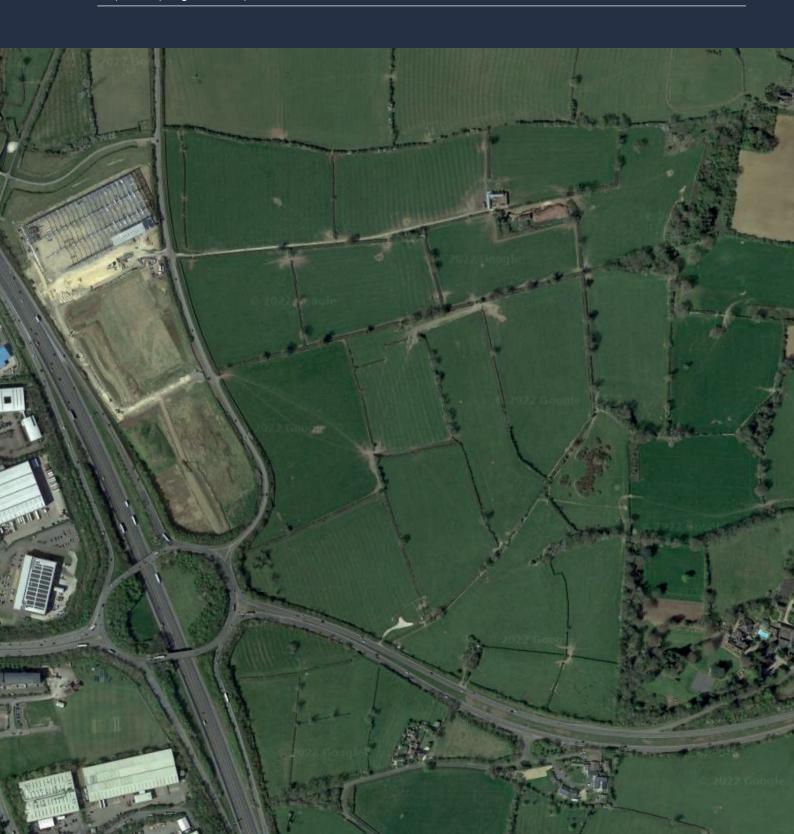


Land East of J11, M40, Banbury Supplementary Environmental Information

Volume 1: Main Report and Figures

Greystoke CB Ltd.

Prepared by Pegasus Group | October 2022 | P21-3302



Statement of Competence

1.1.1 This Supplementary Environmental Information has been prepared by competent experts. Relevant expertise and qualifications of the expert team are outlined below.

LOGO	SPECIALISM	STATEMENT OF COMPETENCE
PEGASUS GROUP	Planning Environmental Impact Assessment	Pegasus Group (Pegasus) is the consultancy that has compiled this Environmental Statement (ES). This consultancy was established in 2003 and has over the years expanded to a company that strives for "good development" across the whole of the UK. Pegasus is a multi-disciplinary planning consultancy and has provided the following services in the context of this ES: planning, environmental planning, heritage, and economics. Pegasus is Institute of Environmental Management and Assessment (IEMA) 'Quality Mark' Accredited and its ESs and the processes that it undertakes to create them are regularly subjected to external review via this accreditation to ensure that all Pegasus Environmental Impact Assessments (EIA) are legally compliant and apply best practice. This ES has been coordinated by a Chartered Environmentalist and Member of IEMA.
harrislamb PROPERTY CONSULTANCY	Ecology	The EcIA was undertaken by Dr Holly Smith MCIEEM with over 17 years' experience in ecological consultancy and an author of numerous EcIAs for schemes similar in nature. The ecologist who contributed to the EcIA are members of CIEEM. Cotswold Ecology James Pattenden, Natural England dormouse licence holder (reference 2016-21635-CLS-CLS) and bat licence holder (Class 2 licence number 2015-106-CLS-CLS) and CL21 Registered Consultant (including Annex D for Lesser Horseshoe Bats). James is a full member of the Chartered Institute of Ecology and Environmental Management (CIEEM) with 16 years of experience in ecological consultancy. Adrian George is a professional ornithologist for Falco Ecology undertaking bird surveys for a variety of ecological consultancies. The HLPC team was supported by Stuart Silver MCIEEM with over 17 years' professional experience and holds a CL35 licence for badgers.
Transport Planning Consultants	Transport and Access	The Transport Chapter has been prepared jointly by Simon Tucker (BSc (Hons) Civil Engineering) and Rose Tinley (BSc (Hons) Physical Geography and Geology). Simon is a Member of the Chartered Institute of Highways and Transportation and has over 22 years in the field of transport planning. DTA regularly contributes to the preparation EIAs for a wide range of projects including large scale DCO application, housing commercial and marine development. They typically prepare around 10 – 15 EIA chapters a year.

SEI: CONTENTS

			SEI: Report, Figures & Appendix	2022 ES: Volume 1 Main Report & Figures	2022 ES: Volume 2 Appendic es
0.	CONTENTS		✓	✓	
	Statement of C	Competence		✓	
1.	INTRODUCTI	ON	✓	✓	
	Figure 1.1	Site Location Plan		✓	
	Appendix 1.1	CDC and WNC Screening Opinion			✓
2.	ASSESSMENT	SCOPE AND METHODOLOGY	✓	✓	
	Figure 2.1	Cumulative Plan		✓	
		No Appendices			-
3.	APPLICATION DEVELOPMEN	N SITE AND PROPOSED	✓	✓	
	Figure 3.1	Environmental Designations Plan		✓	
	Figure 3.2	Parameter Plan		✓	
	Figure 3.3	Illustrative Site Layout		✓	
	Figure 3.4	Illustrative Landscape Strategy		✓	
		No Appendices			-
4.	ALTERNATIVI	ES	✓	✓	
		No Figures		-	
		No Appendices			-
5.	LANDSCAPE A	AND VISUAL	✓	✓	
	Appendix 5.1	Landscape Figures			✓
	Appendix 5.2	Landscape and Visual Methodology			✓
	Appendix 5.3	Landscape and Visual Impact Assessment (May 2022, V2)			✓
		(Figures inserted as part of Appendix 5.1)		-	
6.	CULTURAL HE	RITAGE	✓	✓	
		No Figures		-	
	Appendix 6.1	Heritage Desk- Based Assessment			✓
7.	ECOLOGY		✓	✓	

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			SEI: Report, Figures & Appendix	2022 ES: Volume 1 Main Report & Figures	2022 ES: Volume 2 Appendic es
		No Figures		-	
	Appendix 7.1	Preliminary Ecological Appraisal			✓
	Appendix 7.2	Confidential Badger Addendum			✓
	Appendix 7.3	Biodiversity Metric 3.0			✓
	Appendix 7.3a	Biodiversity Metric 3.1	✓		
8.	TRANSPORT A	AND ACCESS	✓	✓	
		No Figures		-	
	Appendix 8.1	Transport Assessment			✓
	Appendix 8.2	Framework Travel Plan			✓
	Appendix 8.3	Transport Assessment Addendum	✓		
9.	FLOOD RISK A	AND DRAINAGE	✓	✓	
		No Figures		-	
	Appendix 9.1	Flood Risk Assessment and Drainage Strategy			✓
	Appendix 9.2	Envirocheck Report- Datasheets and Maps			✓
10.	AIR QUALITY		✓	✓	
		No Figures		-	
	Appendix 10.1	Definition of Air Quality Terms and Units			✓
	Appendix 10.2	Traffic Data			✓
	Appendix 10.3	M-EC Receptor Location			✓
	Appendix 10.4	Verification			✓
	Appendix 10.5	Modelled Pollutants			✓
	Appendix 10.6	Dusk Risk Assessment Procedures			✓
	Appendix 10.7	Air Quality Control Measures for Low, Medium and High-Risk Sites			✓
11.	NOISE		✓	✓	
	Appendix 11.1	Glossary of Acoustic Terminology			✓
	Appendix 11.2	Legislation and Guidance			✓
	Appendix 11.3	Environmental Noise Survey			✓

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			SEI: Report, Figures & Appendix	2022 ES: Volume 1 Main Report & Figures	2022 ES: Volume 2 Appendic es
	Appendix 11.4	Construction Assessment			✓
	Appendix 11.5	Noise Model Assessment			✓
	Appendix 11.6	Operation Assessment			✓
	Appendix 11.7	Development Generated Traffic Noise Assessment			✓
	Figure 11.1	Measurement Positions and Sensitive Receptors		✓	
	Figure 11.2	Ambient Scenario Contours		✓	
	Figure 11.3	Electric Scenario Contours		✓	
12.	SOCIO-ECONO	MICS	✓	✓	
		Figures are inserted within Main Chapter Text		-	
	Figure 12.1	Population Change 2011-20		✓	
	Figure 12.2	Skill Levels of the Resident Working Age (16-64) Population, 2021		✓	
	Figure 12.3	Index of Multiple Deprivation for Site Location, 2019		✓	
	Figure 12.4	Employment Change, 2015-20		✓	
	Figure 12.5	Claimant Count, Jan 2020-Jan 2022		✓	
	Figure 12.6	Additionality Factors		✓	
		No Appendices			-
13.	SUMMARY		✓	✓	
		No Figures		-	
		No Appendices			-
14.	GLOSSARY AN	D ACRONYMS		✓	
		No Figures		-	
		No Appendices		-	

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1 INTRODUCTION

1.1 INTRODUCTION

1.1.1 An Environmental Statement (ES) was submitted to Cherwell District Council (CDC) in May 2022 (CDC Application Reference: 22/01488/OUT) seeking outline planning permission for the:

"Construction of up to 140,000 sq. m of employment floorspace (use class B8 with ancillary offices and facilities) and servicing and infrastructure including new site accesses, internal roads and footpaths, landscaping including earthworks to create development platforms and bunds, drainage features and other associated works including demolition of the existing farmhouse."

- 1.1.2 The planning application was validated on 19th May 2022 and is awaiting a decision. Following the statutory consultation period Greystoke CB Ltd (the "Applicant") has considered comments provided by the public and statutory consultees and wishes to submit further information to address matters in response to representations made by third parties and through discussion with the LPA since the planning application was submitted.
- 1.1.3 Since the submission of the 2022 ES, the further information provided in this SEI relates to Transport and Ecology matters in response to consultation responses received in relation to the ES submitted with the outline application (22/01488/OUT):
 - Oxfordshire County Council (as the local highway authority) (26/08/2022);
 - National Highways (27/09/2022);
 - Nature Space (15/06/2022); and
 - Oxfordshire Wildlife Trust (24/06/2022).
- 1.1.4 The modifications have been provided by the Applicant voluntarily as opposed to a request for Further Information and Evidence under Regulation 25 of The Town and Country Planning (Environmental Impact Assessment) Regulations 2017. The Transport and Ecology Chapter has been amended to provide additional information where it is considered required.
- 1.1.5 All work undertaken as part of this SEI, which forms this EIA Addendum includes a:
 - Updated Introductory Chapters (1-4);
 - Updated Transport Chapter (8) and Transport Assessment Addendum (Appendix 8.3);
 - Updated Ecology Chapter and Biodiversity Metric (Appendix 7.3a);
 - A summary update.

1.2 EIA REGULATIONS AND PROCEDURES

1.2.1 Environmental Impact Assessment (EIA) is a process, which identifies the potential environmental effects of a development and then seeks to avoid, reduce or offset any adverse effects through mitigation measures.

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- 1.2.2 The process that has been adopted in this SEI follows closely the key characteristics of the Environmental Statement document that was submitted alongside the planning application in May 2022. Consequently, this document should be read alongside the original Environmental Statement since its key characteristics remain unchanged.
- 1.2.3 The Town and Country Planning (Environmental Impact Assessment) Regulations 2017 came into force on 16 May 2017 in response to EU Directive 2014/52/EU. These regulations are set out in detail in the original Environmental Statement and constitute a framework used to deliver this SEI.

1.3 STRUCTURE OF THE SEI

- 1.3.1 There are no requirements with the EIA Regulations as to the format and content of an SEI. This voluntary SEI has been set out in the same structure and order of the chapters within the ES it is supporting. The scope and content of the SEI is based on the methodology adopted in the original Environmental Statement document submitted in May 2022. This SEI only provides updates to the individual elements that changed over time. Any new information is provided under the corresponding chapters of this SEI. In addition, a note has been added under chapters where no assessment or update is deemed necessary and therefore scoped out of this SEI.
- 1.3.2 This SEI comprises studies on each of the aspects of the environment identified as likely to be significantly affected by the Proposed Development, which are supported with technical appendices where appropriate. The chapters in this SEI are set out as follows:
 - Chapter 1- Introduction
 - Chapter 2- Assessment Methodology
 - Chapter 3- Application Site and Proposed Development
 - Chapter 4- Alternatives
 - Chapter 5- Landscape and Visual
 - Chapter 6- Cultural Heritage
 - Chapter 7- Ecology
 - Chapter 8- Transport and Access
 - Chapter 9- Flood Risk and Drainage
 - Chapter 10- Air Quality
 - Chapter 11- Noise
 - Chapter 12- Socio- Economics
 - Chapter 13- Summary
 - Chapter 14- Glossary
- 1.3.3 For continuity, the figures and appendices are arranged and presented using the same reference numbers as the chapters as a means of providing supportive background and technical information. If a figure has been updated within the SEI from the submitted version in the ES, then the revised figure will have the same figure number, but a letter suffix added to show it has been superseded. For example, Figure 1.1 if updated through this addendum would be named Figure 1.1a. The same principle has been applied to the numbering of Tables within this addendum. Where new figures,

tables or appendices have been created they follow on from the numbering set out within the 2022 FS.

1.3.4 The contents list at the start of this addendum lists all the figures within the Environmental Statement and those that have been superseded through the addendum.

1.4 SEI AVAILIBILITY AND COMMENTS

1.4.1 This SEI should be made available by Cherwell District Council for public viewing during normal office hours in accordance with Regulation 25 of The Town and Country Planning (Environmental Impact Assessment) Regulations 2017. For details of where the SEI can be viewed and the times they are available can be found out by contacting CDC's Development Management Department, who can be contacted by:

Planning Services Department of Cherwell District Council, Bodicote House, Bodicote, Banbury, OX15 4AA

Telephone: 01295 227001

- 1.4.2 The SEI documents will also be available via the Council's website once the SEI has been registered. The reference for the planning application is 22/01488/OUT.
- 1.4.3 Alternatively, the SEI (2022) and the ES (2022) may be purchased through Pegasus Group, the costs for which are set out below:
 - Main ES Report (2022) £150
 - Non-Technical Summary (ES NTS) Free of charge
 - SEI (2022)- £55
 - SEI Non-Technical Summary (2022) Free of Charge
 - Digital copies of the above documents on a CD £10
- 1.4.4 For copies of any of the above please contact Pegasus Group (quoting reference P21-3302) at the following address:

Pegasus Group Limited,
Pegasus House,
Querns Business Centre,
Whitworth Road,
Cirencester,
Gloucestershire,
GL7 1RT.

Telephone: 01285 641717

Email: Cirencester@pegasusgroup.co.uk

SUPPLEMENTARY ENVIRONMENTAL INFORMATION

Comments

1.4.5 Comments on the planning application and this SEI should be forwarded to CDC via their planning portal or as mail. The address for the Council can be found above. In all communications for this planning application with the Council the planning application reference 22/01488/OUT should be used.

2 ASSESSMENT METHODOLOGY

- 2.1.1 This SEI reports the findings of the assessment of the likely significant environmental effects of the scheme. Although each assessment applies a specific series of matrices and decision-making tools to assist the assessor in determining the significance of predicted effects identified in the SEI, the same general approach of information gathering, and assessment has been undertaken throughout the EIA process.
- 2.1.2 Following the identification of the possible issues, technical assessments were carried out to assess the likely significant effects that are associated with the Proposed Development. In general terms, the chapter structure undertaken for each topic area and chapter includes:
 - Assessment Approach;
 - · Baseline Conditions;
 - Identification, Description and Evaluation of likely significant environmental effects;
 - Determining Significance of Likely Effects;
 - · Mitigation and Enhancement;
 - Residual effects:
 - · Cumulative and In-Combination Effects; and
 - Summary
- 2.1.3 Details of the scope within the chapter structure headings are as follows:

Assessment Approach

2.1.4 This identifies the study area assessed and explains why this area is appropriate. It also identifies the criteria for assessing and describing significance, whilst confirming what assessments have been carried out and when. The methodology will provide detailed information of any consultation undertaken both pre and post Scoping. It will also include a section on relevant policy and guidance.

Baseline Conditions

2.1.5 Information relating to the existing environmental conditions has been collected. The SEI chapters will refer to the original report where the baseline conditions are not changed.

<u>Identification, Description and Evaluation of Likely Significant Environmental</u> <u>Effects</u>

- 2.1.6 This section recognises the effects which are likely. The methodology adopted in this SEI follows the original approach from the ES document submitted in 2022.
- 2.1.7 In this SEI, the stated methodology is applied to the scheme design, wherever there has been an update to the previously submitted work.
- 2.1.8 Conclusions about significance are derived with reference to available information about the project description and the Site receptors, and to predictions Page 6 of 55

about the impacts which the development proposed, would have, assuming it is consented, on identified receptors.

- 2.1.9 In each of the environmental topic chapters, professional judgement is used in combination with relevant guidance to assess the interaction of the receptor's sensitivity (this may be defined in terms of importance, value, rarity, quality) against the predicted magnitude of change to identify a level of effect.
- 2.1.10 In general terms, and in order to assist consistent interpretation of the final results of the EIA, receptor sensitivity, magnitude of change and level of effect for each environmental topic are categorised as shown in **Tables 2.3** to **2.6**. This categorisation is the same as presented in the 2022 Environmental Statement.
- 2.1.11 The type of categorisation illustrated in **Table 2.3** to **2.6** provides a guide only, and may be moderated by the individual professional that undertakes the assessment in accordance with judgement and experience. In particular, the divisions between categories of receptor sensitivity, magnitude of change, and level of effect should not be interpreted as definitive.

Determining Significance of Likely Effects

- 2.1.12 Significance reflects the relationship between two factors:
 - The magnitude or severity of an effect (i.e., the actual change taking place to the environment); and
 - The sensitivity, importance or value of the resource or receptor.
- 2.1.13 The broad criteria methodology for determining magnitude is set out in **Table 2.3.**

Table 2.3: Degrees of Magnitude and their criteria

Magnitude of Effect	Criteria
High	Total loss or major/substantial alteration to elements/features of the baseline (pre-development) conditions such that the post development character/composition/attributes will be fundamentally changed.
Medium	Loss or alteration to one or more elements/features of the baseline conditions such that post development character/composition/attributes of the baseline will be materially changed.
Low	A minor shift away from baseline conditions. Change arising from the loss/alteration will be discernible/detectable, but the underlying character / composition / attributes of the baseline condition will be similar to the pre-development.
Negligible	Very little change from baseline conditions. Change not material, barely distinguishable or indistinguishable,

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approximating to a 'no change' situation.	
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Table 2.4: Degrees of sensitivity and their criteria

Sensitivity	Criteria
High	The receptor / resource has little ability to absorb change without fundamentally altering its present character or is of international or national importance.
Medium	The receptor / resource has moderate capacity to absorb change without significantly altering its present character or is of high and more than local (but not national or international) importance.
Low	The receptor / resource is tolerant of change without detrimental effect, is of low or local importance.
Negligible	The receptor / resource can accommodate change without material effect, is of limited importance.

Significance

2.1.14 The significance of an environmental effect is determined by the interaction of magnitude and sensitivity, whereby the effects can be positive or negative (beneficial or adverse). **Table 2.5** shows how magnitude and sensitivity interact to derive significance of effects.

Table 2.5- Establishing the Significance of the Effect

		Sensitivity of Receptor					
L.		Low	Medium	High			
f Effect	No Change	Insignificant	Insignificant	Insignificant			
Magnitude of	Minimal Change	Negligible –Minor	Minor	Minor - Moderate			
gnit	Low	Minor	Minor - Moderate	Moderate			
Σ	Medium	Minor - Moderate	Moderate	Moderate - Major			
	High	Moderate	Moderate - Major	Major - Substantial			

2.1.15 An effect established as 'moderate' or above would be deemed as 'significant' and would require further assessment and potentially mitigation to draw final conclusions on the significance and identify any residual and outstanding effects.

Table 2.6: Significance of Effects Definitions

Major Beneficial	Total gain or major/substantial positive alteration to elements/features of the baseline (pre-development) conditions such that the post development composition/attributes will be fundamentally improved from an environmental perspective on a regional, national or international basis.
Moderate Beneficial	Alteration or gain to one or more elements/features of the baseline conditions such that post development composition/attributes of the baseline will be materially improved, including significant enhancements to the environment of the inner and outer impact areas.
Minor Beneficial	A minor shift away from baseline conditions. Change arising from the gain/alteration will be detectable but the underlying character / composition / attributes of the baseline condition will be similar to the pre-development and the proposals meet the needs of the proposed environment.
Negligible	No or very little change from baseline conditions. Change not material, barely distinguishable or indistinguishable.
Minor Adverse	A minor shift away from baseline conditions. Change arising from the loss/alteration will be detectable but the underlying composition / attributes of the baseline condition will be similar to the pre-development.
	The proposals incorporate insufficient measures to ensure that the scheme would meet its own needs and not put undue pressure on existing resources and cannot be substantially mitigated because of the scale of the proposal.
Moderate Adverse	Loss or alteration to one or more elements/features of the baseline conditions such that post development composition/ attributes of the baseline will be materially changed.
	Mitigation would not prevent the scheme from affecting on both inner and outer impact areas in the longer term.
Major Adverse	Total loss or major/substantial alteration to elements/features of the pre-development baseline conditions such that the post-development composition/attributes will be fundamentally changed.

- 2.1.16 As discussed above the above magnitude, sensitivity and significance criteria are provided as a guide for specialists to categorise the significance of effects. Where discipline specific methodology has been applied that differs from the generic criteria above, this is explained within the given technical chapter under the Assessment Approach section.
- 2.1.17 The assessment of potential environmental effects, in line with the requirements of the EIA Regulations, establishes whether identified effects are:
 - Direct, indirect, secondary and cumulative;
 - Positive or negative; (where above effects are also described as:
 - > Adverse detrimental or negative effects on an environmental resource or receptor;
 - Beneficial advantageous or positive effect on an environmental resource or receptor; or
 - ➤ Negligible a neutral effect on an environmental resource or receptor).
 - Short, medium or long term;
 - Permanent or temporary.
- 2.1.18 Most predicted effects will be either positive or negative and will be described as such. However, in some cases it is appropriate to identify that the interpretation of a change is a matter of 'subjectivity'.
- 2.1.19 The temporal scope of environmental effects is stated where known. Effects are typically described as:
 - Temporary these are likely to be related to a particular activity and will cease when the activity finishes. The terms 'short-term' and 'long-term' may also be used to provide further clarification; or
 - Permanent this typically means an unrecoverable change.

Mitigation and Enhancement

- 2.1.20 This section identifies any measures required to prevent, reduce, or compensate for significant adverse impacts, or enhance positive effects.
- 2.1.21 It also considers the likelihood of the success of the mitigation measures proposed.
- 2.1.22 Where effects cannot be avoided individual chapters outline appropriate mitigation to reduce these effects or recommend compensatory measures.

Residual Effects

2.1.23 Each of the technical assessments includes a description and evaluation of the residual effects of the development proposed, i.e., those effects which are considered to be significant in terms of the EIA Regulations following the implementation of mitigation measures.

Cumulative and In-Combination Effects

2.1.24 Schedule 4, part 1, paragraph 4 of the Town and Country Planning (Environmental Impact Assessment) Regulations 2011 requires that a description of the Page 10 of 55

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likely significant effects of the development on the environment should cover cumulative effects.

- 2.1.25 The main aim of a cumulative assessment is to assess the additional impact of the Proposed Development on the baseline of projects that are either already operational, have planning permission or which are in the planning system.
- 2.1.26 This may be more relevant to certain technical areas and therefore will be addressed individually in each chapter. No changes have been made to the cumulative list submitted as part of the 2022 ES.

2.2 THE EIA CONSULTANT TEAM

- 2.2.1 This SEI has been co-ordinated and managed by Pegasus Group. Pegasus Group is one of the founding members of the Institute of Environmental Management and Assessment (IEMA) Quality Mark which is a mark of excellence in EIA Co-ordination and management. Pegasus Group has obtained, and retained since inception, its EIA Quality Mark status which is assessed by IEMA.
- 2.2.2 The consultants who have contributed to the preparation of this SEI are referenced in the Statement of Competence at the front of this document.

2.3 CUMULATIVE AND IN-COMBINATION EFFECTS

- 2.3.1 Within EIA, cumulative effects are generally considered to arise from the combination of effects from the Proposed Development and from other proposed or permitted schemes in the vicinity, acting together to generate elevated levels of effects. Examples of these kinds of effects that can be readily appreciated could include:
 - Traffic generated from developments, affecting the surrounding road network;
 - · Air quality effects from developments; and
 - Discharges to the water environment.
- 2.3.2 The schemes which have been considered in the assessment of cumulative effects have not been updated since the original 2022 ES submission, and therefore there is no update to cumulative and in-combination effects sections within each chapter.

2.4 GENERAL ASSUMPTIONS AND LIMITATIONS

- 2.4.1 The principal assumptions that have been made and any limitations that have been identified in preparing this ES are set out below:
 - Information received from third parties is complete and up to date; and
 - The design, construction and completed stages of the Proposed Development will satisfy legislative requirements.

3 APPLICATION SITE & PROPOSED DEVELOPMENT

3.1 APPLCATION SITE

3.1.1 The Application Site red line boundary has not increased or decreased since the 2022 ES was submitted. The Application Site remains as occupying approximately 66.15ha of undeveloped, greenfield land. Therefore, the Application Site context within the 2022 ES remains accurate and there is no update to this section. Please refer to 'Chapter 3- 3.2 Application Site' in the 2022 ES for this information. The locations of the designations and environmental features within the landscape can be seen in Figure 3.1- Environmental Designations Plan of the 2022 ES.

3.2 PROPOSED DEVELOPMENT

- 3.2.1 The Proposed Development composition and the development parameters, of which the 2022 ES has been assessed against, has not altered since the 2022 ES was submitted. The following headings within the 2022 ES in regard to the Proposed Development remain accurate and there is no update to the following subheadings:
 - Land Use;
 - Building Footprints and Maximum Heights;
 - · Green Infrastructure;
 - Surface Water Drainage;
 - Access and Movement;
 - · Provision for Pedestrians and Cyclists;
 - Car and Cycle Parking; and
 - Utilities.
- 3.2.2 **Figure 3.2- Parameter Plan** and **Figure 3.4- Illustrative Landscape Strategy** has not been altered since the 2022 ES and remains accurate in the 2022 SEI. Therefore, there is no update to this section. Please refer to the 2022 ES for this information.

3.3 DEVELOPMENT PROGRAMME AND CONSTRUCTION

- 3.3.1 Detailed consideration of potential effects during the construction process and any mitigation measures are provided in each relevant chapter of this SEI as appropriate.
- 3.3.2 Planning for construction is necessarily broad at this stage and may be subject to modification during the detailed design stage and in some instances when construction has commenced. Consequently, it has been necessary to predict some of the likely significant effects of the construction of the Proposed Development with the best possible degree of accuracy based on worst case scenarios.
- 3.3.3 The following headings within the 2022 ES in regard to the development programme and construction remains accurate and there is no update to the following subheadings:
 - Programme of Works;
 - · Construction Methodology;

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- Construction Environment Management;
- Management of sub-contractors;
- Management of Construction Works;
- Responses to Complaints;
- Prior Notice;
- Traffic Management;
- Application Site Drainage and Effect on Water Resources;
- Protection of Trees and Vegetation; and
- Demolition and Decommissioning.

4 **ALTERNATIVES**

4.1.1 The text within the 2022 ES remains accurate in the 2022 SEI. Therefore, there is no update to this section. Please refer to the 2022 ES for this information.

5 LANDSCAPE AND VISUAL

- 5.1.1 The text within the 2022 ES remains accurate in the 2022 SEI. Therefore, there is no update to this section. Please refer to the 2022 ES for this information.
- 5.1.2 The conclusion of the Landscape and Visual Chapter remain unaltered.

6 CULTURAL HERITAGE

- 6.1.1 The text within the 2022 ES remains accurate in the 2022 SEI. Therefore, there is no update to this section. Please refer to the 2022 ES for this information.
- 6.1.2 The conclusion of the Cultural Heritage Chapter remain unaltered.

7 ECOLOGY

7.1 INTRODUCTION

- 7.1.1 This Chapter addresses the ecological impacts of the Proposed Development and has been prepared by Harris Lamb Property Consultancy (HLPC). This Chapter is based on details set out in **Chapter 1- Introduction** and **Chapter 3- Application Site and Proposed Development** of the 2022 ES and Illustrative Landscape Strategy (**Figure 3.4** of the 2022 ES).
- 7.1.2 In accordance with the EIA Regulations (2017) the ecological assessment and ES chapter have been carried out by competent experts, comprising ecologists within the Chartered Institute for Ecology and Environmental Management (CIEEM). The ES Chapter has been undertaken by Dr Holly Smith MCIEEM who has over 17 year's ecological consultancy experience and demonstrable experience in producing Ecological Impact Assessments (EcIA) for similar developments in recent years.
- 7.1.3 This EcIA identifies potential ecological constraints to the Proposed Development and indicates where avoidance and mitigation measures are necessary. It also identifies opportunities for ecological enhancement to the Site.
- 7.1.4 Following consultee responses by Nature Space (15/06/2022) and Berkshire, Buckinghamshire, and Oxfordshire Wildlife Trust (24/06/2022), in response to the ES submitted with the outline application (22/01488/OUT), this Ecology Chapter has been amended to provide additional information where it is considered to be required.

7.2 METHODOLOGY

7.2.1 The text within the 2022 Environmental Statement remains accurate in the 2022 SEI. Therefore, there is no update to this section. Please refer to the 2022 Environmental Statement for this information.

7.3 METHODS OF ASSESSMENT AND LEGISLATIVE AND POLICY FRAMEWORK

7.3.1 The text within the 2022 Environmental Statement remains accurate in the 2022 SEI. Therefore, there is no update to this section. Please refer to the 2022 Environmental Statement for this information.

7.4 EXISTING BASELINE CONDITIONS

Baseline Data and Survey Information

Habitats on site

7.4.1 The habitats described below are mapped in **Figure 7.4** Site photographs provided in **Appendix 7.1-PEA** of the 2022 ES. The following habitat section has been amended to provide additional details on modified grassland as follows. The remaining section under Habitats is unchanged from the 2022 ES.

Modified grassland - q4 11 59 75 190 364

- 7.4.2 The majority of the site is comprised of modified grassland (see **Figure 5** within **Appendix 7.1-PEA** for habitat map of the 2022 ES). The grassland is heavily cattle grazed with hedgerows forming the field boundaries. A small number of fields have stands of scattered gorse *Ulex europaeus* scrub and field ponds. Species recorded included perennial rye-grass *Lolium perenne*, Yorkshire fog *Holcus lanatus*, daisy *Bellis perennis*, dandelion *Taraxacum officinalis* agg., cock's foot *Dactylis glomerata*, ribwort plantain *Plantago lanceolata*, white clover *Trifolium repens*, common stinging nettle *Urtica dioica*, meadow foxtail *Alopecurus pratensis* and greater stitchwort *Stellaria holostea*. Density of species was recorded at five per m².
- 7.4.3 The grassland on site is classified as g4 (modified grassland) under the primary hierarchy of the UK Habitats Classification with the secondary codes 10 (scattered scrub), 59 (cattle grazed), 75 (active management), 190 (hedgerow with trees) and 364 (natural pond).
- 7.4.4 Fields were surveyed individually, although survey routes and assessment stopping points within each field were dictated by the presence/absence of cattle. All fields were very similar in composition. The total number of plant species recorded in each field surveyed ranged from 6 to 9, but in each 1m² area selected the number of species recorded did not exceed 6 species. The fields were dominated by *Lolium perenne*. Based on the dominance of perennial ryegrass and the generally uniform sward structure it is considered likely that the fields have been seeded with a grass commercial mix in the past. In every field species considered undesirable were recorded, typically broad-leaved dock *Rumex obtusifolius*, common nettle *Urtica dioica* and white clover *Trifolium repens* (typically indicative of high nutrient loading) together with areas of cattle poaching. The sward height varied very little across all fields, likely indicative of re-seeding. On this basis, the category of modified grassland fairly poor was selected.
- 7.4.5 This habitat is widespread both locally and nationally and is considered to be of importance to conservation at the Site level only.

Species

Amphibians

- 7.4.6 The following habitat section has been amended to provide additional details in relation to great crested newts as follows. The remaining section under Species is unchanged.
- 7.4.7 No records of great crested newt were identified by TVERC and NBRC. A single record of common toad *Bufo bufo*, which is a species of principal importance, was identified c. 1.4 km from the site in 2012.
- 7.4.8 The habitats on site were considered suitable for foraging and sheltering opportunities for great crested newt and common amphibians. The mixture of grassland, hedgerow, scrub, and woodland habitat provides terrestrial habitat for the species.
- 7.4.9 Twelve ponds were identified within 250m of the site from aerial mapping, five of which lie within the site boundaries (P1, 3, 4, 6 and 7 (on Figure 6 within Appendix 7.1).
- $7.4.10\ P8$ and P10 were removed from consideration as they are separated from site by a major road network, creating a barrier to dispersal. P8 is located c. 134 m to the

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south of the application site and separated from the application site by the A422, a dual carriageway, which is considered to act as a significant barrier to amphibian dispersal, and with no direct habitat connectivity to the site identified. Whilst the pond is c. 134 m from the application boundary, the pond is located c. 210 m from the main development area (where habitat loss will occur) with an area proposed for landscape enhancement between the development area and the A422.

- 7.4.11 P10 is located c. 152 m to the south of the application site and separated from the application site by the A422, a dual carriageway, which is considered to act as a significant barrier to amphibian dispersal, with no direct habitat connectivity to the site identified. Whilst the pond is c. 152 m from the application boundary, the pond is located c. 370 m from the main development area (where habitat loss will occur) with an area proposed for landscape enhancement between the development area and the A422.
- 7.4.12 P11 and P12 were no longer present on inspection and were also removed from this assessment.
- 7.4.13 It was not possible to access P5 which was located within private gardens and permission to request access was not granted at the time of survey. P5 is located c. 210 m from the site. No previously identified records¹ of GCN have been identified with this pond using www.magic.gov.uk. The pond is located c. 510 m from the main development area with an area proposed for landscape enhancement between the development area and pond. P5 is immediately surrounded by woodland and grassland, based on aerial imagery, which is considered likely to provide suitable terrestrial habitats for GCN, if present.
- 7.4.14 P9 upon review was a swimming pool associated with a school and was scoped out of further assessment.
- 7.4.15 The remaining six ponds (Ponds 1, 2, 3, 4, 6, and 7) were subject to HSI assessments and subsequent eDNA samples were taken from those that met the habitat suitability threshold, with two ponds considered to have suitability (P1, P7). The HSI results are presented below in Table 7.12. Pond 2 was completely dry during the amphibian breeding season and P3 and P4 were heavily cattle poached, highly visibly nutrified and very shallow.

¹ Using <u>www.magic.gov.uk</u> or data returned via the biological record holders TVERC and NBRC

Table 7.1: Habitat Suitability Index results.

ARGUE	K GCN HSI Calculato	r					
A11001	Pond Name		P2	P3	P4	P6	P7
			-	SP 47563 42287	SP 47799 42026	SP 47664 41726	SP 47325 41890
SI No	SI Description	SI Value	SI Value	SI Value	SI Value	SI Value	SI Value
1	Geographic location	1	1	1	1	1	1
2	Pond area	0.4	0.2	0.2	0.3	0.5	0.8
3	Pond permanence	0.1	0.1	0.1	0.1	0.1	1
4	Water quality	0.01	0.01	0.01	0.01	0.01	0.67
5	Shade	0.5	0.2	1	0.2	0.3	0.3
6	Water fowl effect	1	1	1	1	1	0.67
7	Fish presence	1	1	1	1	1	1
8	Pond Density	1	1	1	1	1	1
9	Terrestrial habitat	0.67	0.67	0.67	0.67	0.67	0.67
10	Macropyhyte cover	0.3	0.3	0.4	0.3	0.3	0.4
	HSI Score	0.36	0.31	0.37	0.32	0.35	0.70
Pond	suitability (see below)	Poor	Poor	Poor	Poor	Poor	Good
		0.1	(11010				
		-	f HSI Score by Le				
		Pond Suitability	y				
		< 0.50	Poor				
		0.50 - 0.59	Below average				
		0.60 - 0.69	Average				
		0.70 - 0.79	Good				
		> 0.80	Excellent				

7.4.16 Only Pond 7 was considered to have 'good' suitability to support amphibians. All other ponds scored as 'poor' in the assessment. An eDNA sample was taken from Pond 7 and additionally from Pond 1 (as vegetation suggested it would hold water for a good proportion of the year, albeit it was nutrified and shallow with very limited egglaying material present). P1 and P7 both returned negative eDNA results which are presented in **Appendix 7.1-PEA** of the 2022 ES. It is noted that Natural England data for Great Crested Newt Pond Surveys 2017 – 2019 as provided via www.magic.gov.uk² records P7 as negative for GCN.

7.4.17 Suitable habitat for amphibians is present on and adjacent to site. No records of great crested newt were identified during the data consultation or 2021 survey effort. It is acknowledged that great crested newts are known to be present in the wider area. It is acknowledged that great crested newts are a mobile species and can exploit areas of ponding for breeding which may differ from season to season. It is acknowledged that pond suitability for supporting breeding great crested newts and common amphibians may alter from season to season. It is acknowledged that habitats on site could provide suitable habitat for great crested newts. Based on data gathered to date the risk of encountering GCN is considered to be low due to poor suitability of ponds to support this species on site, negative eDNA results from ponds which are considered to be suitable for supporting this species, barriers to amphibian dispersal and distance and habitat separation from ponds within the wider landscape which may support this species (albeit no records have been identified). Taking this into consideration it is considered that the risk of great crested newts being present on site is considered to be low.

² www.magic.gov.uk Accessed 11/10/2022

7.4.18 The ponds on site, whilst likely to dry out and have signs of high levels of eutrophication, could support populations of common amphibians such as common frog, and common toad and smooth newts. The terrestrial habitats are largely of limited value being heavily grazed by cattle, but hedgerows and areas of woodland and scrub may provide terrestrial habitats for common amphibians at a Site level.

7.5 EVOLUTION OF THE BASELINE CONDITIONS WITHOUT DEVELOPMENT

7.5.1 The text within the 2022 Environmental Statement remains accurate in the 2022 SEI. Therefore, there is no update to this section. Please refer to the 2022 Environmental Statement for this information.

7.6 ASSESSMENT OF LIKELY SIGNIFICANT EFFECTS

Protected sites

7.6.1 The text within the 2022 Environmental Statement remains accurate in the 2022 SEI. Therefore, there is no update to this section. Please refer to the 2022 Environmental Statement for this information.

Habitats

- 7.6.2 The Proposed Development has embedded mitigation which is based on the Illustrative Landscape Strategy (**Figure 3.4** of the 2022 ES) and includes:
 - Native species-rich hedgerows.
 - The area of grassland to be retained and enhanced.
 - Habitats will be able to attain the required distinctiveness and condition for enhancement at the reserved matters stage.
 - New tree planting will be predominately native species.
 - The proposed orchard will use native species/cultivars.
 - The proposed woodland will include native tree species.
 - At least two separate wildlife ponds will be created for the purpose of providing good quality pond habitat and separate to attenuation functions
- 7.6.3 The Biodiversity Net Gain has been updated since the 2022 ES, of which incorporated the DEFRA's Metric v3.0 as the latest version at that time. Based on **Figure 3.4- Illustrative Landscape Strategy** from the 2022 ES the Proposed Development is anticipated to result in the following Biodiversity Net Gain based on DEFRAs Metric v3.1 which accompanies the planning application documentation (**Appendix 7.3a**):
 - 10.08% BNG habitats
 - 12.64% BNG hedgerows
- 7.6.4 Based on **Figure 3.4- Illustrative Landscape Strategy** the Proposed Development is anticipated to result in a Biodiversity Net Gain using a DEFRA Biodiversity Metric (**Appendix 7.3a**). It is acknowledged that the Proposed Development is in Outline with landscaping reserved and as such without detailed landscape proposals the confidence is low.

Species

Common amphibians

Construction

- 7.6.5 Research conducted by English Nature (now Natural England) in 2004^3 to assess the value of different habitats for great crested newts states "By far the most captures were recorded within 50 m of ponds and few animals were captured at distances greater than 100 m." It also goes on to say:
- 7.6.6 "Captures on fences (and by other methods) at distances between 100 m and 200-250 m from breeding ponds tended to be so low as to raise serious doubts about the efficacy of this as an approach, although a small number of projects did report captures on significant linear features at distances approximately 150-200 m from ponds."
- 7.6.7 Furthermore good practice guidance issued by Natural England and the Forestry Commission⁴ suggests a number of techniques to be employed which (if followed) are permitted without the need for a Great Crested Newt Licence. Such measures include (amongst others):
- 7.6.8 Stacking within 100m of a pond, try to avoid stacking timber
- 7.6.9 Track construction or other ground-works avoid undertaking such activities within 100 m of a pond
- 7.6.10 The strong implication of the above research and advice is that the risk of great crested newts being present more than 100 m from a pond is low; and furthermore that the risk of great crested newts being present beyond 100 m from a pond is greatest with "large populations" or "particularly favourable habitat".
- 7.6.11 Based on the data gathered to date there is considered a low risk of encountering great crested newts during construction as it is acknowledged that newts can move in the landscape and breeding habitat can change suitability in intervening seasons between survey and construction commencing and a precautionary approach should be adopted. Without mitigation there is potential for temporary and permanent loss of great crested newt breeding habitat during the construction phase which based on data gathered to date is not anticipated to be of significance to populations of great crested newts at greater than a Site level, should they be present at the time of works.
- 7.6.12 Without additional mitigation the temporary loss of common amphibian breeding habitat and **permanent**, **direct negative** loss of terrestrial habitat during the construction phase could be of **significance** to populations of common amphibians at a **Site** level.

Operation

7.6.13 7.6.11 Following completion and establishment of proposed ponds and areas of enhanced grassland diversity would be **positive**, **direct**, **permanent** effect for local common amphibians and great crested newts (if present) and significant at a **Site**

³ W. Cresswell and R Whitworth, 2014. An assessment of the efficiency of capture techniques and the value of different habitats for the great crested newt Triturus cristatus. English Nature Research Report Number 576

⁴ Guidance on Managing Woodlands with Great Crested Newts in England, Version 2, 5 September 2007, section 6

to Local level. However, ecological receptors determined as effected below district level are considered not significant under the EIA Regulations overall.

7.7 MITIGATION AND ENHANCEMENTS

7.7.1 This section presents mitigation necessary to reduce any significant impacts identified. The mitigation is additional to the embedded mitigation but is considered necessary to prevent significant effects on the ecological features.

Mitigation by design

- 7.7.2 Section 7.6 included the following assumptions based on the layout which were considered to be 'Mitigation by design':
 - Native species-rich hedgerows would be planted outside the main developed areas.
 - The area of grassland to be retained will be enhanced.
 - New and retained habitats will attain the required condition to achieve net enhancement at the reserved matters stage.
 - New tree planting will be predominately native species.
 - The proposed orchard will use native species/cultivars.
 - The proposed woodland will include native tree species.
 - At least two separate wildlife ponds will be created for the purpose of providing good quality pond habitat and separate to attenuation functions.
- 7.7.3 Based on **Figure 3.4- Illustrative Landscape Strategy** of the 2022 ES the Proposed Development is anticipated to result in the following Biodiversity Net Gai.
 - 10.08% BNG habitats
 - 12.64% BNG hedgerows
- 7.7.4 It is acknowledged that the Proposed Development is in outline with landscape reserved and without additional mitigation there is a risk that the final landscape design, and/or baseline conditions may alter to an extent where biodiversity net gain is not achieved at the reserved matters stage.
- 7.7.5 Based on an initial assessment it is anticipated that a landscape scheme could be delivered to provide a long term, positive and significant effect and operation of the Proposed Development on this Site could be of **significance at a Local Level** (below district level) and considered **not significant** under the EIA Regulations overall.

Additional Mitigation

7.7.6 The following additional mitigation measures are recommended that are not included within the design.

<u>General</u>

7.7.7 The following assessment and mitigation is based on data gathered in 2021. At the reserved matters stage it may be necessary to update surveys where 2 or more years have passed to inform the final layout and details of mitigation measures and the prevailing CIEEM guidelines in relation to the age of ecology data should be adopted.

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Protected Sites

7.7.8 During construction potential minor negative indirect impacts have been identified due to sediment mobilisation/pollution events. Mitigation should include production of a Pollution Prevention Strategy to be included within the Construction and Environmental Management Plan (CEMP), prior to works commencing, agreed with the LPA and secured via planning condition.

Habitats

- 7.7.9 At the reserved matters stage the principles set out within the Illustrative Landscape Strategy and Parameters Plan and the DEFRA Biodiversity Metric submitted with the planning application to deliver measurable ecological enhancement should be implemented through a detailed landscape strategy and Landscape and Ecological Management Plan (LEMP). To inform the DEFRA metric at the reserved matters stage an updated survey to confirm the habitat(s) baseline should be undertaken. The reserved matters landscape design should include the following:
 - Retained grassland to be enhanced through green hay/seeding with an appropriate native mix to increase botanical diversity through long-term management within a LEMP.
 - Creation of species-rich (five or more native species) hedgerows of greater length than being lost.
 - Consideration should be given to translocation of hedgerows. New and retained hedgerows should be protected by a suitable buffer to ensure they can function as habitat corridors.
 - Enhancement of retained hedgerows via gap planting and supplementary planting to increase biodiversity and an appropriate management regime.
 - Creation of woodland and traditional orchard under an appropriate management regime to maintain its value over the long-term as set out in a detailed landscape strategy and LEMP.
 - Planting native trees and shrubs and hedgerow to retain and enhance habitat connectivity and diversity.
 - Creation of SuDs features and two wildlife ponds designed to enhance the biodiversity value of the Site.
 - Locations and nature of positive species-specific enhancements to include bat/bird boxes, amphibian and reptile refugia and insect boxes.
- 7.7.10 Unless otherwise agreed new and retained habitats for the delivery of Biodiversity Net Gain and included within the LEMP should be managed for a minimum of 30 years following granting of planning consent.
- 7.7.11 All trees and hedgerows to be retained should have adequate Root Protection Areas (RPAs) in line with BS 5837:2012 Trees in Relation to Design, Demolition and Construction.
- 7.7.12 These mitigation and long term management measures should be agreed with the LPA in a Landscape and Ecological Management Plan (LEMP) and secured via planning condition.
- 7.7.13 The above estimates for Biodiversity Net Gain do not include the other land in control of the Applicant which totals c. 9.47 ha which could be considered for

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enhancement in the event that the reserved matters application(s) cannot meet the required biodiversity enhancement threshold within the application area.

7.7.14 In the event that the final landscape design does not achieve a Biodiversity Net Gain as required by legislation/planning policy at the time of submission, suitable compensation should be agreed with the LPA (which could include offsite mitigation and/or an appropriate financial contribution).

Species

Amphibians

- 7.7.15 It is acknowledged that great crested newts are a mobile species and can exploit areas of ponding for breeding which may differ from season to season and pond suitability may alter from season to season. Given that habitats on site could provide suitable habitat for great crested newts and taking a precautionary approach, it is recommended that prior to construction commencing one of the following mitigation routes are adopted:
 - A Nature Space Report or Certificate is submitted to the LPA to demonstrate that the impacts of the proposed development can be addressed through Cherwell District Council's District Licence scheme; or
 - Update great crested newt surveys are undertaken (as stated below) and a
 mitigation scheme submitted to the LPA to demonstrate how any impacts to
 great crested newts can be addressed through appropriate
 mitigation/compensation proposals (e.g. obtaining a Natural England
 Licence and/or provision of a precautionary working statement in the form
 of Reasonable Avoidance Measures (RAMs)/Non-Licenced Method Statement
 (NLMS) strategy documents completed by a suitably qualified ecologist).
- 7.7.16 Prior to any works affecting ponds and terrestrial habitat commencing, Common Amphibian and Reptile Reasonable Avoidance Method Statement should be agreed with the LPA and secured via planning condition to minimise impacts to common and reptiles during the construction phase and should as a minimum include the following:
 - A Tool-box talk to all relevant contractors by an appointed Ecological Clerk of Works including how to identify common amphibians, common reptiles and great crested newts and what to do in the event of any of these species being found.
 - A method statement and timings for draw down of ponds to minimise impacts to common amphibians.
- 7.7.17 This information should be included within the CEMP.
- 7.7.18 The reserved matter application(s) landscaping scheme should identify in detail the number, profile and planting specification of all ponds and locations of hibernacula to demonstrate a benefit for amphibian species.
- 7.7.19 Should more than two years have passed since the assessment of ponds within 250 m of the Site for great-crested newts then an update assessment should be undertaken by a suitability experienced ecologist and if necessary surveys undertaken to confirm the current status of the Site with regard to great-crested newts.

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7.7.20 Reptiles are highly mobile and whilst no reptiles were recorded during the survey, should more than two years have lapsed since the date of the survey a reassessment should be undertaken by an experienced ecologist.

Other notable species

- 7.7.21 Should a hedgehog be found, it should be moved using a gloved hand to a place of safety and shelter. A suitable gap (13 cm x 13 cm) should be included in new boundary treatments to allow passage of hedgehogs. These can be marked with signs so that they are not blocked off in the future (https://www.hedgehogstreet.org/help-hedgehogs/link-your-garden/). This information should be included in the CEMP and secured via planning condition.
- 7.7.22 The LEMP at the reserved matters stage should include erection of an owl or kestrel bird box on suitable retained trees. It should also include 2 no. log piles to create refuge for amphibians, small mammals, and invertebrates and installation of 5no. hedgehog houses to benefit to local hedgehog populations. The LEMP should be secured via planning condition.
- 7.7.23 The LEMP at the reserved matters stage should specify the species mix for habitat create to demonstrate benefit for a range of aquatic and terrestrial invertebrate species. The LEMP should be secured via planning condition.

Table 7.18: Mitigation

Measure to avoid, reduce or manage	How measure would be secured			
any adverse effects and/or to deliver beneficial effects	By Design	By S.106	By Condition	
At reserved matters stage update ecological surveys as needed to ensure RM is designed using data in accordance with age guidelines set out by CIEEM			X	
A Construction and Environmental Management Plan to set out how retained habitats will be safeguarded and risk of pollution and construction lighting affecting habitats/species will be minimised.			X	
A Landscape and Ecological Management Plan at each RM stage to set out how habitats have been selected and will be managed to deliver an overall 10% Biodiversity Net Gain or greater in respect of habitats and hedgerows.	X	X	X	
Update surveys and assessment/licensing and/or obtaining a District Level Licence in respect of great crested newts. An Amphibian and Reptile Reasonable Avoidance Measures Method Statement			X	
	any adverse effects and/or to deliver beneficial effects At reserved matters stage update ecological surveys as needed to ensure RM is designed using data in accordance with age guidelines set out by CIEEM A Construction and Environmental Management Plan to set out how retained habitats will be safeguarded and risk of pollution and construction lighting affecting habitats/species will be minimised. A Landscape and Ecological Management Plan at each RM stage to set out how habitats have been selected and will be managed to deliver an overall 10% Biodiversity Net Gain or greater in respect of habitats and hedgerows. Update surveys and assessment/licensing and/or obtaining a District Level Licence in respect of great crested newts.	any adverse effects and/or to deliver beneficial effects At reserved matters stage update ecological surveys as needed to ensure RM is designed using data in accordance with age guidelines set out by CIEEM A Construction and Environmental Management Plan to set out how retained habitats will be safeguarded and risk of pollution and construction lighting affecting habitats/species will be minimised. A Landscape and Ecological Management Plan at each RM stage to set out how habitats have been selected and will be managed to deliver an overall 10% Biodiversity Net Gain or greater in respect of habitats and hedgerows. Update surveys and assessment/licensing and/or obtaining a District Level Licence in respect of great crested newts. An Amphibian and Reptile Reasonable Avoidance Measures Method Statement	any adverse effects and/or to deliver beneficial effects At reserved matters stage update ecological surveys as needed to ensure RM is designed using data in accordance with age guidelines set out by CIEEM A Construction and Environmental Management Plan to set out how retained habitats will be safeguarded and risk of pollution and construction lighting affecting habitats/species will be minimised. A Landscape and Ecological Management Plan at each RM stage to set out how habitats have been selected and will be managed to deliver an overall 10% Biodiversity Net Gain or greater in respect of habitats and hedgerows. Update surveys and assessment/licensing and/or obtaining a District Level Licence in respect of great crested newts. An Amphibian and Reptile Reasonable Avoidance Measures Method Statement	

	methodologies during construction phase	
5	Vegetation clearance or building demolition should be undertaken outside the nesting bird season (nesting season runs March-August, inclusive) where practicable unless supervised by a ECoW. Prior to works affecting the building a survey to confirm status of Schedule 1 bird species.	X
6	Prior to demolition of the buildings or removal of hedgerows connected to the building an appropriate Natural England licence for bats is obtained, informed if needed by up to date bat survey data, and any mitigation agreed with NE put in place.	X
7	At the Reserved Matters stage a lighting scheme devised with an ecologist to minimise impacts to foraging bats	Х
8	Prior to any trees being felled trees should be assessed by an experienced bat ecologist to determine presence/absence of bats and any mitigation put in place prior to felling the relevant tree.	X
9	The CEMP and LEMP for each reserved matters to set out measures to safeguard hedgehogs during construction	X

Enhancements

7.7.24 The text within the 2022 Environmental Statement remains accurate in the 2022 SEI. Therefore, there is no update to this section. Please refer to the 2022 Environmental Statement for this information.

7.8 RESIDUAL EFFECTS

- 7.8.1 The following residual effects are anticipated based on data gathered to date assuming the embedded mitigation and mitigation measures set out in Section 7.8 are implemented:
 - A **positive**, **long-term permanent** effect on habitat biodiversity, hedgerow quality and biodiversity and enhancement of standing water habitat which should deliver over 10% measurable Biodiversity Net Gain either on or off site and considered to be significant at a Site to Local level and not significant under the EIA Regulations.
 - A positive long-term permanent impact on amphibians and reptiles through increased diversity of terrestrial habitats and through an increase in breeding habitat (amphibians) and significant at up to a Local level. Not significant under the EIA Regulations.

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- A **positive**, **long-term permanent** impact on birds through increased provision of nesting and foraging habitat and increasing diversity of habitats through attenuation basins and significant at up to a Local level. Not significant under the EIA Regulations.
- A short-term negative, temporary impact on foraging and commuting bats during the construction phase and whilst habitats establish with a positive, long-term permanent impact on bat through increased provision of roosting habitat and increasing diversity of foraging habitats through attenuation basins and improved botanical diversity and significant at up to a Site level. Not considered significant under the EIA Regulations.
- A **positive, long-term** permanent impact to a range of terrestrial and aquatic invertebrate species and hedgehogs. Not considered significant under the EIA Regulations.
- 7.8.2 The predicted residual effects are not considered to be significant under the EIA Regulations.

7.9 CUMULATIVE EFFECTS

7.9.1 The text within the 2022 Environmental Statement remains accurate in the 2022 SEI. Therefore, there is no update to this section. Please refer to the 2022 Environmental Statement for this information.

7.10 MONITORING

- 7.10.1 The following monitoring measures are anticipated to be secured via planning condition:
 - Each reserved matters application to demonstrate how the detailed layout and landscaping deliver the ecological enhancement and measurable biodiversity enhancement using a DEFRA biodiversity metric along the principles of this assessment within each reserved matters LEMP. The LEMP should set out monitoring measures to ensure the long term success of landscape planting.
 - Should a European Protected Species Licence from Natural England be required in respect of bats and (if required) great crested newts then works should be undertaken in accordance with all monitoring requirements set out within the EPSL.
 - The CEMP to include timing of works, appointment of an Ecological Clerk of Works and any measures to be included from an EPS licence.

7.11 SUMMARY

Introduction

7.11.1 An Ecological Impact Assessment has been undertaken in line with current best practice guidance (CIEEM, 2018). A desk-based assessment was undertaken to identify records of protected and/or notable habitats and species, and designated nature conservation sites in the vicinity of the site. Field survey data was collected in 2021 for the following species or species groups; amphibians, reptiles, birds, badgers, hazel dormice and bats. Information relating to badgers is provided under a separate Confidential Appendix due to the risk of persecution.

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Baseline Conditions

- 7.11.2 The Site is dominated by heavily grazed grassland fields which have been modified through re-seeding and the effects of cattle grazing. The fields are typically bounded by species poor hedgerows with scattered mature trees. There are small field ponds within the site that have been poached by cattle and are of low ecological value. A former farmhouse and outbuildings are present on site. Pockets of woodland and gorse scrub are present along the eastern edge of the site.
- 7.11.3 Surveys to determine the presence/absence of hazel dormouse were undertaken and no hazel dormice were recorded. Pond sampled to determine the presence/absence of great crested newts were negative for this species and remaining ponds in the local landscape were considered to be poor habitat for this species and the risk of encountering great crested newts is considered low and a precautionary approach has been adopted. Ccommon amphibians such as frogs and toads could utilise habitats on site. Reptile survey did not record the presence of any reptile species. A variety of farmland and urban birds use the site for foraging and nesting typically associated with the hedgerows and trees and low numbers of ground nesting birds recorded, likely due to the high levels of cattle grazing. Brown long-eared bat and common pipistrelle bat roosts was recorded in two buildings within the farm complex and bats use the hedgerows for commuting and foraging into the local landscape.

Likely Significant Effects

- 7.11.4 Based on the data gathered the Proposed Development during the construction phase and without mitigation there is potential for negative effects significant at are Site to Local level in relation to pollution events, loss of habitats and effects on species such amphibians, reptiles, birds, bats and small mammals and invertebrates.
- 7.11.5 At the operation stage the Proposed Development will have established newly created habitats including enhanced grassland, species-rich hedgerows, native trees, new ponds, native woodland and an orchard all of which would be positive, permanent and of significance at up to a Local level.

Mitigation and Enhancement

- 7.11.6 The Proposed Development includes retention of green corridors and enhancement of habitats is anticipated to deliver a measurable biodiversity enhancement at the reserved matter(s) stage which would be secured via a Landscape and Ecological Management Plan (LEMP) via planning condition or in the event the final design does not deliver measurable net gain via a suitable compensation package or financial contribution. The LEMP would provide species-specific enhancements including details on bat and bird box provision, amphibian and reptile refugia and appropriate pond design within the final layout. These measures will enhance the site for amphibians, reptiles, birds, badgers, and bats and invertebrate species at a site to local level.
- 7.11.7 Site management during construction would include pollution prevention, biosecurity and good environmental site measures to minimise ecological impacts to local wildlife sites and on site wildlife should be set out within a CEMP to be agreed with the LPA. The CEMP will include the requirement for pre-commencement surveys for nesting birds (if vegetation is removed during the breeding season) and amphibians and reptiles under a Reasonable Avoidance Method Statement (and in respect of great crested newts a suitable licence if required), badgers and lighting which could affect

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bats. Appropriate mitigation should be put in place to comply with legal obligations including where necessary obtaining a European Protected Species Licence in respect of bats identified within buildings and great crested newts if required. It is not know which trees would require felling until final design at the reserved matters stage has been complete and a condition should be imposed to ensure all necessary bat surveys are undertaken of tree prior to felling to determine whether they support roosting bats and any necessary mitigation/licensing put in place. Impacts from construction and operational lighting on bats should be controlled via ecologically sensitive lighting plans secured via planning condition.

Cumulative and In-combination Effects

7.11.8 With the above mitigation put in place, together with proposed embedded enhancements the Proposed Development is anticipated to deliver new, good-quality habitat and no significant negative impacts to ecology are anticipated to occur from the proposed development alone or in-combination with other schemes.

Conclusion

7.11.9 Overall, the Proposed Development with embedded and additional mitigation will have very few residual effects and none anticipated to be significant under the EIA Regulations.

7.12 Summary of Effects, Mitigation and Residual Effects

Table 7.18: Summary of Effects, Mitigation and Residual Effects.

Receptor/ Receiving Environmen t	Description of Effect	Nature of Effect *	Sensitivity Value **	Magnitude of Effect **		Significance of Effects ****	Mitigation/ Enhancement Measures	Residual Effects ****			
Construction											
Protected sites of nature conservation value	Construction activities within proximity to protected sites. Sediment Input/Pollution from construction activities.	Temporary / reversible, indirect	Not applicable	Not applicable	County - regional	Site level negative not significant	Stringent Pollution Controls. Production and Implementation of Construction Environmental Management Plan (CEMP).	Negligible not significant			
Habitats	Loss of species- poor hedgerow, loss of non- priority ponds, loss of modified grassland	Permanent / negative, direct	Not applicable	Not applicable	Site	Site negative not significant	Embedded mitigation to include creation of 2 wildlife ponds, planting species rich hedgerow, enhancing retained hedgerows,	Site - Local level permanent positive not significant			

Receptor/ Receiving Environmen t	Description of Effect	Nature of Effect *	Sensitivity Value **	Magnitude of Effect **		Significance of Effects ****	Mitigation/ Enhancement Measures	Residual Effects ****
							creating enhanced grassland habitat, planting new woodland, orchards, native trees, native shrubs to achieve BNG or an appropriate compensation package/financi al contribution should BNG not be achieved through the final landscape design on site.	
Amphibians/ reptiles	Potential killing and injuring of individual amphibians and reptiles during construction if present. Negative permanent at up	Temporary to Permanent / Direct	Not applicable	Not applicable	Site	Site level, negative, not significant	Re-evaluation of GCN presence/absen ce at RM stage and if required an appropriate EPS licence obtained either	Site level negative, not significant

Receptor/ Receiving Environmen t	Description of Effect	Nature of Effect *	Sensitivity Value **	Magnitude of Effect **		Significance of Effects ****	Mitigation/ Enhancement Measures	Residual Effects ****
	to a Local level predicted (low confidence).						via DLL or NE or an appropriate method statement. The CEMP to include a Reptile Reasonable Avoidance Method Statement (RAMS) in respect of common	
Birds	Risk of killing or injuring nesting birds during demolition/veget ation clearance without mitigation.	Temporary to Permanent / negative, direct	Not applicable	Not applicable	Site	Site - Local level negative, not significant	Vegetation removal/buildin g demolition will be undertaken outside of the bird breeding season (March - August	Site – Local level negative, not significant

Receptor/ Receiving Environmen t	Description of Effect	Nature of Effect *	Sensitivity Value **	Magnitude of Effect **		Significance of Effects ****	Mitigation/ Enhancement Measures	Residual Effects ****
							inclusive) or under ecological supervision.	
Bats	Loss of bat roost(s) during demolition of building(s) and felling of trees.	Permanent / Direct, Negative	Not applicable	Not applicable	Site - Local	Site - Local level, not significant	Prior to demolition a Natural England licence should be obtained and mitigation put in place with installation of bat boxes on retained trees.	Site level negative, not significant
	Possible construction lighting impacting foraging/commuting bats	Temporary / Direct, negative	Not applicable	Not applicable	Site – Local	Site – local level, not significant	CEMP to include a construction lighting scheme.	Site level negative, not significant
		Permanent / direct,	Not	Not	Site – Local	Site – Local not		

Receptor/ Receiving Environmen t	Description of Effect	Nature of Effect *	Sensitivity Value **	Magnitude of Effect **	Geographic al Importance ***	Significance of Effects ****	Mitigation/ Enhancement Measures	Residual Effects ****
	Felling of trees potential to effect roosting bats	negative	applicable	applicable	level (confidence low)	significance (confidence low)	Prior to felling bat assessment and if required bat surveys of trees and mitigation put in place prior to felling.	Site level negligible not significant
Badgers	See separate repor	t						
Hedgehogs, and terrestrial invertebrates	Loss of hedgehog habitat. Low risk of encountering hedgehogs during construction	Permanent, negative, direct	Not applicable	Not applicable	Site	Site level not significant	CEMP to include measures to protect hedgehogs.	Site level, not significant

Receptor/ Receiving Environmen t	Description of Effect	Nature of Effect *	Sensitivity Value **	Magnitude of Effect **	Geographic al Importance ***	Significance of Effects ****	Mitigation/ Enhancement Measures	Residual Effects ****
Operation								
Protected sites of nature conservation value	Recreational activities within proximity to protected sites	Temporary / indirect, negative	Not applicable	Not applicable	County - regional	Site – Local level not significant	Embedded mitigation recreational facilities within the site	Site level, negligible, not significant
Amphibians/ reptiles	Creation of attenuation ponds, species rich grassland, native shrub, tree planting and wetland grass areas for benefit of reptiles.	Permanent / positive, Direct	Not applicable	Not applicable	Site	Site level positive not significant	A LEMP to set out measures to enhance the Site for amphibians and reptiles over the long term including locations of reptile hibernacula, log piles etc.	Site level positive not significant
Birds	Creation of new scrub and tree and standing water features for benefit range of urban and farmland bird	Permanent / positive direct	Not applicable	Not applicable	Local	Site level not significant	LEMP to detail planting to benefit birds	Site – Local positive, not significant

Receptor/ Receiving Environmen t	Description of Effect	Nature of Effect *	Sensitivity Value **	Magnitude of Effect **	Geographic al Importance ***	Significance of Effects ****	Mitigation/ Enhancement Measures	Residual Effects ****
Bats	species. Habitats to benefit foraging bats through habitat creation	Permanent, positive, direct	Not applicable	Not applicable	Site – Local	Site level, not significant	Implementation of a LEMP to ensure that bat foraging and commuting habitat is maintained and enhanced.	Site level. Not significant
	Operational lighting could effect foraging/commuting bats	Permanent, negative, direct	Not applicable	Not applicable	Site - Local	Site – Local level, not significant	Detailed lighting design and specification, to be prepared at the detailed design stage should be bat friendly and developed with the input of a bat ecologist.	Site level - Local. Not significant
Hedgehogs, and terrestrial invertebrates	Enhancement of habitats for hedgehogs and invertebrates	Positive. Permanent at Site level.	Not applicable	Not applicable	Site	Site level, not significant	LEMP to set out how barrier treatment to fences maintain	Site level - Local. Not significant

Receptor/ Receiving Environmen t	Description of Effect	Nature of Effect *	Sensitivity Value **	Magnitude of Effect **	 Significance of Effects ****	Mitigation/ Enhancement Measures	Residual Effects ****
	and connectivity through landscape planting and creation of attenuation ponds.					habitat connectivity and planting benefit hedgehogs. Selection of planting for benefit of invertebrates and installation of bug boxes.	

8 TRANSPORT AND ACCESS

8.1 INTRODUCTION

- 8.1.1 This chapter provides an assessment of the potential significant effects of the proposed outline planning application for the construction of up to "Outline planning application for the construction of up To 140,000 sqm of employment floorspace (use class B8 with ancillary offices and facilities) and servicing and infrastructure including new site accesses, internal roads and footpaths, landscaping including earthworks to create development platforms and bunds, drainage features and other associated works including demolition of the existing farmhouse. All matters of detail reserved." This chapter has been prepared by David Tucker Associates (DTA).
- 8.1.2 The following receptors have been considered as part of the assessment:
 - Users of the public highway in the vicinity of the site including, pedestrians, cyclist, public transport users;
 - Private car and van drivers; and
 - Existing vehicle users in the surrounding areas.
- 8.1.3 The assessment has been carried out in accordance with the Institute of Environmental Assessment (IEA) Guidance Note No 1 'Guidelines for the Environmental Assessment of Road Traffic' (1993) (the 'IEA Guidelines').
- 8.1.4 The impacts associated with traffic in relation to air quality and noise are set out in **Chapter 10: Air Quality** and **Chapter 11: Noise** of this ES respectively.
- 8.1.5 A Transport Assessment (TA) is attached in **Appendix 8.1** of the 2022 ES and has been prepared to support the assessment reported in this chapter. The assessment reviews the impact on both the local and strategic road network (SRN) and reflects initial discussions with National Highways (NH) and the local Highway Authority, Oxfordshire County Council (OCC).
- 8.1.6 A Framework Travel Plan (FTP) is attached in **Appendix 8.2** of the 2022 ES and has been prepared with the objective to reduce the percentage of occupants travelling by single occupancy car.
- 8.1.7 Following comments received from Oxfordshire County Council as local highway authority and National Highways, a Transport Assessment Addendum has been prepared and this is attached in **Appendix 8.3** of this SEI.
- 8.1.8 In the main the Transport Assessment Addendum provides further clarification on the accessibility strategy for the site and further modelling of the site access and J11 of the M40. It does not change the inputs to the ES assessment, nor does it fundamentally change any of the appraisal or outcomes of those assessments.

8.2 ASSESSMENT APPROACH

Methodology

8.2.1 The text within the 2022 Environmental Statement remains accurate in the 2022 SEI. Therefore, there is no update to this section. Please refer to the 2022 Environmental Statement for this information.

Assessment of Significance

8.2.2 The text within the 2022 Environmental Statement remains accurate in the 2022 SEI. Therefore, there is no update to this section. Please refer to the 2022 Environmental Statement for this information.

Legislative and Policy Framework

8.2.3 The text within the 2022 Environmental Statement remains accurate in the 2022 SEI. Therefore, there is no update to this section. Please refer to the 2022 Environmental Statement for this information.

Limitations to the Assessment

8.2.4 The text within the 2022 Environmental Statement remains accurate in the 2022 SEI. Therefore, there is no update to this section. Please refer to the 2022 Environmental Statement for this information.

8.3 BASELINE ENVIRONMENT

8.3.1 The text within the 2022 Environmental Statement remains accurate in the 2022 SEI. Therefore, there is no update to this section. Please refer to the 2022 Environmental Statement for this information.

8.4 ASSESSMENT OF LIKELY SIGNIFICANT EFFECTS

Construction

8.4.1 The text within the 2022 Environmental Statement remains accurate in the 2022 SEI. Therefore, there is no update to this section. Please refer to the 2022 Environmental Statement for this information.

Proposed Traffic Generation

8.4.2 The text within the 2022 Environmental Statement remains accurate in the 2022 SEI. Therefore, there is no update to this section. Please refer to the 2022 Environmental Statement for this information.

Proposed Traffic Distribution

- 8.4.3 Minor changes have been made to the traffic assignment to correct some typographical errors in the original assessment. These are provided below as a replacement to **Table 8.12**:
- 8.4.4 The distribution of the light and heavy vehicles has been analysed using Google Maps and the proposed traffic assignment can be seen in **Table 8.12** below.

Table 8.12: Proposed Traffic Assignment

Link	Light Vehicle	:S		HGVs			
LIIIK	Assignment	АМ	РМ	Assignment	АМ	РМ	
M40 N	12.5%	32	46	18.%	29	17	
M40 S	8.5%	22	31	50.6%	79	47	
A422 E	18.0%	45	66	18.7%	29	17	
A422 W	53.5%	135	197	1.7%	3	2	
A361 N	7.5%	19	28	10.8%	17	10	

Traffic Impact

8.4.5 The percentage change for total vehicles and then also, for completeness, for HGVs is shown in **Table 8.13** for the proposed operational traffic flows.

Table 8.13: Traffic Impact on the Surrounding Road Network for Proposed Traffic Flows

Locations	Base Traffic Flow – AADT		Proposed 1 Flow	Traffic	Percentage Increase				
	Totals	HGVs	Totals	HGVs	Totals	HGVs			
M40 N	90,486	14,659	913	402	1.0%	2.7%			
M40 S	92,286	15,506	1,460	1,112	1.6%	7.2%			
A422 E	9,670	446	1,143	411	11.8%	92.3%			
A422 W	43,404	3,350	2,215	37	5.1%	1.1%			
A361 N	8,032	310	544	237	6.8%	76.6%			

8.4.6 Despite the modest changes, the assessment of impacts as reported in the 2022 Environmental Statement remains accurate in the 2022 SEI. Therefore, there is no update to this section. Please refer to the 2022 Environmental Statement for this information.

Severance

Decommissioning

8.4.7 The text within the 2022 Environmental Statement remains accurate in the 2022 SEI. Therefore, there is no update to this section. Please refer to the 2022 Environmental Statement for this information.

Mitigation by Design

8.4.8 The text within the 2022 Environmental Statement remains accurate in the 2022 SEI. Therefore, there is no update to this section. Please refer to the 2022 Environmental Statement for this information.

Additional Mitigation

8.4.9 In addition to the above, the following measures are included (or expected to be included as part of any planning consented. Following the comments from OCC a contribution has been confirmed towards the following measures:

Table 8.14: Mitigation

Ref	Measure to avoid, reduce or manage	How measu	re would be	secured
	any adverse effects and/or to deliver beneficial effects	By Design	By S.106	By Condition
1	A contribution to OCC to fund wider capacity enhancements on the Hennef Way Corridor.		Х	
2	Public Transport Enhancements – a contribution increasing the frequency of Service 200		Х	
3	Further improvements to bus stop infrastructure		Х	
4	Provision of EV Charging	Х		
5	Routeing and Signage Strategy			X

8.5 CUMULATIVE AND IN-COMBINATION EFFECTS

8.5.1 The text within the 2022 Environmental Statement remains accurate in the 2022 SEI. Therefore, there is no update to this section. Please refer to the 2022 Environmental Statement for this information.

8.6 SUMMARY

8.6.1 The text within the 2022 Environmental Statement remains accurate in the 2022 SEI. Therefore, there is no update to this section. Please refer to the 2022 Environmental Statement for this information.

Table 8.15: Summary of Effects, Mitigation and Residual Effects

Receptor/ Receiving Environment	Description of Effect	Nature of Effect	Sensitivity Value	Magnitude of Effect	Geographical Importance	Significance of Effects	Mitigation/ Enhancement Measures	Residual Effects
Construction								
Severance	This effects pedestrians.	Temporary / Direct	Low	Negligible	Local	Insignificant Adverse	None	Insignificant Adverse
Driver Delay	This effects road users.	Temporary / Direct	Medium	Negligible	Local	Insignificant Adverse	None	Insignificant Adverse
Pedestrian Delay and Amenity	This effects pedestrians.	Temporary / Direct	Low	Negligible	Local	Insignificant Adverse	None	Insignificant Adverse
Accidents and Safety	This effects road users.	Temporary / Direct	Low	Negligible	Local	Insignificant Adverse	None	Insignificant Adverse
Hazardous or Abnormal Loads	This effects pedestrians and road users.	Temporary / Direct	Low	Negligible	Local	Insignificant Adverse	None	Insignificant Adverse
Fear and Intimidation	This effects pedestrians.	Temporary / Direct	Low	Negligible	Local	Insignificant Adverse	None	Insignificant Adverse
Operation	<u>'</u>					<u>'</u>		<u>'</u>
Severance	This effects pedestrians.	Permanent / Direct	Low	Significant	Local	Moderate Adverse	Routeing Strategy	Minor Adverse
Driver Delay	This effects	Permanent /	Medium	Moderate	Local	Moderate	Improvements	Minor

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Receptor/ Receiving Environment	Description of Effect	Nature of Effect	Sensitivity Value	Magnitude of Effect	Geographical Importance	Significance of Effects	Mitigation/ Enhancement Measures	Residual Effects
	road users.	Direct				Adverse	to M40 J11 gyratory	Adverse
Pedestrian Delay and Amenity	This effects pedestrians.	Permanent / Direct	Low	Minor/ Slight	Local	Minor Adverse	None	Minor Adverse
Accidents and Safety	This effects road users.	Permanent / Direct	Low	Negligible	Local	Minor Adverse	None	Minor Adverse
Hazardous or Abnormal Loads	This effects pedestrians and road users.	Permanent / Direct	Low	Negligible	Local	Negligible Adverse	None	Negligible Adverse
Fear and Intimidation	This effects pedestrians.	Permanent / Direct	Low	Negligible	Local	Minor Adverse	None	Minor Adverse
Cumulative ar	nd In-combinati	on						
Severance	This effects pedestrians.	Permanent / Direct	Low	Significant	Local	Moderate Adverse	Routeing Strategy	Minor Adverse
Driver Delay	This effects road users.	Permanent / Direct	Medium	Moderate	Local	Moderate Adverse	Improvements to M40 J11 gyratory	Minor Adverse
Pedestrian Delay and Amenity	This effects pedestrians.	Permanent / Direct	Low	Minor/ Slight	Local	Minor Adverse	None	Minor Adverse
Accidents	This effects	Permanent /	Low	Negligible	Local	Minor	None	Minor

Receptor/ Receiving Environment	Description of Effect	Nature of Effect	Sensitivity Value	Magnitude of Effect	Geographical Importance	Significance of Effects	Mitigation/ Enhancement Measures	Residual Effects
and Safety	road users.	Direct				Adverse		Adverse
Hazardous or Abnormal Loads	This effects pedestrians and road users.	Permanent / Direct	Low	Negligible	Local	Negligible Adverse	None	Negligible Adverse
Fear and Intimidation	This effects pedestrians.	Permanent / Direct	Low	Negligible	Local	Minor Adverse	None	Minor Adverse

9 FLOOD RISK AND DRAINAGE

- 9.1.1 The text within the 2022 ES remains accurate in the 2022 SEI. Therefore, there is no update to this section. Please refer to the 2022 ES for this information.
- 9.1.2 The conclusion of the Flood Risk and Drainage Chapter remain unaltered.

10 AIR QUALITY

- 10.1.1 The text within the 2022 ES remains accurate in the 2022 SEI. Therefore, there is no update to this section. Please refer to the 2022 ES for this information.
- 10.1.2 The conclusion of the Air Quality Chapter remain unaltered.

11 NOISE

- 11.1.1 The text within the 2022 ES remains accurate in the 2022 SEI. Therefore, there is no update to this section. Please refer to the 2022 ES for this information.
- 11.1.2 The conclusion of the Noise Chapter remain unaltered.

12 SOCIO-ECONOMICS

- 12.1.1 The text within the 2022 ES remains accurate in the 2022 SEI. Therefore, there is no update to this section. Please refer to the 2022 ES for this information.
- 12.1.2 The conclusion of the Socio Economics Chapter remain unaltered.

13 SUMMARY

- 13.1.1 This chapter forms the summary of the Supplementary Environmental Information (SEI) which addresses changes to the Proposed Development design since the submission of 2022 Environmental Statement (ES) to Cherwell District Council (CDC) in May 2022 (CDC Application Reference: 22/01488/OUT).
- 13.1.1 This SEI assesses the changes of the design and the validity of the potential significant environmental conclusions drawn in the 2022 ES as a result of any updates Proposed Development at land east of J11, M40, Banbury (the "Application Site" or "Site").
- 13.1.2 This SEI has been prepared on behalf of Greystoke CB Ltd (the "Applicant") in support of a planning application seeking outline planning permission for the 'construction of up to 140,000 sq. m of employment floorspace (use class B8 with ancillary offices and facilities) and servicing and infrastructure including new site accesses, internal roads and footpaths, landscaping including earthworks to create development platforms and bunds, drainage features and other associated works including demolition of the existing farmhouse' the "Proposed Development").
- 13.1.3 The Application Site lies within the administrative area of Cherwell District Council (CDC).
- 13.1.4 This SEI presents further information relating to Transport and Ecology matters in response to consultation responses received in relation to the ES submitted with the outline application (22/01488/OUT).
- 13.1.5 The process that has been adopted in this SEI follows closely the key characteristics of the Environmental Statement document that was submitted alongside the planning application in May 2022. Consequently, this document should be read alongside the original Environmental Statement since its key characteristics remain unchanged.
- 13.1.6 3The Application Site red line boundary has not increased or decreased since the 2022 ES was submitted. The Application Site remains as occupying approximately 66.15ha of undeveloped, greenfield land. Therefore, the Application Site context within the 2022 ES remains accurate and there is no update to this section. Please refer to 'Chapter 3- 3.2 Application Site' in the 2022 ES for this information.
- 13.1.7 The Proposed Development composition and the development parameters, of which the 2022 ES has been assessed against, has not altered since the 2022 ES was submitted.
- 13.1.8 There are no updates to the following chapters text:
 - Landscape and Visual;
 - · Cultural Heritage;
 - · Flood Risk and Drainage;
 - Air Quality;
 - · Noise; and

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- Socio- Economics.
- 13.1.9 Therefore the 2022 ES remains accurate in the 2022 SEI. Please refer to the 2022 ES for this information.

13.2 SUMMARY OF REVISED ECOLOGY CHAPTER

13.2.1 Following consultee responses by Nature Space (15/06/2022) and Berkshire, Buckinghamshire, and Oxfordshire Wildlife Trust (24/06/2022), in response to the ES submitted with the outline application (22/01488/OUT), this Ecology Chapter has been amended to provide additional information where it is considered to be required.

Baseline Conditions

<u>Habitats</u>

- 13.2.2 The habitats are mapped in **Figure 7.4** Site photographs provided in **Appendix 7.1-PEA** of the 2022 ES. Modified grassland g4 10 59 75 190 364 has been amended to provide additional details.
- 13.2.3 The grassland on site is classified as g4 (modified grassland) under the primary hierarchy of the UK Habitats Classification with the secondary codes 10 (scattered scrub), 59 (cattle grazed), 75 (active management), 190 (hedgerow with trees) and 364 (natural pond).
- 13.2.4 Fields were surveyed individually, although survey routes and assessment stopping points within each field were dictated by the presence/absence of cattle. All fields were very similar in composition. the category of modified grassland fairly poor was selected. This habitat is widespread both locally and nationally and is considered to be of importance to conservation at the Site level only.

Species

- 13.2.5 Amphibians has been amended to provide additional details in relation to great crested newts.
- 13.2.6 No records of great crested newt were identified by TVERC and NBRC.
- 13.2.7 The habitats on site were considered suitable for foraging and sheltering opportunities for great crested newt and common amphibians.
- 13.2.8 Twelve ponds were identified within 250m of the site from aerial mapping, five of which lie within the site boundaries. Six ponds were removed from consideration due to site separation distances, no longer present or unable to access.
- 13.2.9 The remaining six ponds (Ponds 1, 2, 3, 4, 6, and 7) were subject to HSI assessments and subsequent eDNA samples were taken from those that met the habitat suitability threshold, with two ponds considered to have suitability (P1, P7).
- 13.2.10 Only Pond 7 was considered to have 'good' suitability to support amphibians. All other ponds scored as 'poor' in the assessment.

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13.2.11 Suitable habitat for amphibians is present on and adjacent to site. No records of great crested newt were identified during the data consultation or 2021 survey effort. It is acknowledged that great crested newts are known to be present in the wider area. It is acknowledged that great crested newts are a mobile species and can exploit areas of ponding for breeding which may differ from season to season. It is acknowledged that pond suitability for supporting breeding great crested newts and common amphibians may alter from season to season. It is acknowledged that habitats on site could provide suitable habitat for great crested newts. Based on data gathered to date the risk of encountering GCN is considered to be low due to poor suitability of ponds to support this species on site, negative eDNA results from ponds which are considered to be suitable for supporting this species, barriers to amphibian dispersal and distance and habitat separation from ponds within the wider landscape which may support this species (albeit no records have been identified). Taking this into consideration it is considered that the risk of great crested newts being present on site is considered to be low.

Likely Significant Effects

- 13.2.12 The Biodiversity Net Gain has been updated since the 2022 ES, of which incorporated the DEFRA's Metric v3.0 as the latest version at that time. Based on **Figure 3.4- Illustrative Landscape Strategy** from the 2022 ES the Proposed Development is anticipated to result in the following Biodiversity Net Gain based on DEFRAs Metric v3.1 which accompanies the planning application documentation (**Appendix 7.3a**):
 - 10.08% BNG habitats
 - 12.64% BNG hedgerows
- 13.2.13 Based on the data gathered to date there is considered a low risk of encountering great crested newts during construction as it is acknowledged that newts can move in the landscape and breeding habitat can change suitability in intervening seasons between survey and construction commencing and a precautionary approach should be adopted. Without mitigation there is potential for temporary and permanent loss of great crested newt breeding habitat during the construction phase which based on data gathered to date is not anticipated to be of significance to populations of great crested newts at greater than a Site level, should they be present at the time of works.
- 13.2.14 Without additional mitigation the temporary loss of common amphibian breeding habitat and **permanent**, **direct negative** loss of terrestrial habitat during the construction phase could be of **significance** to populations of common amphibians at a **Site** level.
- 13.2.15 Following completion and establishment of proposed ponds and areas of enhanced grassland diversity would be **positive**, **direct**, **permanent** effect for local common amphibians and great crested newts (if present) and significant at a **Site to Local level**. However, ecological receptors determined as effected below district level are considered not significant under the EIA Regulations overall.

Mitigation and Enhancements

- 13.2.16 Mitigation by Design and Additional Mitigation measures are outlined in **Chapter 7 Ecology.** With mitigation in place, the following residual effects are anticipated:
 - A **positive, long-term permanent effect** on habitat biodiversity, hedgerow quality and biodiversity and enhancement of standing water

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habitat which should deliver over 10% measurable Biodiversity Net Gain either on or off site and considered to be significant at a Site to Local level and **not significant** under the EIA Regulations.

- A positive long-term permanent impact on amphibians and reptiles through increased diversity of terrestrial habitats and through an increase in breeding habitat (amphibians) and significant at up to a Local level. Not significant under the EIA Regulations.
- A positive, long-term permanent impact on birds through increased provision of nesting and foraging habitat and increasing diversity of habitats through attenuation basins and significant at up to a Local level. Not significant under the EIA Regulations.
- A **short-term negative**, temporary impact on foraging and commuting bats during the construction phase and whilst habitats establish with a **positive**, **long-term permanent** impact on bat through increased provision of roosting habitat and increasing diversity of foraging habitats through attenuation basins and improved botanical diversity and significant at up to a Site level. **Not significant** under the EIA Regulations.
- A **positive**, **long-term permanent** impact to a range of terrestrial and aquatic invertebrate species and hedgehogs. **Not significant** under the EIA Regulations.
- 13.2.17 The predicted residual effects are not considered to cause adverse significant effects under the EIA Regulations.
- 13.2.18 The overall conclusions of the Ecology Chapter remain unaltered to the 2022 ES. Please refer to the 2022 ES for this information.

13.3 SUMMARY OF REVISED TRANSPORT AND ACCESS CHAPTER

- 13.3.1 Following comments received from Oxfordshire County Council as local highway authority and National Highways, a Transport Assessment Addendum has been prepared and this is attached in **Appendix 8.3** of this SEI.
- 13.3.2 Minor changes have been made to the traffic assignment to correct some typographical errors in the original assessment. The replaced data is found within **Table 8.12** of **Chapter 8** of this SEI. Despite the modest changes, the assessment of impacts as reported in the 2022 Environmental Statement remains accurate in the 2022 SEI.
- 13.3.3 In the main the Transport Assessment Addendum provides further clarification on the accessibility strategy for the site and further modelling of the site access and J11 of the M40. It does not change the inputs to the ES assessment, nor does it fundamentally change any of the appraisal or outcomes of those assessments.
- 13.3.4 The overall conclusions of the Transport and Access Chapter remain unaltered to the 2022 ES. Please refer to the 2022 ES for this information.

13.4 CONCLUSION

13.4.1 This SEI demonstrates that there are no overriding environmental constraints which would preclude the Proposed Development. As a result of the findings from this

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SEI the overall conclusions of each chapter of the Environmental Statement have not altered.

13.4.2 The design of the Proposed Development has taken account of the likely significant environmental effects and where necessary, mitigation measures form an integral part of the Proposed Development to ensure that the environment is suitably protected.

14 GLOSSARY

14.1.1 The text within the 2022 ES remains accurate in the 2022 SEI. Therefore, there is no update to this section. Please refer to the 2022 ES for this information.

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