sunshine (hours)	Rainfall (mm)	Days of rainfall ≥1 mm (days)
January	8.78	3.16	6.65	63.35	89.37	12.47
February	9.11	2.96	6.41	82.71	63.86	10.08
March	11.51	4.26	2.71	125.07	56.01	9.66
April	14.69	6.11	0.85	181.57	52.27	9.48
May	18.02	9.23	0.00	215.49	47.37	7.70
June	20.57	11.96	0.00	211.69	56.90	7.78
July	22.63	13.91	0.00	223.78	44.01	7.73
August	22.51	13.97	0.00	205.80	58.90	8.45
September	20.12	11.56	0.00	151.96	60.45	8.89

¹⁶¹ Met Office (no date) Location-specific long-term averages. Available at: <https://www.metoffice.gov.uk/research/climate/maps-and-data/location-specific-long-term-averages/gcncxcwvr> [Accessed: 27 November 2025].

Month	Maximum Temperature (°C) 7.98	Minimum Temperature (°C)	Days of air frost (days)	Sunshine (hours)	Rainfall (mm)	Days of rainfall ≥1 mm (days)
October	15.90	9.15	0.50	112.70	92.55	11.82
November	12.02	5.73	2.09	76.26	99.93	12.80
December	9.29	3.50	6.91	55.33	96.94	12.71
Annual	15.46	7.99	26.12	1705.71	818.56	119.57

12.4 Climate data available for Southampton (Mayflower Park) shows annual average maximum and minimum temperatures of 15.46 °C and 7.99 °C respectively, both which are higher than the UK maximum and minimum temperatures (12.79 °C and 5.53 °C, respectively). The area has fewer days of air frost (26.12 days per year) than the UK annual average of 45.14 days. The annual average rainfall for the area is 818.56 mm, slightly lower than the national average of 869.60 mm.

12.5 The EIA Site Boundary contains several watercourses and drainage ditches, particularly in central and eastern areas, which discharge via multiple points along the EIA Site boundaries. Ditches from woodland areas to the south and west flow across the EIA Site Boundary, with at least three distinct discharge points along northern, north-eastern, and eastern boundaries. A southern boundary ditch also conveys flows through the EIA Site Boundary.

12.6 The Marl Brook, an Environment Agency (EA) Main River, receives flows from the east before directing them into Monks Brook, located approximately 1.4 km east. Flows from the north of the EIA Site Boundary discharge into an unnamed EA Main River, which also joins Monks Brook. According to the EA Flood Map for Planning, over 98-99 % of the EIA Site Boundary is classified as Flood Zone 1 (low probability of fluvial or tidal flooding), with limited higher-risk areas adjacent to existing watercourses.

Greenhouse Gas Emissions

12.7 The EIA Site Boundary is predominantly rural in character, with one farm building and horses present associated with Velmore Farm. It is not possible to estimate the operational emissions from the existing building at this stage, therefore, as a reasonable worst-case assumption, the EIA Site Boundary is considered to generate no operational energy or operational transport GHG emissions in its existing use.

12.8 Carbon sequestration from existent habitat types within the EIA Site Boundary was estimated using the Natural England¹⁶² and Woodland Carbon Code¹⁶³ data. The EIA Site Boundary is dominated by grassland and cropland, with scrubland and broadleaf woodland also identified. Based on 2024 baseline habitat data from the EIA Site Boundary, carbon sequestration has been estimated to be around 5.03 tCO₂e/year.

¹⁶² Natural England (2021) Carbon Storage and Sequestration by Habitat 2021 (NERR 094). Available at: <https://publications.naturalengland.org.uk/publication/5419124441481216> [Accessed: 03 December 2025].

¹⁶³ Woodland Carbon Code (2022) 3.3 Project Carbon Sequestration. Available at: via: <https://www.woodlandcarboncode.org.uk/standard-and-guidance/3-carbon-sequestration/3-3-project-carbon-sequestration> [Accessed: 03 December 2025].

- 12.9 Relevant historical data for the local area was reviewed using UK Government statistics (2005-2023). TVBC emitted 749.9 ktCO₂e and EBC emitted 494.8 ktCO₂e in 2023¹⁶⁴.

Future Baseline

Climate Change Resilience

- 12.10 Future climate projections for the EIA Site Boundary are derived from the Met Office through the UK Climate Projections 2018 website¹⁶⁵ and UK Climate Change Risk Assessment 2022¹⁶⁶. These provide probabilistic estimates of climate variables accounting for natural variability and modelling uncertainties.
- 12.11 The general climate trends for the UK, summarised within the UKCP18 Factsheet projections, indicate that at 2 °C of global mean warming:
- The largest warming in the UK will occur in the southeast England, where summer temperatures may increase another 3 to 4 °C relative to present day;
 - Median warming across the UK will be at least 1 to 2 °C throughout the year;
 - Winter cool days will warm by 1 to 1.5 °C across the UK, whilst temperatures on warmer winter days increase by less than 1 °C; and
 - In summer both hot and cool days will warm by 1.5 to 2 °C across England.
- 12.12 Under 4 °C of global mean warming, the projections show:
- Hot summer days will warm by 4.5 to 5 °C compared to present day (1981-2000), across much of southern England, possibly exceeding 5 °C in some locations;
 - Cooler summer days will warm by 4 to 4.5 °C across England and up to 5 °C in the southeast; and
 - Cool winter days will warm by 2.5 to 3 °C across the country.
- 12.13 Projected changes in precipitation include:
- Changes are uncertain, but suggest slightly wetter winters and drier summers, with summer drying more in the south (2 °C global warming);
 - Median winter precipitation increases by up to 20 % across the country (4 °C global warming); and

¹⁶⁴ UK Government (2023) UK local authority and regional carbon dioxide emissions national statistics 2005-2023. Available at: <https://www.gov.uk/government/statistics/uk-local-authority-and-regional-greenhouse-gas-emissions-statistics-2005-to-2023> [Accessed: 27 November 2025].

¹⁶⁵ Met Office (2018) UKCP data. Available at: <https://ukclimateprojections-ui.metoffice.gov.uk/ui/home> [Accessed: 03 December 2025].

¹⁶⁶ HM Government (2022) UK Climate Change Risk Assessment 2022. Available at: <https://assets.publishing.service.gov.uk/media/61e54d8f8fa8f505985ef3c7/climate-change-risk-assessment-2022.pdf> [Accessed: 03 December 2025].

- Median summer precipitation decreases most in the south with median reductions of up to 20 to 30 % across much of the England and Wales (4 °C global warming).
- 12.14 With respect to wind, wind speed projections remain uncertain due to natural climate variability, with limited confidence in regional extreme wind events.
- 12.15 With respect of humidity, UKCP18 projections indicate that climate change is expected to lead to an increase in humidity (a measurement of the amount of water vapour in the air).
- 12.16 The 2022 UKCP18 Factsheet updates also show the following changes by 2070 under a high emissions scenario:
- Hot summer day temperatures to increase by 3.8 °C to 6.8 °C;
 - The frequency of hot spells to increase from an 0.20 occurrences per year at present to 4.1 by 2070;
 - Summer precipitation is predicted to change by -45 % to +5 %, and winter precipitation by -3 % to +39 % (where a negative change indicates less precipitation, and a positive change indicates more precipitation);
 - Rainfall associated with an event that occurs typically once every 2 years to increase by 29 % (central estimate); and
 - A decrease in soil moisture during summers in the future, consistent with the reduction in summer rainfall.

Greenhouse Gas Emissions

- 12.17 National and regional GHG emissions are expected to continue declining, driven primarily by ongoing decarbonisation of the electricity grid, national carbon budgets, and wider sectoral decarbonisation, including transport, buildings and industry. As a result, the carbon intensity of energy consumption and transport activity within the region is likely to be lower in the future baseline than at present.
- 12.18 TVBC declared a climate emergency in 2019 and approved its first Climate Emergency Action Plan in 2020¹⁶⁷, with actions set to aid the Council becoming a carbon neutral organisation and to make the Borough itself carbon neutral. The TVBC Net Zero Carbon Advice Note (2024)¹⁶⁸ includes approaches to achieve net zero carbon new build and retrofitted homes, including lowering operational carbon and embodied carbon. EBC Climate and Environment Emergency Strategy outlines the council's commitment to achieve carbon neutrality by 2025 for the Council's own operations and functions and

¹⁶⁷ Test Valley Borough Council (2024) Climate Emergency Action Plan – Progress Update 2024. Available at: <https://testvalley.gov.uk/aboutyourcouncil/corporatedirection/environmentandsustainability/climate-emergency-action-plan> [Accessed: 08 January 2026].

¹⁶⁸ Test Valley Borough Council (2024) Net Zero Carbon Advice Note. Available at: <https://testvalley.gov.uk/aboutyourcouncil/corporatedirection/environmentandsustainability/net-zero-carbon-advice-note> [Accessed: 03 December 2025].

establish a plan for how the Borough of Eastleigh could achieve carbon neutrality by 2030.

- 12.19 Local planning policies for new development are progressively strengthening requirements for sustainable design, improved energy performance, and reduced operational carbon. This includes increased expectations for energy efficiency, the use of low-carbon heat, and integration of renewable energy technologies.
- 12.20 Overall, the future baseline is expected to be characterised by lower grid carbon intensity, greater low-carbon transport uptake, more stringent building performance standards, and ongoing reductions in area-wide emissions, consistent with local and national net-zero trajectories.

Proposed Scope of Assessment

- 12.21 The below sets out the proposed scope of assessment based on an understanding of the characteristics of the EIA Site Boundary, surrounding area and the Proposed Development (Chapter 4). Where environmental effects are considered unlikely to be 'significant', an appropriate evidence base has been provided to justify the 'scoping out' of these effects ensuring the EIA and ES only assess those effects considered 'likely' to be significant.

Effects Unlikely/Not Significant

- 12.22 The CCR assessment, in line with the ISEP EIA Guide to: Climate Change Resilience and Adaptation (2020)¹⁶⁹ has comprised the following:

- Identification of sensitive receptors; and
- Review of the current climate conditions in the assessment area and future trends for the construction and operational phases, using data from the Southampton, Mayflower Park Climate Station and UKCP18 projections; including analysis of changes in relevant climate variables.

- 12.23 The following effects in the CCR assessment are considered unlikely to be significant and therefore will not be considered further within the EIA or reported in the ES. A factual evidence base has been provided below to support this. Where mitigation has been used to inform this judgement, the identified mitigation has been captured within the PEMP provided in Appendix 2.1.

Increased precipitation (especially in winter) during construction on infrastructure receptors

- 12.24 Increased precipitation (especially in winter) has the potential to result in an increase in construction site flooding, damage to materials and erosion of stockpiles. This has the potential to result in disruption to infrastructure and building receptors such as residential buildings, roads, primary school, surface water drainage network and play areas, leading to program delays (e.g. pouring concrete, laying asphalt).

¹⁶⁹ ISEP (2020) Environmental Impact Assessment: Climate Change Resilience and Adaptation. Available at: <https://www.isepglobal.org/media/mabhqino/iema-eia-climate-change-resilience-june-2020.pdf> [Accessed: 27 November 2025].

12.25 A CEMP and SWMP would be prepared for the Proposed Development and would include measures such as:

- Material stockpiles will be adequately protected to avoid being washed or blown away from the immediate area. These would be constrained to dedicated protected areas;
- Appropriate storage, handling and management of construction wastes and materials to minimise damage by weather and reduce erosion, with due regard to the potential for mobilisation into surface drainage;
- Surface water would be prevented from entering excavations by using cut-off ditches;
- Deliveries would generally be coordinated with the construction programme to avoid storing large volumes of materials. However, any construction materials that are stored on-site would be protected to minimise damage by weather; and
- All storage facilities should be located outside the flood risk extents and on suitably designed and managed hardstanding, bunded where necessary, to prevent any accidental spillages from being released to ground.

12.26 In addition, the construction drainage system for the Proposed Development would be designed and managed to comply with BS 6031:2009¹⁷⁰, which sets out best practice for drainage control on construction sites. With these measures in place, increased precipitation (especially in winter) during construction on infrastructure receptors is not considered to be significant and will not be considered further in the EIA or reported in the ES.

Increased precipitation (especially in winter) during construction and operation on infrastructure and buildings receptors

12.27 The Surface Water Drainage Strategy will be designed to reduce the runoff rates relative to the existing site and would accommodate rainfall events up to and including rainfall events of 1 in 100-year storm + 45 % climate change event, which will reduce the risk to flooding under a future climate scenario.

12.28 Attenuation will be achieved through a series of proposed surface water attenuation areas, connected by a network of proposed swales and surface water sewers. This will convey surface water runoff through the EIA Site Boundary, reducing surface ponding, erosion and scour on roads and paved surfaces. On this basis, increased precipitation (especially in winter) during construction and operation on infrastructure and buildings both within and outside the EIA Site Boundary is not considered to be significant and will not be considered further in the EIA or reported in the ES.

Increased precipitation (especially in winter) during construction and operation on surface and groundwater and human health receptors

12.29 Increased precipitation (especially in winter) has the potential to cause an increase in contamination to nearby soils, and groundwater as a result of increased run-off

¹⁷⁰ British Standard Institution (2009) BS6031:2009 British Standard Code of Practice for Earthworks.

containing silt, debris and contaminants from the construction EIA Site Boundary entering the surface water network. It is anticipated that the CEMP would include pollution prevention measures such as:

- Regular maintenance of construction vehicles and plant.
- Refuelling construction vehicles suitably away from any water body.
- Ensuring spill kits are available in case of an accident and correct procedure is followed.
- Suitably locating above-ground storage tanks and temporary welfare facilities on designated areas of hardstanding away from potential surface water drainage routes.
- Storage of liquids such as degreasers, solvents, lubricants and paints in segregated, bunded enclosures.
- Ensuring any tanks storing significant volumes of oil on-Site have secondary bunding.
- Ensuring any construction drainage system is designed to and complies with the appropriate standards.
- Ensuring any stockpiles are suitably managed to ensure minimal surface runoff or windblown deposition of materials to local receptors.
- Locating the construction compound, storage and plant outside the flood risk extents.
- The requirement for a CEMP, including the measure above, would therefore address the management of surface water runoff and pollution during the construction stage.

12.30 Furthermore, all EIA Site Boundary works would be undertaken in accordance with the EA's Pollution Prevention Guidance Note 6 (PPG6)¹⁷¹.

12.31 It is also anticipated that an Emergency Incident Plan would be in place for the EIA Site Boundary to deal with potential spillages and/or pollution incidents. It is assumed that this would include the provision of on-site equipment for containing spillages, such as emergency booms and chemicals to soak up spillages.

12.32 It is anticipated that drain interceptors and Sustainable urban Drainage Systems (SuDS) would reduce the effect of oil and petrol from entering the water environment during operation of the Proposed Development.

¹⁷¹ Environment Agency (2012) PPG6 Construction and demolition sites: prevent pollution. Available at: <https://www.gov.uk/government/publications/construction-and-demolition-sites-ppg6-prevent-pollution> [Accessed: 13 January 2026].

- 12.33 Therefore, increased precipitation (especially in winter) during construction and operation on the environment and human health is not considered to be significant and will not be considered further in the EIA or reported in the ES.

Increased frequency of dry periods during construction and operation on green infrastructure receptors

- 12.34 An increase in the frequency of dry periods has the potential to affect the establishment of new habitats and resilience of new and existing green infrastructure, including habitats created as part of the Proposed Development, landscaping, and planting within the EIA Site Boundary.
- 12.35 Potential effects of climate change on biodiversity will be addressed through landscape planting proposals such as the SANG Management Plan for the Proposed Development. Planting within the EIA Site Boundary would prioritise native vegetation and trees and will consider the selection of species tolerant to a range of future climatic conditions, including periods of reduced or increased water availability. With appropriate species selection, planting design and maintenance regimes, increased frequency of dry or wet periods during construction and operation on green infrastructure is not considered to be significant and will not be considered further within the EIA and reported within the ES.

Increased frequency of dry periods during construction on infrastructure and building receptors

- 12.36 An increase in the frequency of dry periods has the potential to result in a reduction of water availability and supplies affecting the construction of the buildings and infrastructure. Water would be required for construction activities such as dust suppression and mixing cement and aggregate.
- 12.37 The CEMP would include measures to manage water consumption efficiently, including monitoring and target-setting to reduce water use during construction. Therefore, increased frequency of dry periods during construction on infrastructure and buildings is not considered to be significant and will not be considered further within the EIA and reported within the ES.

Increased frequency of extreme wind events during construction on human health and infrastructure receptors

- 12.38 An increase in the frequency of extreme wind events has the potential to result in damage to stockpiles, create windblown debris and disruption to construction activities. This could create unsafe conditions for EIA Site Boundary personnel and pedestrians, disrupt mobile crane operations and damage hoardings. The CEMP would include best practices for mobile crane operations, health and safety measures to ensure construction personnel are protected from wind conditions, and regular inspections and maintenance of hoardings and temporary structures. Therefore, increased frequency of wind events on human health and on-site infrastructure during construction is not considered to be significant and will not be considered further in the EIA or reported in the ES.

Increased frequency of extreme wind events during operation on human health, infrastructure and building receptors

12.39 The structural and architectural design would incorporate appropriate wind loading at the detailed design stage in accordance with relevant UK standards and codes of practice. This will ensure that buildings and permanent structures are designed to safely withstand anticipated storms and high wind conditions over their design life. Furthermore, given the low height of the proposed buildings (up to 15m), the potential for significant wind tunnelling or acceleration effects is considered low and is not expected to give rise to adverse wind microclimate conditions. Therefore, increased frequency of wind events on human health, infrastructure and buildings during operation is not considered to be significant and will not be considered further in the EIA or reported in the ES.

Increased summer temperatures during construction on human health receptors

12.40 An increase in summer temperature has the potential to result in additional health and safety risks for construction workers including heat stress, drought conditions, and increased dust generation. The CEMP would include measures such as:

- All works on-site would be undertaken in accordance with the provisions of the CDM Regulations 2015 to reduce risk of heat stress;
- A Health and Safety Plan would be produced detailing measures to reduce the risk of heat exhaustion such as wearing appropriate clothing and providing appropriate sheltered rest areas;
- Cutting, grinding, or sawing equipment only to be used with suitable dust suppression equipment techniques;
- Ensure adequate water supply for dust and particulate matter suppression (use recycled water where possible);
- Use enclosed chutes, conveyors, and covered skips, and minimising material drop heights;
- Ensure suitable cleaning material is always available to clean up dry spills using wet cleaning methods;
- Implementation of a Dust Management Plan (DMP);
- Undertaking daily EIA Site Boundary inspections and recording and taking action for all dust complaints;
- Planning the EIA Site Boundary layout to ensure dust generating activities are far from receptors;
- Installing solid barriers around dusty activities and storing materials and to ensure delivered materials are enclosed;
- Using water assisted dust sweepers and inspection of haul routes; and

- Removing materials that have a potential to produce dust from the EIA Site Boundary as soon as possible or cover stockpiles to prevent dust generation.

12.41 Therefore, increased summer temperatures during construction on human health receptors is not considered to be significant and will not be considered further in the EIA or reported in the ES.

Increased summer temperatures during operation on human health receptors

12.42 An increase in summer temperature has the potential to result in overheating and unsuitable conditions (e.g. discomfort for building occupants of the Proposed Development). Design will follow the cooling hierarchy, prioritising passive measures such as orientation, shading, ventilation, and fabric performance before consideration of active cooling systems. On this basis, increased summer temperatures during operation on human health receptors are not considered to be significant and will not be considered further in the EIA or reported in the ES.

Increased summer temperatures on construction activities (materials and processes)

12.43 Increased temperatures and prolonged heatwaves have the potential to disrupt construction activities. High ambient temperatures can accelerate concrete setting times, increasing the risk of cracking and reducing long-term strength if curing is not carefully managed. Asphalt can become overly soft during placement, affecting compaction and long-term performance. Heat stress may also reduce workforce productivity and increase health and safety risks, while construction plant and machinery may be more prone to overheating and mechanical failure.

12.44 The CEMP should include measures to manage the effects of elevated temperatures on construction materials, processes and the workforce. These could include consideration of mitigation measures such as:

- Scheduling concrete pours and asphalt laying during cooler periods of the day or adjusting mix designs to account for elevated ambient temperatures;
- Implementing enhanced curing regimes (e.g. use of curing compounds, damp hessian, or polythene sheeting) to manage concrete hydration under high temperatures;
- Monitoring ambient and material temperatures during critical construction activities and adjusting programmes accordingly; and
- Regular inspection and maintenance of plant and machinery to reduce the risk of overheating and mechanical failure.

12.45 With consideration of measures to reduce increased summer temperatures on construction activities secured through the CEMP, the potential effects of increased summer temperatures on construction activities are considered to be adequately managed. Therefore, the effects of increased summer temperatures on construction activities are not considered to be significant and will not be considered further in the EIA or reported in the ES.

Increased summer temperatures during operation on infrastructure (roads and pavements) receptors

- 12.46 Road infrastructure is vulnerable to extreme heat. Asphalt pavements may soften, leading to rutting, surface deformation and reduced skid resistance. Concrete pavements can expand under high temperatures, placing stress on joints and potentially causing slab buckling. Repeated exposure to elevated temperatures accelerates material ageing and fatigue, reducing overall durability and increasing lifecycle costs.
- 12.47 The following measures could be incorporated into the design and operational management of road and pavement infrastructure unless otherwise agreed with the LPA:
- The detailed design would consider the use of heat-resilient pavement materials, such as Stone Mastic Asphalt (SMA) or Hot Rolled Asphalt (HRA) mixes, which offer greater resistance to deformation under elevated temperatures; and
 - Joint design and slab dimensions for concrete pavements would give consideration for thermal expansion under projected future temperature scenarios (UKCP18 RCP8.5).
- 12.48 With heat-resilient materials considered at detailed design stage, the residual effect of increased summer temperatures on road and pavement infrastructure would not be significant and will not be considered further in the EIA or reported in the ES.

Increased summer temperatures during operation on infrastructure (equipment) and building receptors

- 12.49 Higher temperatures affect both the structural performance and operational efficiency of buildings. Thermal expansion can place additional stress on structural elements, façades and seals, potentially leading to material degradation. Cooling demand increases during prolonged heatwaves, placing strain on HVAC systems and contributing to higher energy consumption and operating costs. Buildings not designed for higher temperature thresholds may experience overheating, reducing occupant comfort and productivity.
- 12.50 The Energy Strategy will apply the energy hierarchy (Be Lean, Be Clean, Be Green) and the cooling hierarchy to the Proposed Development to reduce cooling demand. Specific measures considered could unless otherwise agreed with the LPA include:
- Material specifications for structural elements, façades and seals that account for thermal expansion under projected future temperature scenarios;
 - Ventilation and cooling of plant rooms taking account of projected impacts; and
 - HVAC systems sized and specified to accommodate projected increases in cooling demand under future climate scenarios.
- 12.51 With the energy and cooling hierarchies applied and HVAC and ventilation systems designed to accommodate future climate conditions, the residual effect of increased

summer temperatures on building and equipment receptors would not be significant and will not be considered further in the EIA or reported in the ES.

Increased summer temperatures during operation on human health and building receptors

12.52 Prolonged periods of high temperatures pose risks to human health and water security. Building occupants may experience overheating, which can exacerbate health conditions, particularly among vulnerable populations. Heatwaves also drive higher water demand while reducing available supply, increasing pressure on water supply systems and heightening the risk of shortages.

12.53 The overheating hierarchy should be applied during the design of the Energy Strategy. The following passive design measures would be considered for the residential elements:

- Building shape and detailing (e.g. external blinds) to minimise internal heat generation through energy-efficient design;
- Appropriate glazing-to-solid ratios with lower g-value glazing to reduce solar heat gains in summer;
- Openable windows to allow natural ventilation and cross-ventilation in apartments; and
- Mechanical ventilation with heat recovery (MVHR) as a secondary measure.

12.54 An Overheating Assessment will be prepared using thermal dynamic modelling as part of detailed design, i.e. in accordance with CIBSE TM59 (2017) guidance, using TM49 weather files. The assessment would also be run against future weather files for 2050 and 2080 to understand compliance with CIBSE TM59 limiting values under projected climate conditions and feed into the design of the building and cooling systems as part of an iterative process.

12.55 With the overheating hierarchy applied, a CIBSE TM59-compliant Overheating Assessment undertaken against current and future climate scenarios, and robust water efficiency measures secured through the Sustainability Statement, the residual effects of increased summer temperatures on human health and building receptors would not be significant and will not be considered further in the EIA or reported in the ES.

Increased summer temperatures during operation on human health and operational receptors

12.56 Increasing temperatures and decreasing summer rainfall impact on water security and pose risks to human health and site operations. The Sustainability Statement accompanying the planning application will include the following water efficiency measures:

- All commercial units designed to meet BREEAM Excellent standards for water efficiency; and

- All residential units designed to limit water consumption to no more than 110 litres per person per day in line with the Building Regulations Part G higher efficiency standard.

12.57 Therefore, the effect of increased summer temperatures on human health would not be significant and will not be considered further in the EIA or reported in the ES.

Effects Likely/Significant

12.58 Table 12.2 outlines the effects (and associated receptors) that are considered to be likely and significant and therefore will be assessed within the EIA and reported in the ES.

Table 12.2: Potentially Significant Effects and Sensitive Receptors

Effect	Receptor(s)	Applicable Stage(s)
GHG Emissions	Global atmosphere	Construction and Operation

Assessment Methodology of Effects Likely/Significant

12.59 The following background surveys/studies have been/will be completed.

Table 12.3: Background Surveys/Studies

Survey/Study/Analysis/Evaluation	Overview	Date of Completion
Pending		
GHG Emissions Assessment	Assesses the potential for significant effects associated with GHG emissions generated by the Proposed Development during the construction, operational and end-of-life phases.	2026

12.60 The approach and method of assessment that will be applied during the EIA is as follows.

Assessment Guidance

12.61 The Institute of Sustainability and Environmental Professionals (ISEP) Guide to Assessing Greenhouse Gas Emissions and Evaluating their Significance (2022)¹⁷² will be used in the EIA chapter. Additionally, the following guidance and tool will be utilised:

¹⁷² ISEP (2022) Environmental Impact Assessment: Guide to Assessing GHG Emissions and Evaluating Their Significance 2nd Edition. Available at: https://www.isepglobal.org/media/n5wdnley/2022_isep_greenhouse_gas_guidance_eia.pdf [Accessed: 27 November 2025].

- Planning Practice Guidance¹⁷³;
- Royal Institution of Chartered Surveyors (RICS) Whole Life Carbon Assessment for the built environment (2024)¹⁷⁴;
- The British Standards Institution's (BSI) Publicly Available Standard (PAS) 2080:2023 Carbon Management in Buildings and Infrastructure (2023)¹⁷⁵; and
- Logika local authority carbon budget tool¹⁷⁶.

Assessment Method

- 12.62 The climate change assessment criteria have been informed by ISEP Guidance, which differs slightly from those used in other assessments. The criteria used to determine whether an effect is significant has been outlined in subsequent sub-sections.
- 12.63 Significance criteria will be determined based on the sensitivity of the receptor, the magnitude of impact and the scale of the effect. In assessing significance, consideration will be given to the duration of the effect, its geographical extent and the application of professional judgement.

Greenhouse Gas Emissions

- 12.64 The GHG emissions assessment will be undertaken following the ISEP Guide: Assessing Greenhouse Gas Emissions and Evaluating their Significance. The GHG emissions will be measured in carbon dioxide equivalent (CO₂e), allowing comparison of emissions from various sources based on their global warming potential. The assessment will quantify GHG emissions associated with the construction and operational phases of the Proposed Development. In line with ISEP Guidance, emissions from the 'do something' scenario, i.e., the Proposed Development, will be compared with those for the 'do minimum' scenario representing the future baseline in the absence of the Proposed Development.
- 12.65 The assessment area for the GHG emissions assessment is not restricted by geographical scope but instead includes any increase or decrease in GHG emissions associated with the construction, operation and end-of-life phases of the Proposed Development. This includes the following:
- Construction GHG emissions – arising from the demolition of the existing buildings within the EIA Site Boundary, Proposed Development's carbon

¹⁷³ Department for Levelling Up, Housing and Communities (2019) Planning practice guidance. Available at: <https://www.gov.uk/government/collections/planning-practice-guidance> [Accessed: 27 November 2025].

¹⁷⁴ RICS (2024) Whole life carbon assessment for the built environment (2nd edition). Available at: https://www.rics.org/content/dam/ricsglobal/documents/standards/Whole_life_carbon_assessment_PS_Sept23.pdf [Accessed: 27 November 2025].

¹⁷⁵ BSI (2023) PAS 2080:2023 Carbon management in buildings and infrastructure. Available at: https://www.bsigroup.com/siteassets/pdf/en/insights-and-media/insights/brochures/pas_2080.pdf [Accessed 27 November 2025].

¹⁷⁶ Logika Group (2025) Introducing the Logika Local Authority Carbon Budget Tool. Available at: <https://www.aqconsultants.co.uk/news/september-2025/introducing-the-logika-local-authority-carbon-budg> [Accessed 27 November 2025].

footprint and transport of materials, plant and equipment and personnel to and from the EIA Site Boundary; and

- Operational emissions – resulting from the use of the Proposed Development and any shifts in transport modes/patterns which may occur. Such emissions include those for traffic using the Proposed Development, as well as the regional road network to gain access.
- End-of-life emissions - associated with the decommissioning, demolition, or repurposing of the Proposed Development at the end of its operational life.

12.66 The GHG assessment will consider impacts arising during the construction phase and end-of-life as well as the operational stage. For the purposes of the assessment, a design life of 60 years will be assumed, based on principles outlined in the RICS Standard. Where appropriate, any assumed overlap between the construction stage and the operational stage will be considered within the EIA process to ensure impacts and effects from ongoing construction work and the operational phase of the Proposed Development have been assessed and understood.

12.67 The anticipated sources of GHG emissions associated with all phases of the Proposed Development and included within the scope of the assessment are set out in Table 12.4. Emissions sources in Table 12.4 are presented in accordance with the PAS 2080 life-cycle modules below.

Table 12.4: Greenhouse Gas Emissions Assessment

PAS2080 Module	Description
A1-A3: Product stage	GHG emissions emitted during the extraction and manufacture of materials used in the construction works.
A4: Transport to the EIA Site Boundary	GHG emissions associated with vehicles transporting resources to and from the construction EIA Site Boundary.
A5: Construction – Installation process	GHG emissions from the direct on-site demolition and construction works and waste disposal.
	GHG emissions from on-site demolition works.
B1: Use of Proposed Development (In-Use Emissions)	GHG emissions associated with the in-use emissions arising from the life of a building and its components
B2-B5: Maintenance, repair and replacement of materials.	GHG emissions associated with the maintenance, repair and replacement of materials from all buildings.
B6: Energy consumption	GHG emissions from regulated energy consumption of the Proposed Development.
B7: Water consumption	GHG emissions associated with water consumption.
B8: User utilisation	GHG emissions associated with vehicles travelling to and from the Proposed Development.

PAS2080 Module	Description
Other: Land use change	GHG emissions associated with the change of land use as a result of the Proposed Development
C1-C4: End-of-life stage ¹⁷⁷	The electricity, fuel and water used in the deconstruction process, i.e., deconstruction, transport; waste processing for recovery; and disposal.

- 12.68 The GHG emissions assessment will provide a professional judgement on whether GHG emissions associated with the Proposed Development are likely to be significant in the context of the UK and buildings sector carbon budgets. Additionally, for a regional comparison, GHG emissions will be compared to the Logika carbon budgets, which have been estimated for local authorities based on the national carbon budgets and UK's balanced net zero pathway. The comparison with the TVBC and EBC carbon budgets will be up to 2047, reflecting the appropriate carbon budgets presented by the Logika Local Authority Carbon Budget Tool.
- 12.69 Although the tool's datasets extend to 2100, emissions beyond 2047 will not be included in the GHG assessment, as projections beyond the national net zero target are highly uncertain and fall outside the scope of current policy frameworks. Furthermore, the Proposed Developments carbon emissions will be estimated using current carbon emission factors, which reflect present-day energy and material intensities. Extending these assumptions beyond 2047 would not provide a realistic or meaningful comparison, as future emission factors are expected to decline substantially due to ongoing decarbonisation.
- 12.70 The assessment of likely significant effects to sensitive receptors will consider the sensitivity of the receptor (on a scale of high, medium, low and negligible) and the magnitude of change (on a scale of large, medium, small and negligible) to determine the level of effect on a scale of major, moderate, minor and negligible. The global climate system is the receptor for GHG emissions and is considered highly sensitive in accordance with ISEP Guidance.
- 12.71 The significance of the Proposed Development's net GHG effect will then be determined by considering the magnitude of its net GHG emissions effect in conjunction with whether it makes an appropriate contribution to the UK's net zero trajectory by 2050 for a project of its type and also using professional judgment.

Limitations and Assumptions

- 12.72 To ensure transparency within the EIA process, the following limitations and assumptions have been identified:

¹⁷⁷ To be compliant with RICS WLCA standard, all stages of the build asset including End-of-life stage needs to be assessed, even though the Proposed Development is intended to extend past the 60-year RSP. This is to present a reasonable worst-case scenario, even if it is understood in some cases that the project will be refurbished and never decommissioned.

Climate Change Resilience

- The assessment has relied on data provided by the Met Office and UKCP18. It has been assumed that these data sets have been reported correctly. Southampton, Mayflower Park Station is the closest climate station to the Proposed Development with available climate data.

Greenhouse Gas Assessment

- In the absence of Proposed Development specific information for any specific PAS 2080 module, GHG emissions associated with construction and/or operation will be calculated using OneClick LCA, along the areas, targets and KPIs set out in the RICS Whole Life Carbon Assessment Standard.
- GHG emissions associated with transport during construction and operation will be calculated using traffic information provided by the Air Quality technical discipline lead and benchmarks for operational energy. The Air Quality consultants will obtain information from the Transport consultants to be added into the Emissions Factor toolkit. This will calculate GHG emissions as well as NOx and PM10.
- GHG emissions resulting from the end-of-life stage and associated with deconstruction, transport, waste processing, and disposal will be calculated based on GHG emissions associated with the construction stage. As benchmarks are not available for emissions associated with deconstruction at the end-of-life stage, construction stage emissions present a worst case scenario.

13. Agricultural Land and Soils

Technical Baseline

- 13.1 The EIA Site Boundary is approximately 69 ha the majority of which is tenanted agricultural land in mixed use for grazing by cattle and horses. Non-agricultural land at the EIA Site Boundary comprises the farm house, yard, buildings and access road of Velmore Farm, Velmore Farm Cottages, a section of Templars Way in the east, and a small area of Austins Copse in the west. Hut Wood bounds the EIA Site Boundary to the south.
- 13.2 The topography of the EIA Site Boundary is broadly characterised by a central valley, with high altitudes of around 62.3m AOD in the south west and the lowest altitude approximately 33m AOD in the north east.
- 13.3 The valley directs water northward, along Monks Brook and into the catchment of the River Itchen. The valley itself, and the land surrounding drain in the south-east, are mapped as being at risk of flooding by rivers. There are additional pockets around the EIA Site Boundary that are subject to surface water flood risk¹⁷⁸, albeit, as stated within 'Water Environment' Chapter 5, 96 – 97% of the EIA Site Boundary is assessed to be at a very low risk from surface water flooding.
- 13.4 The climate at the EIA Site Boundary is warm and wet. There is no overriding climatic limitation to the agricultural land quality.
- 13.5 The Provisional Agricultural Land Classification (ALC) mapping¹⁷⁹ shows the EIA Site Boundary as poor quality Grade 4. However, most of the EIA Site Boundary was subject to detailed survey¹⁸⁰ in 1997 and classified the EIA Site Boundary as roughly equal proportions of Subgrade 3a (25.5 ha) and Subgrade 3b (27.8 ha), with a small area (0.7 ha) of Grade 4.
- 13.6 The bedrock geology mapped by the British Geological Survey¹⁸¹ belongs to the Bracklesham Group, comprising laminated clay, interbedded sand and clay, or fine- to medium-grained sand of the Wittering Formation across most of the EIA Site Boundary, and silty sand and sandy silt of the Earnley Sand Formation in the west and east. There are no mapped superficial deposits.
- 13.7 The mapped soil information¹⁸² shows the Wickham 3 association across most of the EIA Site Boundary, and the Holidays Hill association in the south. The main Wickham 3

¹⁷⁸ Environment Agency (2026). Flood map for planning. Available at: <https://flood-map-for-planning.service.gov.uk/map?seg=fz,fzpd&cz=442015.3,119392.6,16.278094> [Accessed: 03 December 2025]

¹⁷⁹ Natural England (2010). Agricultural Land Classification Map London and the South East Region (ALC007). Available at: <https://publications.naturalengland.org.uk/publication/141047?category=5954148537204736> [Accessed: 03 December 2025]

¹⁸⁰ FRCA (1997). Agricultural Land Classification detailed Post 1988 ALC survey, Chandler's Ford (Test Valley BLP Site 101) (ALCR18096). Available at: [Agricultural Land Classification detailed Post 1988 ALC survey, Chandler's Ford \(Test Valley BLP Site 101\) - ALCR18096](#)

¹⁸¹ British Geological Survey (2026). Geology Viewer. Available at: <https://geologyviewer.bgs.ac.uk/> [Accessed 03 December 2025]

¹⁸² Soil Survey of England and Wales (1984). Soils of South East England (1:250,000), Sheet 6.

soils are characterised by fine loamy or coarse loamy soil textures over slowly permeable clay subsoils. The soils are waterlogged for long periods in winter and are typically in Wetness Class (WC) IV or V.

- 13.8 The Holidays Hill association includes naturally very acid sandy soils over slowly permeable clay. Locally they may have humose or peaty topsoils. The profiles are seasonally waterlogged, in WC IV. Due to the inherent acidity, much of the land with these soils is under woodland¹⁸³.
- 13.9 The detailed survey undertaken identified considerable variability in the soils across the EIA Site Boundary, broadly including:
- Fine sandy silt loam, sandy loam or loamy fine sand topsoil over similar, medium clay loam, sandy clay loam or medium sandy loam upper subsoils, passing to sandy clay loam, heavy clay loam or sandy clay lower subsoils. The majority of lower subsoils are slowly permeable. These soils give rise to the land of Subgrade 3a quality, limited by wetness or occasionally droughtiness; and
 - Medium clay loam, medium silty clay loam or sandy clay loam topsoil over gleyed sandy clay loam or heavy clay loam upper subsoil, passing to slowly permeable clay or sandy clay. These soils give rise to land of Subgrade 3b quality, limited by wetness.
- 13.10 The land of Grade 4 quality is limited by gradient, with slope measurements exceeding 11°.

Proposed Scope of Assessment

- 13.11 The below sets out the proposed scope of assessment based on an understanding of the characteristics of the EIA Site Boundary, surrounding area and the Proposed Development (Chapter 4). Where environmental effects are considered unlikely to be 'significant', an appropriate evidence base has been provided to justify the 'scoping out' of these effects ensuring the EIA and ES only assess those effects considered 'likely' to be significant.

Effects Unlikely/Not Significant

- 13.12 The following effects are considered unlikely to be significant and therefore will not be considered further within the EIA or reported in the ES. A factual evidence base has been provided below to support this. Where mitigation has been used to inform this judgement, the identified mitigation has been captured within the PEMP provided in Appendix 2.1.

Loss of agricultural land during operation

- 13.13 All of the agricultural land will cease to be in agricultural use at commencement of the construction stage and will be permanently lost to development. There will be no further loss of agricultural land in the operational stage.

¹⁸³ LandIS (2025). Soils Guide. Available at: https://www.landis.org.uk/soilsguide/mapunit_list.cfm [Accessed 03 December 2025]

- 13.14 Therefore, loss of agricultural land in the operational phase is not considered to be significant and will not be considered further in the EIA or reported in the ES.

Loss of or damage to soil resources during operation

- 13.15 All disturbance to the soil resource will occur in the construction stage of the Proposed Development. There is not anticipated to be further disturbance through the operational stage.

- 13.16 Therefore, loss of or damage to soil resources in the operation stage is not considered to be significant and will not be considered further in the EIA or reported in the ES.

Effects Likely/Significant

- 13.17 Table 13.1 outlines the effects (and associated receptor[s]) that are considered to be likely and significant and therefore will be assessed within the EIA and reported in the ES.

Table 13.1: Potential Likely Significant Effects and Sensitive Receptors

Effect	Receptor(s)	Applicable Stage(s)
Loss of agricultural land	Agricultural land, including that of best and most versatile (BMV) quality	Construction
Loss of or damage to soil resources	Soil resources	Construction
Loss of farm viability	Agricultural landowner and/or occupier	Construction

Assessment Methodology of Effects Likely/Significant

- 13.18 The following background surveys/studies have been/will be completed.

Table 13.2: Background Surveys/Studies

Survey/Study/Analysis/ Evaluation	Overview	Date of Completion
Completed		
Detailed ALC and soil resources survey ¹⁸⁴	Statement of existing detailed survey data, as presented above in the Technical Baseline	April 1997
Pending		

¹⁸⁴ FRCA (1997). Agricultural Land Classification detailed Post 1988 ALC survey, Chandler's Ford (Test Valley BLP Site 101) (ALCR18096). Available at: [Agricultural Land Classification detailed Post 1988 ALC survey, Chandler's Ford \(Test Valley BLP Site 101\) - ALCR18096](#)

Survey/Study/Analysis/ Evaluation	Overview	Date of Completion
Farm impact assessment	Assessment of the impact on the viability of the residual farm holding/business	2026

- 13.19 The study area extends to all of the agricultural land within the EIA Site Boundary. The agricultural land and soil baseline has been established through existing survey data. Although the data was obtained in 1997, as the ALC considers the long-term inherent characteristics of agricultural land, the original findings will remain applicable.
- 13.20 Agricultural land in England and Wales is graded between 1 and 5, depending on the extent to which physical or chemical characteristics impose long-term limitations on agricultural use. The principal physical factors influencing grading are climate, site conditions and soil which, together with interactions between them, form the basis for classifying land into one of the five grades.
- 13.21 Grade 1 is excellent quality agricultural land with very minor or no limitations to agricultural use. Grade 2 is very good quality agricultural land, with minor limitations which affect crop yield, cultivations or harvesting. Grade 3 land has moderate limitations which affect the choice of crops, timing and type of cultivation, harvesting or the level of yield, and is subdivided into Subgrade 3a (good quality land) and Subgrade 3b (moderate quality land). Grade 4 is poor quality agricultural land with severe limitations which significantly restrict the range of crops and/or level of yields. Grade 5 is very poor quality land, with very severe limitations which restrict use to permanent pasture or rough grazing.
- 13.22 Land which is classified as Grades 1, 2 and 3a in the ALC system is defined in Annex 2 of the National Planning Policy Framework (NPPF¹⁸⁵) as best and most versatile (BMV) agricultural land. The sensitivity of agricultural land reflects the grading within the ALC system, as determined from the surveys already undertaken.
- 13.23 The sensitivity of the soil resource is primarily determined by the texture as this affects the susceptibility of the soil to damage, such as smearing or compaction, when being handled. The texture is established from the surveys already undertaken.
- 13.24 The sensitivity of the farm holding is assessed according to the spatial relationship between the farm operations and infrastructure, as well as the degree of flexibility within normal operations. Information will be sought from the landowner/occupier to clarify the existing operations and aid the assessment of sensitivity.
- 13.25 The assessment of likely significant effects to sensitive receptors will consider the sensitivity of the receptor (on a scale of high, medium, low and negligible) and the magnitude of change (on a scale of large, medium, small and negligible) to determine

¹⁸⁵ Ministry of Housing, Communities and Local Government (2024). National Planning Policy Framework. Available at: <https://www.gov.uk/government/publications/national-planning-policy-framework--2>

the level of effect on a scale of major, moderate, minor and negligible. Significant effects will be determined following this through professional judgment.

- 13.26 The criteria to be used will follow the same principles to those established in IEMA (now ISEP) guidance¹⁸⁶. The sensitivity of the agricultural receptors is determined as follows in Table 13.3.

Table 13.3: Sensitivity Criteria for Agricultural Land, Soil Resources and Farm Holdings

Sensitivity	Agricultural Land	Soil Resources	Farm Holding
High	Grades 1 and 2	Peat soils	Farm types in which the operation of the enterprise is dependent on the spatial relationship of land to key infrastructure, and where there is a requirement for frequent and regular access between the two, or dependent on the existence of the infrastructure itself
Medium	Subgrade 3a	Soils with high clay and silt fractions (clays, silty clays, sandy clays, heavy silty clay loams and heavy clay loams)	Farm types in which there is a degree of flexibility in the normal course of operations
Low	Subgrade 3b	Medium-textured soils (silt loams, medium silty clay loams, medium clay loams and sandy clay loams)	Off-lying areas of commercial land and non-commercially farmed land
Negligible	Grades 4 and 5	Soils with a high sand fraction (sands, loamy sands, sandy loams and sandy silt loams)	None

- 13.27 The magnitude of change to each receptor will be determined as shown in Table 13.4 below.

¹⁸⁶ IEMA (2022) A New Perspective on Land and Soil in Environmental Impact Assessment

Table 13.4: Magnitude of Change Criteria for Agricultural Land, Soil Resources and Farm Holdings

Magnitude	Agricultural Land	Soil Resources	Farm Holding
Large	Development would directly lead to the loss of over 50 ha of agricultural land	The soil displaced from development is unable to fulfil one or more of the primary soil functions	Development results in the loss of the tenanted farm holding or renders the residual land holding non-viable
Medium	Development would directly lead to the loss of between 20 ha and 50 ha of agricultural land	The soil displaced from development mostly fulfils the primary soil functions off-site or has a reduced capacity to fulfil the primary functions on site	Development results in changes being required to the management of the residual farm holding in order that it can remain viable
Small	Development would directly lead to the loss of between 5 ha and 20 ha of agricultural land	The soil displaced from development mostly fulfils the primary soil functions on-site	Development does not affect the ongoing management of the residual land
Negligible	Development would directly lead to the loss of less than 5 ha of agricultural land	The soil retains its existing functions on-site	No impact on the farm holding

Limitations and Assumptions

13.28 To ensure transparency within the EIA process, the following limitations and assumptions have been identified:

- The baseline ALC and soil survey data have not been verified by repeated surveys and are assumed to remain a robust and accurate representation of site conditions; and
- The two small field parcels south of the access track from Templars Way to the farmstead, and the field parcel in the south west, were not included in the original surveyed area. A worst-case scenario approach will be adopted for this assessment, whereby the fields, which collectively extend to around 6.2ha, are assumed to be of Subgrade 3a quality.

14. Approach to the Assessment of Cumulative Effects

Overview

- 14.1 This chapter establishes the methodology for the assessment of cumulative effects arising from the Proposed Development.
- 14.2 The EIA Regulations, through Schedule 4, Paragraph 5e and Regulation 4, Paragraph 2, requires the consideration of the culmination of effects with other “existing and/or approved projects”, as well as the interaction between effects identified at the project level.
- 14.3 To accord with the EIA Regulations and best practice guidance, the following types of cumulative effects will be considered within the EIA:
- Effect interactions (to accord with Regulation 4, Paragraph 2): the interactions and combination of environmental effects of the Proposed Development affecting the same receptor, either within the Site or in the local area; and
 - In-combination effects (to accord with Schedule 4, Paragraph 5(e)): the interaction and combination of environmental effects of the Proposed Development with other existing or approved project (s) affecting the same receptor (hereinafter referred to as ‘Cumulative Projects’).

Assessment Methodology

- 14.4 There is no widely accepted current methodology or best practice for the assessment of cumulative effects for projects under The Town and Country Planning (EIA) Regulations 2017 (as amended). However, it is acknowledged that guidance on the approach to the assessment of in-combination cumulative effects for projects that fall under the Nationally Significant Infrastructure Project (NSIP) regime has been issued by the Planning Inspectorate¹⁸⁷. However, as this is focused on NSIPs, it is not necessarily applicable to all projects/sectors.
- 14.5 Given this, the proposed assessment methodology set out below is based on the principles of the Planning Inspectorate guidance, an understanding of the receptors to be assessed through the ES, the nature of the Proposed Development, and professional judgement drawing on previous experience and knowledge at Turley.
- 14.6 The assessment of cumulative effects, for both effect interactions and in-combination effects, will be largely qualitative in nature. For some technical topics, quantitative data may be available (e.g. where modelling work is undertaken), facilitating a quantitative

¹⁸⁷ Nationally Significant Infrastructure Projects: Advice on Cumulative Effects Assessment (2024). Available at: <https://www.gov.uk/guidance/nationally-significant-infrastructure-projects-advice-on-cumulative-effects-assessment#full-publication-update-history> (Accessed 11.02.26)

analysis of cumulative effects. Where quantitative analysis is possible, it will be fully detailed within the assessment in the ES.

- 14.7 In cases where information is not available, assumptions will be made based on professional judgement and clearly stated alongside any uncertainty as part of the assessment.

Effect Interactions

- 14.8 The assessment of effect interactions will follow a two-stage process, as follows.

Step 1 – Identification of potential effect interactions

- 14.9 The assessment of effect interactions will consider the changes from baseline condition at common sensitive receptors, because of the Proposed Development.

- 14.10 Common sensitive receptors will be those that are assessed within two or more technical effects assessments provided within the ES. The assessment will be focused on residual effects only (i.e. following the implementation of scheme specific mitigation).

- 14.11 In order to identify where a potential common receptor is present, the receptors assessed through the ES will be categorised into the 'factors' / 'receptor groups' (termed 'receptor categories') outlined in Regulation 4, Paragraph 2 (and expanded on in Schedule 4, Paragraph 4) of the EIA Regulations. These are as follows:

- Population and human health.
- Biodiversity (for example fauna and flora).
- Land (for example land take).
- Soil (for example organic matter, erosion, compaction, sealing).
- Water (for example hydromorphological changes, quantity and quality).
- Air.
- Climate (for example greenhouse gas emissions, impacts relevant to adaptation).
- Material assets.
- Cultural heritage, including architectural and archaeological aspects.
- Landscape

- 14.12 A matrix of residual effect interactions will be formulated in the ES corresponding to the construction and operational stages of the Proposed Development.

- 14.13 The threshold for inclusion within the matrices will be set at a 'minor' level of effect as this is considered to address the potential for a number of residual effects that are not necessarily considered to be 'Significant' in isolation to become 'Significant' when they are considered collectively on a common sensitive receptor.

- 14.14 Where, through the application of the matrices, potential effect interactions are not identified, in that no specific common receptor(s) is identified, then it will be concluded that there are no effect interactions.
- 14.15 Where potential effect interactions are identified, a qualitative assessment will then be undertaken for the relevant receptor categories through Step 2 below.

Step 2 – Qualitative appraisal

14.16 The qualitative assessment will include the following:

- Clear identification of specific receptor(s) considered for each effect ‘contributing’ to a potential effect interaction to understand the common receptor (and their attributes, such as location etc.).
- An appraisal where there are specific common receptors, considering.
 - Magnitude of change (or impact) of each residual effect;
 - Sensitivity (or value, importance, etc.) of the receptor / receiving environment to change;
 - Duration (of the effects individually and collectively utilising the short / medium / long-term criteria set out in Chapter 2) and reversibility of the effect;
 - If the effects are temporary and / or permanent;
 - If the effects are experienced / occur concurrently or sequentially; and / or
 - The geographical / spatial extent of the individual effects.

14.17 An overall qualitative assessment of the cumulative effects on the identified receptor categories will; then be made using the information contained within this ES and supporting appendices in Volume 2 (where appropriate), and professional judgement.

14.18 Where possible, a conclusion on effect interactions will be provided discussing the likelihood of the effect interactions being ‘Significant’ or ‘Not Significant’.

In-Combination effects

14.19 The assessment of potential in-combination effects will be undertaken using the methodology outlined below.

Step 1: Identification and evaluation of Projects for Consideration

14.20 In order to identify relevant projects (referred to as ‘Cumulative Projects’) that could give rise to in-combination effects within the Proposed Development, a review of the following sources has been undertaken:

- TVBCs online register of projects¹⁸⁸;

¹⁸⁸ <https://view-applications.testvalley.gov.uk/online-applications/>

- EBCs online register of projects¹⁸⁹;
- Landstack map function to identify current and historic planning applications from 1970¹⁹⁰;
- Planning Inspectorate online register of projects¹⁹¹;
- Transport and Works Order Act online register of projects¹⁹²;
- Parliament Hybrid Bills online register¹⁹³.

14.21 In line with the EIA Regulations, this search has focused on projects and therefore is not inclusive of sites allocated within local plans, core strategy documents or supplementary planning documents.

14.22 In line with Planning Inspectorate advice, criteria and professional judgment have been used to determine whether to include or exclude projects from further assessment (i.e. apply proportionality), informed by aspects such as temporal scale, nature of development and other factors.

14.23 As such, the search has been focused on projects within 5km of the EIA Site Boundary, acknowledging the maximum extent of likely receptors and nature of effects to be reported within the ES.

14.24 The following additional criteria has also been used to define the list of Cumulative Projects:

- Applications dating from January 2020 onwards. It is anticipated that applications prior to this date will already have been built out (and therefore form part of the baseline) and / or where subsequent applications have been submitted these would be captured within the search dates;
- Applications that have been submitted, consented/granted planning permission, or part implemented;
- Applications that have been refused but are subject to an undetermined appeal;
- Projects of a pertinent scale, which has been determined using professional judgment but informed by their scale¹⁹⁴, perceived impact, or complexity, and are present near the Site.

¹⁸⁹ <https://planning.eastleigh.gov.uk/s/public-register>

¹⁹⁰ Landstack is an interactive mapping tool that displays all planning applications submitted to local planning authorities and automatically updates on a weekly basis.

¹⁹¹ <https://infrastructure.planninginspectorate.gov.uk/projects/register-of-applications/>.

¹⁹² <https://www.gov.uk/government/collections/twa-inspector-reports-and-decision-letters>.

¹⁹³ <https://www.parliament.uk/business/bills-and-legislation/current-bills/hybrid-bills/>.

¹⁹⁴ Scale has been based on a judgement, but in part informed by the definition of a major developed within NPPF; the definitions of Schedule 1 and 2 developments within the EIA Regulations; and other developments that do not fall into the above, but could have perceived notable effects.

- 14.25 Given the expected build out period of the Proposed Development, as part of the search for cumulative projects a number of 'other projects' known to the project team but are yet to be subject to a formal planning application have been identified. Such other projects have been identified within Table 14.1 as 'Projects to Monitor'. Currently there is insufficient information available to enable a robust appraisal of possible cumulative effects.
- 14.26 A further search will be undertaken 12 weeks prior to the finalisation of the assessment of cumulative assessment as part of the ES. This is to ensure there is sufficient time for them to be considered and incorporated within any studies / evaluation / modelling that may underpin the assessments within the ES (e.g. visualisations).
- 14.27 Where 'Projects to Monitor' do not have a submitted application 12 weeks prior to the finalisation of the ES, they will need to be excluded from the final assessment of cumulative effects presented in the ES.
- 14.28 The resulting Cumulative Projects that will be considered and appraised in the assessment of cumulative effects using the methodology and criteria set out above is provided within Table 14.1 and shown on Figure 14.1.

Table 14.1: Cumulative Projects for Assessment of In-combination Effects

ID	Application reference / location	Description	Status	Distance from Site	EIA?
Test Valley Borough Council (TVBC)					
1	26/00044/OUTS Land At Thorn Hill, Flexford Road, North Baddesley, Hampshire	Demolition of stable buildings and erection of up to 230 residential dwellings ((including affordable housing), up to 0.4 hectares of land for a convenience store (Use Class E), structural planting and landscaping, informal open space, surface water attenuation, vehicular access and associated ancillary works	Pending Determination	2km North	Yes
2	22/01213/OUTS Land at Whitenap, Luzborough Lane, Romsey, Hampshire	Outline application for up to 1,100 dwellings including affordable homes with associated open space, roads, parking, service infrastructure, local food production and	Pending Determination	4.2km North West	Yes

ID	Application reference / location	Description	Status	Distance from Site	EIA?
		landscaping. Employment areas (commercial, business and service), visitor accommodation, local community uses, community hall, medical consulting rooms, 1.5 form entry primary school, early years/nursery provision, conversion and/or new build at Whitenap Barns to provide commercial, business, service and local community uses with associated infrastructure.			
3	24/00174/OUTS Appeal Ref: 3354052 Land at Halterworth Lane, Romsey, Hampshire	Outline planning application for demolition of existing buildings and erection of up to 270 dwellings, including affordable housing, with land for the potential future expansion of Halterworth Primary School, public open space, structural planting and landscaping, sustainable drainage system (SuDS) and vehicular access points.	Approved	4.2km North West	Yes
4	25/01526/OUTS Land North of Highwood Lane, Romsey, Hampshire	Outline planning permission for the erection of up to 146 dwellings with all matters reserved for future approval except access	Pending Determination	4.25km North West	No
5	23/00964/OUTS Kings Chase South, Land South of Ganger Farm, Ganger Farm Lane,	Residential development of up to 309 dwellings, delivered across 3 severable residential parcels and 1 access parcel with associated infrastructure and works	Pending Determination	4.6km North West	Yes

ID	Application reference / location	Description	Status	Distance from Site	EIA?
Romsey, Hampshire					
6	24/02526/FULLS Brentry Nurseries, Jermyns Lane, Ampfield, Hampshire	Demolition of existing buildings and structures to provide, head office, storage and distribution building, 244 dwellings, associated infrastructure works	Pending Determination	4.7km North West	No
Eastleigh Borough Council (EBC)					
7	O/25/99506 Navigator Quarter, Eastleigh	Development of the land adjacent to Southampton Airport to provide employment floorspace of up to 92,000 sqm (GIA) within Use Classes E(g) (ii & iii), B2 and B8 with ancillary offices and areas for service yards, car parking, landscaping, ancillary buildings and associated activities.	Pending Determination	2.7km South East	Yes
8	WA010002 (NSIP) Proposed Water Recycling Plant at Harts Farm Way, Havant.	Circa 40km underground pipeline (minimum 800mm diameter) to transfer at peak operation (i.e. in a drought scenario) at least 75M l/d of water from Havant Thicket Reservoir to Otterbourne Water Supply Works.	Pending Determination	4.3km North East	Yes
Projects To Monitor					
9	25/02777/SCRS Land At Castle Lane, Chandler's Ford, Eastleigh, Hampshire	Screening opinion under the Environment Impact Assessment Regulations 2017 (as amended) for the erection of up to 140 residential dwellings, with associated access, parking, landscaping, open space (including SANGS) and infrastructure works.	EIA Screening	Adjacent to Northern Border	No

ID	Application reference / location	Description	Status	Distance from Site	EIA?
10	25/01797/SCRS Land at Packridge Farm, Packridge Lane.	EIA Screening Opinion for a proposed development comprises of up to 200 residential dwellings, SANG, associated infrastructure and landscaping.	EIA Screening	2.15km West	No
11	25/02794/SCOS Land South of Highwood Lane, Romsey, Hampshire	Request for an EIA Scoping opinion for a development of up to 300 dwellings	EIA Scoping	4.1km North West	Yes

Step 2: Assessment of In-combination Effects

- 14.29 The assessment of in-combination effects will take into consideration available documentation submitted in support of the application for the above Cumulative Projects, to conclude if common receptors are present between the Proposed Development and the Cumulative Projects and the extent of any in-combination effect. Where suitable information is not available, either professional judgement will be used to determine the cumulative effects or limitations will be set out.
- 14.30 The in-combination assessment will focus on the technical topic / effects 'scoped in' (i.e., reported within the ES).
- 14.31 The evaluation at the receptor level will consider the following:
- Magnitude of change (or impact) in the relevant technical assessments;
 - Sensitivity (or value, importance, etc.) of the receptor / receiving environment to change; and / or
 - Duration and reversibility of effect.
- 14.32 Through a combination of the qualitative evaluation and mitigation presented in the EIA, conclusions will be drawn as to the likelihood for significant in-combination environmental effects and conclusions will be made in terms of:
- How the in-combination effect is different to the project level effect.
 - Is there an increase or decrease in the in-combination effects when compared against the project level effect.
 - Is the in-combination effect significant and does the Proposed Development create the 'tipping point'?

15. Summary of EIA Scoping Report

- 15.1 This EIA Scoping Report has been prepared to support a request for a Scoping Opinion from TVBC in relation to the Proposed Development on land at Velmore Farm, Chandlers Ford.
- 15.2 The Proposed Development comprises up to 1,000 dwellings including SEN / Early Years provision, employment/community provision, SANG, play areas, allotments and associated infrastructure. A High Level Development Specification is provided in Chapter 4.
- 15.3 Based on the baseline context and the nature and scale of the Proposed Development, the following technical topics have been scoped out of the EIA on the basis that significant environmental effects are not anticipated:
- Archaeology;
 - Built Heritage;
 - Ground Conditions and Contamination;
 - Lighting;
 - Major Accidents and/or Disasters;
 - Materials and Waste;
 - Minerals; and
 - Water Environment.
- 15.4 Justification for scoping out these topics is provided in Chapter 5.
- 15.5 The following technical topics have been scoped into the EIA and will be subject to detailed assessment within the ES:
- Transport and Access;
 - Air Quality;
 - Noise and Vibration;
 - Biodiversity;
 - Landscape and Visual;
 - Socio-Economics and Human Health;
 - Climate Change; and
 - Agricultural Land and Soils.

- 15.6 The proposed scope and methodology for assessment of these topics is set out in Chapters 6 – 13.
- 15.7 An assessment of cumulative effects will also be undertaken in accordance with the methodology set out in Chapter 14.
- 15.8 Following receipt of the Scoping Opinion from TVBC, the EIA will be progressed in accordance with the agreed scope and methodology. The ES will be submitted alongside the planning application and will be structured as set out in Chapter 2.
- 15.9 TVBC is respectfully requested to provide their Scoping Opinion within the statutory timescale of five weeks from the date of receipt of this request, in accordance with Regulation 15(4) of the EIA Regulations.

Appendix 2.1: Preliminary Environmental Management Plan

Project specific measures to avoid and/or prevent significant adverse environmental effects (i.e. mitigation measures) have been considered through EIA scoping when appraising likely environmental effects.

At this stage, this has focused on 'primary mitigation' (i.e. inherent mitigation, comprising fundamental aspects of the project design) and 'tertiary mitigation' (i.e. standard environmental commitments/practices).

In order to support TVBC and other stakeholders, the mitigation measures that have been identified at this stage have been collated into a single schedule of mitigation (referred to as the Preliminary Environmental Management Plan) set out below. This will be developed further as part of the ES.

It is envisaged that mitigation will be secured through suitably worded planning conditions or another mechanism, where appropriate, and the Preliminary Environmental Management Plan will be utilised by the Applicant and appointed contractor(s) to control mitigation commitments and assurance over their implementation.

Mitigation Measure	Description / Details of Measure
Primary Mitigation	
Building Heights	The maximum height of built development within the EIA Site Boundary will be up to 4 storeys and approximately 15m AOD above ground level (max of 20m including ground changes).
Vehicular Access	Two new accesses will provide access / egress into the Proposed Development. This includes: • School Lane Access – This will involve modifying the existing Templars Way / School Lane three-arm roundabout to create a new four-way signalised junction, incorporating a fourth exit on its southern side to serve the Proposed Development. • Montgomery Way Access – This will involve modifying the existing Templars Way / Montgomery Way to create a new four-way signalised junction, incorporating a fourth exit to serve the south eastern elements of the Proposed Development. These junctions will connect to the internal road network of secondary and tertiary roads that will lead to the proposed uses and will provide access for cars / vans, emergency vehicles, service and refuse vehicles. It is assumed that the existing track from Bournemouth Road will be retained as an emergency access into the southern part of the Proposed Development as well as being a cycle / pedestrian route.
Car Parking	Car parking will be provided as part of the Proposed Development in line with TVBC and HCC guidance.
Pedestrian / Cycle Connections	New pedestrian and cycle access routes will provide both access within the Proposed Development as well as wider connectivity across Templars Way and Bournemouth Road to local amenities. The PRoW [Ref: 050/7/1] running east to west along the southern boundary of the EIA Site Boundary, and one public bridleway [Ref: 050/6/1] running north to south along the western portion of the EIA Site Boundary before connecting to Castle Lane to the north will be retained on their current alignment and enhanced as part of the Proposed Development.
Development Offsets and Easements	The 400kV overhead powerline (OHL) will remain on its existing west - east alignment, with statutory stand-off distances from development maintained (30m). Other non-structural development may, however, occur within this area such as SuDS, internal roads, green infrastructure, recreational open space and SANG.

Mitigation Measure	Description / Details of Measure
	High and intermediate-pressure gas mains, as well as potable water mains, also cross the EIA Site Boundary and will be appropriately offset from built development in accordance with statutory requirements that include 12.2m (high-pressure gas); 6.1m (intermediate-pressure gas); and 6m (potable water). A 20m built development offset will be applied from the boundary of the Hut Wood Site of Importance for Nature Conservation (SINC) to the south of the EIA Site Boundary. Protective fencing will also be installed along the perimeter of Hut Wood SINC and around retained Habitats of Principal Importance where they fall adjacent to or within construction areas to prevent accidental damage arising from inappropriate machinery use/access. The route of the Roman Road that passes through the EIA Site Boundary on a north east to south east trajectory will be retained on its current alignment and a 15m stand-off distance implemented.
Operational Flood Risk Strategy and Surface Drainage System	The Proposed Development will include SuDS features which will manage surface water and be designed to manage run off to greenfield rates equivalent to a 1 in 100 storm event with a 45% allowance for the potential impacts of climate change and not increase flood risk off site and adopt the principles set out in CIRIA C635, Designing for Exceedance in Urban Drainage. Finished Floor Levels (FFL's) and threshold levels of all dwellings will be at least 150mm above the surrounding ground. Built development will be focused to areas of the EIA Site Boundary at the lowest risk of flooding (Food Zone 1) as far as practical. Where this is not possible, such as with internal access roads, specific mitigation measures to ensure no increase in flood risk will be detailed. Watercourse crossings proposed in areas deemed of flood risk will be clear span at a suitable level not to create or exacerbate flood risk. Any culverts required as part of the Proposed Development will be designed to be suitably large and will be considered water-compatible development. Attenuation will be achieved through a series of proposed surface water attenuation areas, connected by a network of proposed swales and surface water sewers to convey surface water runoff through the EIA Site Boundary. The attenuation areas will be located strategically across the EIA Site Boundary in line with existing topography. Initial ground investigation indicates that infiltration is unlikely to be feasible within the EIA Site Boundary.
Landscaping	The Proposed Development will include a SANG located in the south western part of the EIA Site Boundary, as a result, the Rough SINC and St Austins SINC that partially lie within this area are proposed to be retained as part of the Proposed

Mitigation Measure	Description / Details of Measure
	Development. This area will incorporate a range of biodiversity and landscaping enhancements and recreational opportunities for future users, including walking routes. Across the remainder of the EIA Site Boundary, the Proposed Development will retain existing boundary hedgerows/trees (barring that required for access), enhance existing habitats, alongside the provision of public open space, play areas, and additional hedgerow, tree, and woodland planting.
Ecological Enhancements	Additional roosting features, above and beyond the minimum requirement of the mitigation licence, will be provided through the inclusion of bat boxes in/on new buildings and retained trees within suitable greenspace.
Potable Water	Potable water will be supplied from the existing water main through the EIA Site Boundary and will comply with current building regulations and with the Southern Water, Water Efficiency standards ¹⁹⁵ , which propose a maximum consumption rate of 110 L per person per day for residential units. All commercial units designed to meet BREEAM Excellent standards for water efficiency.
Foul Water	Foul sewage will be discharged to and require treatment at the Millbrook WWTW via the Woodside Chilworth pumping station that is located adjacent to the southern boundary of the EIA Site Boundary. Permitted nitrogen concentrations at the Millbrook WWTW are 10 mg TN/L.
Operational Lighting	New lighting will be installed as part of the Proposed Development access, along internal routes, within parking and servicing areas associated with the commercial uses, and around pedestrian pathways where required. All future lighting installations will be designed to ensure appropriate levels of illumination across the site, avoiding dark spots and promoting a safe and welcoming environment and be cognisant of ecological constraints. Measures will be taken to minimise light spill and pollution to surrounding areas. All lighting will be installed in accordance with relevant standards and best practice

¹⁹⁵ Southern Water (February 2026) New Connections Services Charging Scheme 2026-27, Version 1. Available at: https://www.southernwater.co.uk/media/nedbsdtc/new-connection-charging-arrangements-26_27.pdf [Accessed February 2026].

Mitigation Measure	Description / Details of Measure
	guidance ¹⁹⁶ . Any lighting to be installed will be in accordance with the principles outlined in Guidance Note 08/23: Bats and Artificial Lighting at Night ¹⁹⁷ .
Operational Waste	The Proposed Development will include appropriate facilities for the storage, handling and collection of residential / commercial and green waste types. An Operational Waste Management Strategy (OWMS) will be developed to maximise segregation, recycling and diversion of waste from landfill during operation of the Proposed Development and be developed in line with best practice and the requirements of TVBC ¹⁹⁸ .
Tertiary Mitigation	
Construction Environmental Management Plan (CEMP)	A CEMP will be prepared by the appointed contractor(s) in advance of commencing construction works. This document will provide detailed measures / controls to avoid and effectively manage potential adverse effects on the environment. This will be submitted to TVBC for approval. <u>General measures</u> UK legislation and guidance issued by the HSE will be adhered to, thereby ensuring the safety of the on-site workforce. A CEMP should include measures in line with all relevant legislation, government and industry standards, codes of practice and best practice measures, inclusive of, but not limited to: <u>General</u> • It is assumed that temporary fencing and hoarding will be erected around the perimeter of the EIA Site Boundary at the outset of construction to prevent unauthorised access and to screen views; • Appropriate alternative routes will be provided for vehicles, pedestrians and cyclists where the temporary closure of existing routes (including roads, footways and PRoW's) is needed to facilitate the works;

¹⁹⁶ British Standard 12464-2:2024 – Light and Lighting for Outdoor Workplaces; British Standard 13201 – Road Lighting; British Standard 5489-1:2020 Design Road Lighting; Hampshire County Council, Technical Guidance Note TG13 - Street Lighting; The Institution of Lighting Professionals, Guidance Note 08/23 Bats and Artificial Lighting at Night; The Institution of Lighting Professionals, Guidance Note 01/02; The Reduction of Obtrusive Light; ILP's Towards a Dark Sky Standard, A Lighting Guide to Protect Dark Skies (2021); Chartered Institution of Building Services Engineers, 2022. Society of Light and Lighting (SLL) Code of Lighting

¹⁹⁷ Bat Conservation Trust (2023): Guidance Note on Bats and Artificial Lighting at Night (Guidance Note 08/23)

¹⁹⁸ Test Valley Borough Council (2017), Guidance Document for the Storage and Collection of Domestic Waste and Recycling for New and Existing Developments.

Mitigation Measure	Description / Details of Measure
	• Temporary secure access gates will be provided at the EIA Site Boundary accesses to manage the movement of vehicles, plant, equipment and personnel required for construction; and • All construction works will be undertaken in line with the requirements set out in the Construction (Design and Management) Regulations 2015¹⁹⁹ and appropriate levels of security (e.g. personnel / CCTV) will be provided. <u>Site working hours / days</u> • Construction working hours would be 08:00 to 18:00 Mondays to Fridays; 09:00 to 13:00 on Saturday; and it is anticipated that there will be no construction on Sundays or Bank Holidays. Some quiet works may be undertaken outside of these hours if agreed with TVBC. <u>Light pollution management</u> • Construction compound lighting will be temporary, used only during winter when natural light levels are insufficient for safe working. All lighting will be designed to minimise spill beyond the boundary of the site compounds, directed away from sensitive habitats, and informed by the standalone external Lighting Assessment which will accompany the planning application. This will include measures such as: • Provision of general lighting sufficient to complete tasks without over lighting and low-level controlled task lighting for activities requiring higher illumination; • Implementation of the Lighting Management Plan as part of the construction works for example including hours of scheduled work and lighting control covering aftermarket controls and the turning off of construction lighting; • Directing lighting away from sensitive habitats in conjunction with and advice from a qualified ecologist; and • Adherence to agreed start up and shut down times to ensure consistent control over obstructive effects for all construction activities. <u>Contamination management</u>

¹⁹⁹ Construction (Design and Management) Regulations 2015.

Mitigation Measure	Description / Details of Measure
	• A PRA identified the risk of significant contamination onsite as unlikely and further ground investigation(s) will determine the presence / absence of contamination (and its nature and extent, if present) and therefore the requirements for any remediation prior to the construction activities within the relevant area under construction; • Any contamination that is identified will be dealt with appropriately, in agreement with TVBC, prior to construction works commencing (this may include remediation and verification plans, as appropriate, and any necessary remediation will be undertaken prior to construction). • Groundwater contamination mitigation will include measures, such as procedures to mitigate against the presence of unexpected contaminated land, which are appropriate for protecting groundwater of the highest sensitivity, and will be adhered to across all areas of the EIA Site Boundary; • The CEMP will provide the details of strategies to cover: • Pollution incident control; • Emergency preparedness; • Construction site security; and • Site materials and waste management. <u>Ground gas management</u> • Intrusive investigation works will determine whether it is appropriate to undertake ground gas monitoring and/or sampling (for example if significant quantities of made ground are identified with the potential to generate ground gases), and any ground gas monitoring programme will be agreed with TVBC; • This could include requirements for procedures to protect construction staff, or for ground gas ingress preventative measures to be incorporated into buildings (with the scope/extent of any actions/measures to be agreed with the TVBC) <u>UXO management</u> • There will be communication to all construction workers on UXO risks, safety training by a competent expert and the attendance of UXO supervisors during the groundworks (if appropriate). <u>Waste management</u>

Mitigation Measure	Description / Details of Measure
	- A SWMP will be implemented to drive segregation, reuse and recycling and to minimise disposal to landfill. A MMP will be prepared (as appropriate) in accordance with the CL:AIRE Definition of Waste: Development Industry Code of Practice²⁰⁰ to maximise on-site soil reuse and avoid unnecessary off-site disposal. - The Proposed Development will be designed to minimise the use of resources and following established sustainability principles. Sustainable sourcing policies would be used to source materials such as timber. - Where possible demolition and excavation arisings will be re-used within the development. Value engineering and workshops to design out waste will be undertaken to minimise the material resources required. Imported fill materials would be sourced from recycled or secondary sources where possible and practicable to do so. The use of primary aggregate would be minimised within technical specifications. <u>Utilities</u> - Any required diversions of utilities during construction will be undertaken by the relevant Distribution Network Operator (DNO) (or a third-party contractor appointed by the DNO), who will operate in line with standard good practice working measures, including accordance with the Construction (Design and Management) Regulations 2015 and other health and safety regulations. Any such works would include appropriate isolation of utilities as required). - During construction, safe working methods will be implemented to take account of the 400kV OHL, high and intermediate-pressure gas mains, as well as potable water mains and included in the CEMP. This will include adherence to relevant health and safety legislation including GS6 Avoiding danger from overhead lines²⁰¹, and ensuring construction workers are briefed on the appropriate methods of working and the easements. In addition, relevant HSE guidance will be adhered to, including Avoiding danger from underground services²⁰². <u>Surface water management</u>

²⁰⁰ CL:AIRE (2021). The Definition of Waste: Development Industry Code of Practice (DoWCoP).

²⁰¹ HSE (2013) GS6 Avoiding danger from overhead lines.

²⁰² HSE (2014) Avoiding danger from underground services HSG47.

Mitigation Measure	Description / Details of Measure
	• Temporary surface water drainage will be installed and maintained to mitigate flood risk and sediment loading in line with practice guidance such as CIRIA's Control of water pollution from construction sites²⁰³ to avoid pollution of neighbouring surface water bodies. • The following mitigation and management measures will be included (but not be limited to): • Locating the construction compound, storage and plant outside the flood risk extents and any potential surface water drainage routes. Any required Flood Compensation Areas would be completed prior to any construction of structures; • Completion of a construction stage surface water management plan, with all necessary consents agreed with the relevant authorities prior to works commencing, and in accordance with the appropriate standards; and • Surface water runoff during construction would be discharged to the existing watercourses/ditches on-Site, under consent to be obtained from the LLFA following the implementation of appropriate pollution prevention measures. An Ordinary Watercourse Consent (OWC) would additionally be obtained from the LLFA for discharges to ditches, as well as any proposed temporary or permanent modifications, such as culverts or diversions. <u>Pollution of local waterbodies</u> • Works would be undertaken in line with the EA's Pollution Prevention Guidance Note 6 (PPG6)²⁰⁴ and include the following mitigation and management measures: • Regular maintenance of construction vehicles and plant. • Refuelling construction vehicles suitably away from any water body. • Ensuring spill kits are available in case of an accident and correct procedure is followed.

²⁰³ CIRIA (2001) Control of water pollution from construction sites. Guidance for consultants and contractors (C532).

²⁰⁴ Environment Agency (2012) PPG6 Construction and demolition sites: prevent pollution. Available at: <https://www.gov.uk/government/publications/construction-and-demolition-sites-ppg6-prevent-pollution> [Accessed: 13 January 2026].

Mitigation Measure	Description / Details of Measure
	• Suitably locating above-ground storage tanks and temporary welfare facilities on designated areas of hardstanding away from potential surface water drainage routes. • Storage of liquids such as degreasers, solvents, lubricants and paints in segregated, bunded enclosures and at least 10m from watercourses. • Ensuring any tanks storing significant volumes of oil on-Site have secondary bunding. • Ensuring any construction drainage system is designed to and complies with the appropriate standards. • Ensuring any stockpiles are suitably managed to ensure minimal surface runoff or windblown deposition of materials to local receptors. • Locating the construction compound, storage and plant outside the flood risk extents.
	<u>Construction fire safety</u> • Construction works will be undertaken in line with Fire Prevention on Construction Sites: Joint Code of Practice²⁰⁵.
	<u>Managing increased temperatures</u> The CEMP will include measures to manage the effects of elevated temperatures on construction materials, processes and the workforce. These could include consideration of mitigation measures such as: • Scheduling concrete pours and asphalt laying during cooler periods of the day or adjusting mix designs to account for elevated ambient temperatures; • Implementing enhanced curing regimes (e.g. use of curing compounds, damp hessian, or polythene sheeting) to manage concrete hydration under high temperatures; • Monitoring ambient and material temperatures during critical construction activities and adjusting programmes accordingly; and • Regular inspection and maintenance of plant and machinery to reduce the risk of overheating and mechanical failure.
	<u>Plant</u>

²⁰⁵ RISC Authority and The Fire Protection Association (2022) Fire Prevention on Construction Sites: The Joint Code of Practice on the Protection from Fire of Construction Sites and Buildings Undergoing Renovation (10th Edition).

Mitigation Measure	Description / Details of Measure
	Mobiles cranes may be used on Site that will be used in line with best practices for mobile crane operations, health and safety measures to ensure construction personnel are protected from wind conditions. <u>Traffic management</u> • Construction access, routing and movements will be agreed with TVBC prior to construction; • Construction access in the first instance will be obtained from Templars Way via new access points that will be created early in the construction stage and then be used as a primary construction access before becoming the permanent access points for the operational stage; • It is anticipated that construction vehicles will arrive/depart via Templars Way before dispersing toward the M3/M27 to the east or Castle Lane to the west²⁰⁶; • The potential for major transport accidents during the construction stage will be mitigated by a construction logistics/traffic management plan as part of the CEMP. This will include measures such as a planned route(s) for construction traffic to reduce the risk to road users, restricting deliveries to certain periods and ensuring the vehicles are well maintained and roads are kept clean. The new accesses and vehicle circulation through the Proposed Development will all be designed in accordance with relevant guidance/standards. <u>Air quality and dust management</u> • Dust and particulate matter emission produced during construction activities (from both mobile and immobile machinery) will be controlled through the implementation of a DMP informed by the Institute of Air Quality Management (IAQM) 2024 guidance²⁰⁷ and would include prevention measures and set out requirements for ongoing monitoring and liaison with the local community and TVBC. <u>Archaeology and heritage assets</u> • The Proposed Development will take account of the Roman road alignment and maintain a 15m offset from built development within the EIA Site Boundary to ensure the feature is retained in situ and is not affected during construction through appropriate protective fencing.

²⁰⁶ To be agreed with TVBC.

²⁰⁷ Institute of Air Quality Management, 2024. Guidance of the Assessment of dust from demolition and construction (Version 2.2).

Mitigation Measure	Description / Details of Measure
Earthworks / Foundation Design	Foundation details have not yet been finalised and will depend on the final building design and ground-condition investigations. Shallow foundations are assumed to be suitable, although the need for piled foundations cannot be ruled out at this stage. If piling is required, the need for a piling risk assessment will be discussed and agreed with the local planning authority, prior to construction commencing. This will ensure that any potential risks to groundwater from piling operations (if applicable) mobilising existing contamination are managed appropriately. All earthworks and foundation design will be in accordance with relevant standards and guidance, including but not limited to CIRIA Report C572: Treated ground engineering properties and performance²⁰⁸, British Research Establishment document FB75: Building on Fill - Geotechnical Aspects²⁰⁹, British Standard 6031:2009: Code of Practice for Earthworks²¹⁰ and Building Regulations Approved Document A - Structure²¹¹. Achieving suitable development plateau levels will require areas of both cut (lowering ground levels) and fill (raising ground levels). Any surplus material generated is expected to be retained for reuse on site that will be managed through a Materials Management Plan (MMP) to avoid unnecessary off-site disposal.
European Protected Species License	Any works to a building or tree supporting a confirmed roost will be undertaken under a European Protected Species Licence (EPSL) from Natural England. The licence application will include a detailed mitigation strategy, developed in accordance with best practice guidance, that will be adopted to avoid detrimental impacts on bats. Although full details of the mitigation strategy will be agreed with Natural England through the licensing process, the principal elements will include: • Sensitive timing of works (bats are most vulnerable during the maternity season and the hibernation period); • A pre demolition/felling emergence survey; • A pre demolition/felling inspection;

²⁰⁸ J A Charles and K S Watts (2002). Treated ground - engineering properties and performance (C572).

²⁰⁹ BRE (2015) FB75 Building on fill: geotechnical aspects (3rd edition).

²¹⁰ British Standard 6031:2009 Code of practice for earthworks.

²¹¹ HM Government (2013) Approved Document A – Structure.

Mitigation Measure	Description / Details of Measure
	• The supervised soft strip of building features; and • Provision of appropriate compensatory roosting (for example, bat boxes, recessed bat bricks, external wall mounted boxes, tree mounted boxes or pole mounted boxes).
Operational Fire Safety	All buildings will be designed with appropriate fire prevention / control measures (e.g. fire doors, extinguishers, etc.) and all external facades and materials will meet the necessary fire resistance standards set out within relevant legislation (e.g. the Building Regulations). Fire management measures (including smoke detectors etc.) will also be installed within the Proposed Development. It is assumed that the final end-users/ building management company will have in place the required emergency procedures/ practices (i.e. Fire Emergency Evacuation Plan (FEPP) or apparatus/ instruments (i.e. smoke detectors/ sprinklers) required by law for commercial occupation. Furthermore, the Proposed Development will incorporate appropriate access arrangements and hose-reach provisions to ensure that fire engines can safely and effectively respond in the event of an emergency in line with Building Regulations²¹².
Building Safety	Site security arrangements during the construction stage will be in line with the requirements set out in the Construction (Design and Management) Regulations 2015²¹³. The design of the Proposed Development will be informed by 'Secure by Design' principles and appropriate design, and site management measures (personnel and CCTV) will be implemented to ensure that the potential for crime and anti-social behaviour is minimised.
Building Design	The Energy Strategy will apply the energy hierarchy (Be Lean, Be Clean, Be Green) and the cooling hierarchy to reduce cooling demand. Specific measures considered could unless otherwise agreed with the LPA include: • Material specifications for structural elements, façades and seals that account for thermal expansion under projected future temperature scenarios; • Ventilation and cooling of plant rooms taking account of projected impacts; and

²¹² Approved Document B Fire Safety. Build Regulations 2010. Available at: <https://www.gov.uk/government/publications/fire-safety-approved-document-b>

²¹³ Secretary of State (2015) Construction (Design and Management) Regulations 2015.

Mitigation Measure	Description / Details of Measure
	- HVAC systems sized and specified to accommodate projected increases in cooling demand under future climate scenarios. Overheating An Overheating Assessment will be prepared using thermal dynamic modelling as part of detailed design, i.e. in accordance with CIBSE TM59 (2017) guidance, using TM49 weather files and feed into the design of the building and cooling systems as part of an iterative process. The overheating hierarchy should be applied during the design of the Energy Strategy. The following passive design measures would be considered for the residential elements: - Building shape and detailing (e.g. external blinds) to minimise internal heat generation through energy-efficient design; - Appropriate glazing-to-solid ratios with lower g-value glazing to reduce solar heat gains in summer; - Openable windows to allow natural ventilation and cross-ventilation in apartments; and - Mechanical ventilation with heat recovery (MVHR) as a secondary measure.
Road and Pavement Design	The following measures could be incorporated into the design and operational management of road and pavement infrastructure: - The detailed design would consider the use of heat-resilient pavement materials, such as Stone Mastic Asphalt (SMA) or Hot Rolled Asphalt (HRA) mixes, which offer greater resistance to deformation under elevated temperatures; and - Joint design and slab dimensions for concrete pavements would give consideration for thermal expansion under projected future temperature scenarios (UKCP18 RCP8.5).
Secondary Mitigation	
Archaeological Investigation	Mitigation will comprise a suitable scheme of archaeological trial trench evaluation with reporting of results, carried out in accordance with a Written Scheme of Investigation (WSI) agreed in advance with TVBC and their archaeological advisors. The evaluation will target possible archaeological anomalies identified by the geophysical survey, and establish the absence/presence of archaeological remains in areas of potential impact. The evaluation results will inform an appropriate mitigation strategy that may comprise a strategy for archaeological excavation and/or an archaeological watching brief during construction ground works.

Turley Office
40 Queen Square
Bristol
BS1 4QP

T 0117 989 7000