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The Cambourne to Cambridge Order

Cambridgeshire County Council

Transport and Works Act 1992

Transport and Works (Inquiries Procedure) Rules 2004

Inquiry into:

THE CAMBOURNE TO CAMBRIDGE ORDER

PROOF OF EVIDENCE

of

Andy Saunders BA(Hons), MCIEEM, MCIWEM, CENV, CWEM

of WSP

On behalf of Cambridgeshire County Council

14th August 2025

Planning Inspectorate Reference: DPI/E0535/25/1

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1. INTRODUCTION

1.1 Qualifications and Experience

Academic qualification

- 1.1.1 My name is Andy Saunders. I am a Technical Director in the Environment Team at WSP. I hold a BA(Honours) in Geography from the University of Manchester and am a Member of the Chartered Institution of Water and Environmental Management (MCIWEM), a Member of the Chartered Institute of Ecology and Environmental Management (CIEEM), a Chartered Environmentalist (CEnv) and a Chartered Water and Environmental Manager (CWEM). I am also a certified and approved trainer in Advanced Environmental Impact Assessment (EIA) for the Institute of Environmental Management and Assessment.

Professional career

- 1.1.2 I have over 30 years' experience in public and private sector environmental consultancy work including in EIA for major infrastructure projects. I have managed the environmental input to schemes through all stages of the project lifecycle including strategic route corridor studies, alternatives appraisals, Environmental Statement (ES) preparation, public inquiries / examinations and construction site management. I have also contributed to the preparation of best practice guidance in relation to EIA including for the EU and to the Design Manual for Roads and Bridges (DMRB).

Key project experience

- 1.1.3 I have managed or co-ordinated over 300 EIAs, Strategic Environmental Appraisals and Construction Environmental Management Plans and acted as expert witness in relation to environmental matters for transport infrastructure schemes in England, Northern Ireland, Wales and Scotland. Most recently I acted as environmental expert witness for the A5 Western Transport Corridor (an 85km road scheme) and the A29 Cookstown Bypass and am the environmental planning lead for those projects. My EIA management experience predominantly relates to linear infrastructure and includes Lower Thames Crossing, Leigh-Salford-Manchester Quality Bus Corridor, National Grid projects and transportation projects for local authorities.
- 1.1.4 In my current role at WSP I am leading the environmental planning aspects of several large infrastructure projects. This includes the A5 Western Transport Corridor in Northern Ireland which is Northern Ireland's largest infrastructure project. I am Project Director for WSP's environmental and planning work for Eastern Green Links 3 and 4 which are 100km long National Grid electrical connection Nationally Significant Infrastructure Projects in Eastern England and am providing advice to National Highways on their Environmental Sustainability Strategy. As an Institute of Environmental Management and Assessment registered trainer on Advanced EIA I regularly run 2-day courses for external organisations on EIA best practice, processes and management.
- 1.1.5 My expert witness experience covers a range of consenting regimes including the Planning Act, Transport and Works Act and Town and Country Planning Act and includes the following:
- A595 Parton – Lillyhall Improvement - expert witness on a range of environmental matters;
 - A497 Abererch to Llanystumdwy Improvement - sole expert witness on environmental matters (including noise, air quality, ecology, landscape and agricultural severance);

- A499 Aberdesach – Llanaelhaearn - sole expert witness on environmental matters dealing principally with air, noise, visual, land use and pedestrian issues;
- M876 Glenbervie Slip Road - expert witness on air and noise aspects;
- Leigh Salford Manchester Quality Bus Corridor - expert witness on environmental matters;
- Wigan Unitary Development Plan - expert witness on air quality;
- River Humber Gas Replacement Project - expert witness on certain environmental matters;
- Hadzor Motorway Service Area - expert witness on environmental matters;
- Preesall Gas Storage Facility - expert witness on environmental matters;
- A57 / A628 Mottram to Tintwistle Bypass - expert witness on environmental matters;
- Borough Road Footbridge, North Tyneside - expert witness on equality matters;
- A5 Western Transport Corridor - expert witness on certain environmental matters; and
- A29 Cookstown Bypass – sole expert witness on environmental matters including noise, air quality, landscape, ecology and cultural heritage.

1.2 Scope of Evidence

- 1.2.1 The scope of my evidence is in relation to the overall approach and findings of the EIA for the Scheme as reported in the ES **[CD1-10.01 being the Main Report]** and Addendums **[CD1-10.06 and CD1-10.07]** and focusing on likely significant effects and adherence to EIA legislation and standards. In relation to the ES topics my scope of evidence is set out below including identification of those elements that are being dealt with by others:
- Air Quality – covered in my Proof of Evidence;
 - Acoustics (sound, noise and vibration) - a brief overview is provided in my Proof of Evidence – details are covered in the Proof of Evidence of Toby Lewis **[CD26-01-APP-W11-1]**;
 - Traffic and Transport (Transit and Access) - covered in my Proof of Evidence from an EIA perspective with other traffic matters covered in the Proof of Evidence of Jo Baker **[CD26-01-APP-W1-1]**;
 - Community and Human Health and Land Use - covered in my Proof of Evidence;
 - Ecology - a brief overview is provided in my Proof of Evidence - details are covered in the Proof of Evidence of Ian Ellis in relation to Ecology **[CD26-01-APP-W13-1]** with the exception of veteran trees which are covered by Chris Alder **[CD26-01-APP-W4-1]** and bats, specifically Barbastelle, which are covered in the Proof of Evidence of Paola Reason **[CD26-01-APP-W12-1]**;
 - Landscape and Visual - a brief overview is provided in my Proof of Evidence – details are covered in the Proof of Evidence of Chris Carolan **[CD26-01-APP-W5-1]**;

- Heritage – a brief overview is provided in my Proof of Evidence with the exception of built heritage setting effects including in relation to Clare Hall and the American Military Cemetery which are dealt with in the Proof of Evidence of Tom Wilson **[CD26-01-APP-W2-1]**;
 - Water (including flooding) - covered in my Proof of Evidence with the exception of flooding effects at Bin Brook which are dealt with in the Proof of Evidence of Jack Southon **[CD26-01-APP-W9-1]**;
 - Soil, Geology and Land Contamination - covered in my Proof of Evidence;
 - Material Use and Waste - covered in my Proof of Evidence;
 - Greenhouse Gases (including carbon) - covered in my Proof of Evidence but as noted above traffic inputs to inform the carbon calculations are covered in the Proof of Evidence of Jo Baker **[CD26-01-APP-W1-1]**;
 - Climate Resilience - covered in my Proof of Evidence; and
 - Cumulative Effects - covered in my Proof of Evidence.
- 1.2.2 In addition to covering the EIA process and findings as reported in the ES **[CD1-10.01]**, associated appendices and ES Addendums **[CD1-10.06 and CD1-10.07]**, my Proof of Evidence also covers my response to issues relating to some of the wider environmental effects of the Scheme that are raised in Statements of Case of 3 objectors; namely Coton Busway Action Group (OBJ143) **[CD23-08-1 and CD23-08-2]**, Gough Way Residents Association (K Fry) (OBJ175) **[CD23-05]** and PX Land Limited (OBJ252) **[CD23-14]**. This is explained in more detail in Section 7.
- 1.2.3 With regards to the Statement of Matters **[CD25-01]** the following matters are partially related to my Proof of Evidence but also covered by the Proofs of Evidence of others as set out below.

Table 1.1: Coverage of certain matters in Proofs of Evidence as set out in the Statement of Matters **[CD25-01], pages 1 and 2**

Statement of Matters [CD25-01] Reference	Statement of Matters text	Coverage through my Proof of Evidence	Coverage through Proofs of Evidence of Others
3:	The main alternative options considered by CCC and the reasons for choosing the preferred option set out in the Order.		
3a	a. The rationale for the preferred option and the alternatives considered.	I will describe how the ES has reported alternatives including a description of the reasonable alternatives studied and the main reasons for selecting the preferred option.	The rationale for the preferred option and the consideration of alternatives is covered in the Proof of Evidence of Jo Baker [CD26-01-APP-W1-1] .

Statement of Matters [CD25-01] Reference	Statement of Matters text	Coverage through my Proof of Evidence	Coverage through Proofs of Evidence of Others
3b	b. The cost of the scheme and overall benefits.	I will describe the costs and benefits in terms of adverse and beneficial environmental effects as reported in the ES.	The cost of the scheme and overall benefits are dealt with in the Proofs of Evidence of Jo Baker [CD26-01-APP-W1-1] , Ralph Lewis [CD26-01-APP-W10-1] and Chris Whitehouse [CD26-01-APP-W6-1] .
4:	The effect of the implementation, operation and maintenance of the scheme.		
4b	The effect on local residents, pedestrians, cyclists, and motorists.	I will describe the effects on local residents (e.g. air and noise) and pedestrians and cyclists as reported in the ES.	Further details on the environmental effects on local residents are provided in the Proofs of Evidence of Toby Lewis (Noise) [CD26-01-APP-W11-1] and Chris Carolan (Visual Effects [CD26-01-APP-W5-1]). Effects on motorists are dealt with in the Proof of Evidence of Jo Baker [CD26-01-APP-W1-1] .
4c	The effect of the scheme on the environment, including biodiversity, habitats, and wildlife, with particular reference to the Coton Orchard and Coton Orchard County Wildlife Site.	I will describe how the ES has reported the effect of the scheme on the environment including biodiversity.	Specific details in relation to biodiversity, habitats and wildlife are covered in the Proof of Evidence of Ian Ellis [CD26-01-APP-W13-1] in relation to ecology with the exception of veteran trees at Coton Orchard which is covered in the Proof of Evidence of Chris Alder [CD26-01-APP-W4-1] and bats, specifically Barbastelle, which are covered in the Proof of Evidence of Paola Reason [CD26-01-APP-W12-1] .
4e	The effect of the scheme on heritage assets, with particular reference to the grade I registered park and garden of the American	I will describe how the ES has reported the effects of the scheme on heritage assets including the	The effects on built heritage assets including on the American Military Cemetery and Clare Hall are dealt with in detail in the Proof of Evidence of

Statement of Matters [CD25-01] Reference	Statement of Matters text	Coverage through my Proof of Evidence	Coverage through Proofs of Evidence of Others
	Military Cemetery at Madingley Cambridge.	American Military Cemetery.	Tom Wilson [CD26-01-APP-W2-1]. The effect of the CPPF alternative on the American Military Cemetery is dealt with in CPPF Alternative Scheme – Engineering Assessment [CD9-31] and in the Proof of Evidence of Tom Wilson [CD26-01-APP-W2-1].

1.3 Summary of Evidence

- 1.3.1 The purpose of my evidence is to demonstrate that the EIA has been carried out in accordance with the relevant regulations and standards and that due process has been followed. It is also to demonstrate that environmental considerations have been integral to the development of the Scheme, that relevant environmental consultation has taken place and how significant environmental effects would be managed. I will also describe the method used for assessment, mitigation measures proposed, the findings of the assessments and conclusions on the residual significance of effect following the implementation of mitigation measures.
- 1.3.2 In Section 2 of my Proof of Evidence I explain the ES structure along with the Non-Technical Summary of the ES [CD1-09] and the supporting Technical Reports. In Section 3 I give an overview of the Scheme development and the environmental design measures including those embedded into the Scheme and measures to control effects such as through a Code of Construction Practice [CD1-26].
- 1.3.3 Section 4 sets out the legal requirements in relation to EIA, how the scope of the environmental assessment was determined, details of the key stakeholder consultation that has taken place and an overview of the findings reported in the ES across all environmental topics.
- 1.3.4 Section 5 covers the main alternative designs from an environmental perspective and signposts as necessary to other documents and Proofs of Evidence. It focuses on Coton Orchard Options, the On-line Cambridge Past Present and Future (CPPF) option and the assessment of options in relation to Adams Road and the Former Rifle Range Track.
- 1.3.5 Section 6 deals with the main environmental considerations as they relate to my evidence with some EIA topic areas being partially or wholly dealt with through the Proof of Evidence of others. For each topic covered by my Proof of Evidence I provide details on the method of assessment, proposed mitigation, the main findings (focusing on significant environmental effects as required by the EIA Regulations).
- 1.3.6 Section 7 deals with objections and representations made relevant to my Proof of Evidence. I address specific matters raised in the Statements of Case in relation to the following objections:

- Coton Busway Action Group Statement of Case **[CD23-08-1 and CD23-08-2] (OBJ143)** in relation to environmental impact;
 - Gough Way Residents Association (K Fry) Statement of Case **[CD23-05] (OBJ175)** in relation to impact on the countryside; and
 - PX Land Limited Statement of Case **[CD23-14] (OBJ252)** in relation to adverse impacts.
- 1.3.7 In all cases, the three Statements of Case raise a number of different environmental matters (e.g. in relation to ecology, visual effects) which are dealt with in other Proofs of Evidence. In such instances, I have signposted those other Proofs of Evidence described the matters dealt with in those other Proofs of Evidence in this Proof of Evidence.
- 1.3.8 Section 7 also deals with other issues relevant to my Proof of Evidence raised by the Environment Agency **[CD2-OBJ-301]** and a representation made by L. Hirst **[CD2-OBJ-279]**.
- 1.3.9 In Section 8 I provide an overall conclusion on the matters covered by my Proof of Evidence and Section 9 provides my Statement of Truth.
- 1.3.10 Note that all references to page numbers in my Proof of Evidence relate to the pdf page number of the referenced document.

2. EXPLANATION OF THE ES STRUCTURE

- 2.1.1 As described above, this section of my Proof of Evidence provides an overview of the ES structure, including in relation to the Non-Technical Summary **[CD1-09]** of the ES and the supporting Technical Reports.
- 2.1.2 The main ES **[CD1.10.01]** has been structured and written to make information easy to find and easy to understand. With this in mind, this main document has been kept relatively succinct and makes extensive use of illustrations. The ES consolidates information from the independent assessment of environmental topics, particularly information about the predicted likely significant environmental effects and embedded mitigation. Detailed information from each of these assessments is provided in separate technical reports, including the assessment methods and a full account of the findings, including all data and observations. These technical reports are listed on the contents page of the ES and comprise the following some of which also contain supporting appendices:
- Technical Report 1 – Acoustics **[CD1.11.01]**
 - Technical Report 2 – Air Quality **[CD1.11.02]**
 - Technical Report 3 – Climate Resilience **[CD1.11.03]**
 - Technical Report 4 – Community and Human Health, Land Use and Land Take **[CD1.11.04]**
 - Technical Report 5 – Ecological Impact Assessment **[CD1.11.05]**
 - Technical Report 6 – Greenhouse Gases **[CD1.11.06]**
 - Technical Report 7 – Heritage Impact Assessment (incorporating historic environment desk-based assessment) **[CD1.11.07.1]**
 - Technical Report 8 – Landscape and Visual **[CD1.11.08.1]**
 - Technical Report 9 – Major Accidents and Disasters **[CD1.11.09]**
 - Technical Report 10 – Materials Assets and Waste **[CD1.11.10]**
 - Technical Report 11 – Soil, Geology and Land Contamination **[CD1.11.11.1]**
 - Technical Report 12 – Traffic and Transport **[CD1.11.12]**
 - Technical Report 13 – Water **[CD1.11.13.1]**
 - Technical Report 14 – Arboriculture **[CD1.11.14.1]**
- 2.1.3 In addition, a non-technical summary of the ES **[CD1-09]** has been produced covering the information required under the Schedule 1 Transport and Works Act (TWA) Rules – Rules 4(1) and 11(2) **[CD5-18, pages 40 to 45]** and Schedule 4 of the Town and Country Planning Act (TCPA) (EIA) Regulations - Regulation 18(3) **[CD5-22, pages 104 to 108]**.
- 2.1.4 As a check to demonstrate that the contents of the ES accords with Schedule 1 in the 2006 TWA Rules **[CD5-18, pages 40 to 45]** and Schedule 4 of the EIA Regulations **[CD5-22, pages 104 to 108]**, Table 1.1 of the ES **[CD1-10.01, pages 12 to 14]** sets out the requirements alongside the corresponding locations in the ES.
- 2.1.5 The EIA TWA Rules **[CD5-18, page 20, paragraph 11(3)]** require that, in order to ensure the completeness and quality of the ES:

“(a) the applicant must ensure that the environmental statement is prepared by competent experts; and

(b) the environmental statement must be accompanied by a statement from the applicant outlining the relevant expertise or qualifications of such experts”.

- 2.1.6 Appendix ES2 of the ES **[CD1-10.03, pages 2 to 5]** sets out the assessment team and their expertise and qualifications which demonstrates their competency.
- 2.1.7 The other Appendices associated with the ES are the Mitigation Register (Appendix ES1) **[CD1-10.02]** and the Cumulative Development List (Appendix ES3) **[CD1-10.04]**.
- 2.1.8 Since publication of the ES two ES Addendums **[CD1-10.06 and CD1-10.07]** have been produced and consulted on. These are referenced in my Proof of Evidence where appropriate.

3. SCHEME DEVELOPMENT

3.1 The Scheme

- 3.1.1 The Cambourne to Cambridge Scheme is a proposed new 13.6km long public transport route linking Cambourne and Cambridge. It will include a dedicated busway serving communities in Cambourne and the proposed Bourn Airfield development, as well as in Hardwick, Coton and the West Cambridge campus. An emergency and maintenance access track, to be used as a path for active travel - particularly by cyclists and pedestrians - will run alongside the busway. A new travel hub (a park and ride facility) will be provided at Scotland Farm where drivers can leave their cars and continue into the city by bus or bike. The Scheme is being put forward by the Greater Cambridge Partnership (GCP) to create a route which is reliable, more sustainable and makes it quicker to get people to where they need to be.
- 3.1.2 A detailed description of the Scheme is provided in **Chapter 3** of the ES **[CD1-10.01, pages 24 to 36, paragraphs 3.1.1 to 3.10.9]**. Cambridgeshire County Council's Statement of Case **[CD23-01, pages 21 to 22, paragraphs 6.2.1 to 6.4.2]** also includes details in relation to Scheme Objectives, Aims and Vision (**Chapter 6**), Scheme Development (**Chapter 7**) and Scheme Benefits (**Chapter 8**). Scheme details are also included in the Proof of Evidence of Jo Baker **[CD26-01-APP-W1-1, page 11 to 31, paragraphs 3.1.1 to 5.5.3]**. The deemed planning drawings include Proposed Site Plans **[CD1-16.4]** which includes details of earthworks, drainage, speed restrictions, rights of way diversions and the indicative landscape design, Proposed Site Sections **[CD1-16.5]** Structures **[CD1-16.6]** and Construction Compounds **[CD1-16.7]** with details of Site access points and the footprint of the Construction Compounds.
- 3.1.3 The TWA EIA Rules **[CD5-18, page 44, paragraph 7]** also require that the ES provides *"A description of the measures envisaged to avoid, prevent, reduce or, if possible, offset any identified significant adverse effects on the environment and, where appropriate, of any proposed monitoring arrangements (for example the preparation of a post-project analysis). That description must explain the extent to which significant adverse effects on the environment are avoided, prevented, reduced or offset, and must cover both the construction and operational phases"*.

3.2 Environmental Design and Mitigation

- 3.2.1 The ES **[CD1-10.01, pages 86 to 91, paragraphs 6.1.1 to 6.6.12]** at **Chapter 6** sets out the mitigation through design and practice.
- 3.2.2 The Scheme proposals have been developed taking account of transport, engineering, land, economic, cost and environmental and community considerations. The route alignment; the design of the various Scheme components; the proposed construction methods; the operation of the bus service, the travel hub and other aspects; and the servicing and maintenance of the Scheme have each taken account of these various considerations as they have become increasingly well understood through successive stages of design and assessment.
- 3.2.3 The EIA has been instrumental in informing changes to the Scheme design through its feedback on aspects of the communities affected by the proposals, of the natural environment, of cultural and heritage assets, and of global sustainability issues, including climate change. The Scheme proposals therefore accommodate various mitigation measures.
- 3.2.4 The ES Main Report **[CD1-10.01]** addresses an integrated design **[CD1-10.01, section 6.2, pages 86 to 87]**, landscape mitigation **[CD1-10.01, section 6.3, page 87]**, mitigating impacts from construction **[CD1-10.01, section 6.4, pages 87 and 88]** and mechanisms for securing mitigation **[CD1-10.01, section 6.5, pages 88 to 89]**. **Section 6.6 [CD1-10.01, pages 89 to 91]** provides an overview of the Mitigation

Register (Appendix ES1) **[CD1-10.02]**. The Mitigation Register **[CD1-10.02]** summarises each of over 60 environmental mitigation measures together with the environmental objectives and a description of the mechanisms proposed to secure them. Mitigation is grouped and includes the Code of Construction Practice (CoCP) **[CD1-26]**, passive measures (e.g. identifying features that must be maintained), planting and landscaping, arboricultural mitigation, structural mitigation (e.g. bunds, mammal culverts), drainage, climate resilience and sustainability.

3.3 Environmental Effects Monitoring

- 3.3.1 ES **Section 6.7 [CD1-10.01, page 91]** deals with monitoring arrangements.
- 3.3.2 Since 2017, the EIA process requirements have included a provision that requires the consenting authority (for Cambourne to Cambridge this is the Secretary of State) to consider whether it is appropriate to impose monitoring of the mitigation of likely significant effects. When considering whether to impose a monitoring measure, the Secretary of State must consider whether to make provision for potential remedial action; take steps to ensure that the type of parameters to be monitored and the duration of the monitoring are proportionate to the nature, location and size of the proposed development; and consider whether any existing monitoring arrangements are more appropriate than imposing a monitoring measure specific to the consent. Equally, the EIA requirements state that the ES must, where appropriate, describe any proposed monitoring arrangements.
- 3.3.3 Required monitoring of construction impacts is secured through the CoCP **[CD1-26]**. **Section 2.3 of the CoCP [CD1-26, pages 8 and 9, paragraphs 2.3.1 to 2.3.3]** requires the principal contractor to undertake the necessary monitoring as outlined for each environmental topic to comply with the requirements of this draft CoCP **[CD1-26]** and the relevant Local Environmental Management Plan (LEMP), as well as any additional consent requirements. Monitoring will address the impact of construction works, and the effectiveness of mitigation measures. The arrangements that are put in place by the principal contractor to meet this requirement will need to be agreed with the Shared Planning Service.
- 3.3.4 As specified in the CoCP **[CD1-26]**, the principal contractor is required, where necessary, to implement suitable remedial measures to provide additional protection and to take other actions as may be necessary to enable compliance with relevant laws and policy.
- 3.3.5 Proposed environmental monitoring of the operational Scheme will focus on the efficacy of the permanent mitigation measures that are embedded within the design and the assumptions about its operation. Each proposed monitoring measure will be secured through an appropriate planning condition attached to the grant of deemed planning permission for the development authorised by the Cambourne to Cambridge Order, which may require a contractual commitment. Mechanisms will be agreed on the basis of monitoring requirements.

4. ENVIRONMENTAL STATEMENT

4.1 Introduction

- 4.1.1 This Section of my Proof of Evidence sets out the legal requirements in relation to EIA, how the scope of the environmental assessment was determined, details of the key stakeholder consultation that has taken place and the main findings reported in the ES.
- 4.1.2 The procedural requirements for Transport and Works Act Order (TWA) applications are set out in the TWA Rules **[CD5-18]**. One of the requirements is that applications for projects of a type listed in Annex I of the European Union's EIA Directive **[CD5-25]**, or listed in Annex II of the Directive that have not received a negative screening opinion from the Secretary of State, be accompanied by an ES. The request for a Planning Direction is made under the Town and Country Planning Act (TCPA) **[CD5-08]**. Although set out in different instruments, the EIA processes for applications under the TWA **[CD5-18]** and the TCPA EIA Regulations 2017 **[CD5-22]** are substantially the same and the ES and ES Addendums meet the requirements of both.
- 4.1.3 The Scheme does not fall within the types of development listed in Annex I **[CD5-25, pages 26/8 to 26/10]** (and Schedule 1 of the TCPA EIA Regulations **[CD5-22]**). However, Annex II (and Schedule 2 of the TCPA EIA Regulations) are relevant as they cover transport infrastructure projects that are likely to result in significant environmental effects **[CD5-25, page 26/13, category 10: Infrastructure Projects]**; as such, the Applicant (Cambridgeshire County Council) considered that the Scheme should be EIA development. In coming to this conclusion, the Applicant opted not to seek a screening opinion from the Secretary of State.
- 4.1.4 The identification and assessment of environmental impacts and likely significant effects is a critical initial part of the EIA process; this phase is referred to here as the environmental assessment. The wider process of EIA also includes the ES preparation, publication and consultation; the collation of any other environmental information and representations made by relevant bodies and the public about the environmental effects of the Scheme; and the steps required of the Secretary of State in examining the environmental information, in reaching a reasoned conclusion on the Scheme's likely significant effects, as well as the integration of that conclusion into the decision as to whether planning permission or consent is to be granted and, if it is, the appropriateness of proposed monitoring measures.

4.2 Developing the ES Scope

- 4.2.1 Environmental scoping is undertaken in advance of the main assessment workstreams to focus attention and resource where it is most needed. By considering the characteristics of a project and the likely environmental impacts it will cause, and through an appreciation of the baseline environment, scoping allows the experts who compile the ES to:
- determine which topics to include in the assessment, and which to omit;
 - distinguish the relative importance of each assessment topic, to ensure key issues are prioritised for informing consultation and decision making; and
 - decide the relative importance of different aspects within each assessment topic to determine how each needs to be assessed.
- 4.2.2 Projects can seek an opinion from the relevant consenting authority as to the required scope for the environmental assessment and ES. The general approach wherever a scoping opinion is sought is for the assessors to set out their planned approach to the assessment within a scoping report and to use this as a vehicle to elicit a response from the consenting authority. WSP prepared a Scoping Report **[CD1-10.05]** for the Scheme on behalf of the GCP (including Cambridgeshire County Council as the

Applicant), which was submitted to the Transport Infrastructure Planning Unit of the Department for Transport in February 2022.

- 4.2.3 In preparing its scoping opinion, the Department for Transport sought input from a range of statutory consultees. The scoping opinion **[CD1-10.05]** was received by the GCP on 28th March 2022.
- 4.2.4 Scoping is not mandatory for an environmental assessment carried out within the TWA or TCPA framework, but where a scoping opinion has been provided it is a requirement for the assessment to be based on the scoping opinion. The scoping opinion and the associated responses to it are summarised in the Scoping Opinion Response Tracker (Appendix ES4 of Volume 1 of the ES) **[CD1-10.05, pages 262 to 275]**.

4.3 Key stakeholder consultation in relation to the Environmental Statement (ES)

- 4.3.1 Four rounds of consultation have been held in relation to the Scheme since 2015 and are described in Chapter 4.8 of the ES **[CD1-10.01, page 55 to 58, paragraph 4.8.1 to 4.8.9]**. The fourth consultation between 16th May and 11th July 2022 focused on the EIA, and specifically sought views on the potential environmental impacts and how to best manage and mitigate the Scheme's impacts on the landscape and environment]. Almost 600 responses were received, which established general support of the active travel aims and active travel investment, and support for the segregated active travel path. The consultation findings are presented fully in the Consultation Report **[CD1-06.01]** and Appendices **[CD1-06.02 -16]**.
- 4.3.2 Key stakeholder consultation has included Greater Cambridge Shared Planning, Natural England, Historic England and the Environment Agency. Details of consultation are provided where relevant under the appropriate environmental topic headings below in Section 5.
- 4.3.3 In addition to ES consultation, engagement with stakeholders, particularly through the Joint Director of Planning and Economic Development at Greater Cambridge Shared Planning (the Shared Planning Service), has informed the development of a draft Code of Construction Practice (CoCP) **[CD1-26]** which has been reviewed by the Shared Planning Service and amended where appropriate.

4.4 Main findings reported in the ES

- 4.4.1 The EIA Regulations **[CD5-18, page 20, paragraph 11(1)(b)]** require that an ES should contain "*A description of the likely significant effects of the proposed works on the environment*". The ES for the Scheme **[CD1-10.01]** considers likely significant effects across topics which had been scoped into the assessment and at different stages (e.g. construction, operation). The assessment has taken into account environmental design and mitigation measures, including those provided in the Mitigation Register (Appendix ES1) **[CD1-10.02]**, in determining the significance of effects. In addition to measures such as planting proposals and Sustainable Drainage Systems (SuDS) various plans will be in place, particularly during the construction stage to manage construction effects such as a Local Environmental Management Plan and a Construction Traffic Management Plan.
- 4.4.2 It should be noted that the ES Addendums **[CD1-10.06 and CD1-10.07]** do not alter the conclusions of the ES.
- 4.4.3 Taking into account the mitigation measures the main findings of the ES **[CD1-10.01]** are as follows.

Health effects and construction impacts

- 4.4.4 There are clear health benefits from the operation of the Scheme, including better connectivity and easier access with health facilities in Cambridge, such as

Addenbrooke's and Papworth hospitals; facilitated active travel through provision of cycling and walking along the length of the Scheme; and by improved air quality in most parts of the study area.

- 4.4.5 There are several adverse effects predicted temporarily during construction, including noise and vibration impacts and reductions in visual amenity. Occasional construction noise impacts will occur at different locations along the route. However, the effects will occur intermittently, with only occasional periods of higher noise levels from particular activities close to sensitive receptors. At six locations the impacts will be of sufficient duration to result in a significant effect, including Childerley Gate, a few locations along Scotland Road and immediately adjacent to the Bin Brook bridge. None of these effects is expected to affect health adversely.
- 4.4.6 A construction site alongside Bin Brook will temporarily displace around 1.5ha of farmland, which, at around 15% of the holding, is considered a significant adverse effect for the tenant farmer.
- 4.4.7 There are several commercial and research facilities at West Cambridge that will be close to construction work and which could have particularly vibration-sensitive equipment and may be subject to significant effects. The principal contractor will be required to consult with the relevant organisations well in advance of potentially disruptive work to agree the approach to construction that will minimise risk of vibration impacts.

Effects on the natural environment

- 4.4.8 The Scheme crosses two watercourses, Bin Brook and Callow Brook. Neither watercourse will be significantly adversely affected and best practice will be followed to ensure the streams are protected from pollution and other impacts during construction. The ecological assessment has been important in shaping the design of the Scheme and the mitigation that will be included with it.
- 4.4.9 The GCP is committed to developing new habitat as part of the Scheme that will in time result in an overall gain in biodiversity of at least 10% and with the aim of achieving 20%. Proposals for these have not, at the time of writing, been confirmed and will require some close working and agreement with landowners, but there are several options for potential habitat creation, some near to the route.
- 4.4.10 The area of greatest ecological value is Coton Orchard, a recently designated County Wildlife Site; effects on the site will be significant. Although dating from 1922, most of its apple trees are of more recent origin, though 13 original trees remain. The ES reported that up to six may be affected by the Scheme and the ES Addendum, June 2025 **[CD1-10.06]** provides updated information on the status, avoidance and mitigation measures in relation to the six veteran Bramley apple trees that are located within the draft Order Limits. Three of the six veteran trees will be expected to be retained through detailed design and strict protection during construction with the other three veteran trees relocated **[CD1-10.06, paragraph 2.5.2 and paragraph 2.5.3, page 18]**.
- 4.4.11 The Scheme will require the removal of around 500 trees, affecting about a fifth (1.5 hectares) of the remaining orchard, although this has already been greatly diminished from its original 1922 extent. The Scheme will include fencing to minimise risk of collision with animals, as well as underpasses to allow badgers and other wildlife to cross safely. The orchard supports a notable range of insects, including some nationally rare species. The remaining part of the orchard will continue to support these, and new habitat along the route will also provide an important continued habitat for insects and other wildlife. However, the effect on the non-statutory designated site will be significant.

- 4.4.12 The loss of a little under half a hectare of traditional orchard habitat is predicted to be a likely significant effect, as is the loss at various locations across the Scheme of hedgerows (around 1.3 linear kilometres). There will be a net increase by almost 6 hectares in the area of lowland mixed deciduous woodland, and although it will take 10 years for this habitat to mature, this scale of replacement will mitigate the impact.
- 4.4.13 The significant effects on traditional orchard and hedgerows will be compensated through habitat creation offsite, although the location for this is yet to be agreed. Potential impacts on bats (including the rare barbastelle) have been the focus of much of the assessment work, not least due to the ancient woods in the wider area that provide roosts for them. Although the Scheme affects no bat roosts directly, and the habitat it displaces will be more than replaced, there are certain commuting routes that bats use when travelling between roosts and feeding areas. Surveys have identified where these routes are and, as a result, the Scheme includes specific tree planting and mounding to ensure that bats can cross the busway with little risk of collision. The service will, in any case, mostly operate during the daytime when bats will be relatively inactive.

Effects on the cultural environment

- 4.4.14 Cultural resources include structures and archaeology that are of importance to local or national heritage, as well as the landscape.
- 4.4.15 Much of the Scheme's alignment will affect areas of relatively lower landscape sensitivity, such as around Bourn Airfield, or will result in relatively small change, such as past Hardwick. However, turning southwards towards Coton, the Scheme crosses land of higher visual, historical and cultural significance whose character is important to the setting and character of Cambridge.
- 4.4.16 There would be some noticeable change to existing landscape elements and landscape character; however the landscape mitigation proposals will be essential to the Scheme's integration in the landscape, including the introduction of new earth bunds and planting alongside the busway.
- 4.4.17 The Scheme will alter the local character of the rolling open farmland near Coton, though maturing planting will increasingly help to tie the Scheme into the landscape. The Scheme and buses will be visible from the important viewpoint at Red Meadow Hill but, at some 2km distance, northward views from this location will not be greatly affected.
- 4.4.18 In terms of heritage, the Scheme will have a physical impact on West Cambridge Conservation Area due to construction of the guided busway to Grange Road and works to the road intersection. There would be no physical impact on any other designated assets such as listed buildings, conservation areas, or scheduled monuments. West Cambridge Conservation Area would also experience minor impacts due to changes to its character and appearance, as would Coton Conservation Area, which the route passes close to. Equally, although passing several listed buildings, the infrastructure of the busway will not be prominent and will have no more than a minor and non-significant effect on the character of buildings such as the Schlumberger Gould Research Centre on the West Cambridge science park, and Clare Hall college off Grange Road. The harm to the heritage assets described above would be 'less than substantial' in National Planning Policy Framework (NPPF) **[CD8-01, paragraphs 212 – 221, pages 60 to 62]** terms. There will be no views from, and no impact on the significance of the American Military Cemetery.
- 4.4.19 The previous archaeological investigations, as well as those commissioned for the EIA, have given a good understanding of the extent of past human activity along the route, including sustained prehistoric and Roman activity as evidenced by field systems, enclosures, trackways and isolated features at several locations along the route.

- 4.4.20 A programme of archaeological mitigation will be agreed with the county council's archaeological advisor in advance of construction. Focusing on areas with more concentrated archaeology, these are likely to take the form of targeted archaeological excavation and recording, as well as a programme of wider public engagement. This will reduce potential effects to negligible and not significant.

Effects on global issues and resources

- 4.4.21 Global issues and resources include climate change, land, building materials and waste capacity.
- 4.4.22 Much of the land affected by the Scheme is agricultural and of high quality. Up to 45 hectares of this will be lost as a result of the Scheme, although 6 hectares of this will be used only temporarily during construction and will be restored. Nevertheless, despite the extensive resource in the area, this scale of loss will be a significant effect.
- 4.4.23 The Scheme will not affect any mineral resources. The potential for impacts on contaminated land is limited, though more notable at Bourn Airfield. Risks from this would be addressed during the regeneration of this site, following all legal requirements to protect people and the environment. More generally, good practice, in line with the CoCP **[CD1-26]**, will ensure that the risks of effects from contamination on human health and controlled waters during the construction and operation of the Scheme will be negligible.
- 4.4.24 The balance of carbon emissions will reflect both those that result from the construction and operation of the Scheme (infrastructure emissions) and the changes that will arise as people move from more carbon polluting forms of travel (road vehicle) to less polluting (public transport, foot and cycle) as well as efficiency benefits to that network.
- 4.4.25 The ES reports that over the assessment period, operational savings (from people switching how they travel and changes in traffic flows) are estimated to reduce emissions by around (-)36,000 tonnes of CO₂ equivalent (denoted as tCO₂e). These benefits combined with the impact of carbon embedded in the construction materials used to build the Scheme (about +29,000 tCO₂e) and from changes in vegetation (about +2,000 tCO₂e) result in a net savings of about 5,000 tCO₂e over the assessment period. This is a minor benefit given the time taken to reach net zero and the relatively small overall carbon reduction. However, when combined with numerous other measures that are expected to be introduced by the GCP to limit car use in and around Cambridge, there is potential for net savings of about 47,000 tCO₂e, bringing the net zero payback period to around 2045. This would be a significant beneficial effect.
- 4.4.26 An updated assessment from that presented in the ES using the latest available traffic modelling outputs and assumptions from the latest iteration of the Transport Appraisal Guidance (TAG) Databook that has been released estimates a reduction of (-)7,055 tCO₂e over the assessment period. To indicate the greater levels of mode shift that are likely to be possible in the context of Cambridgeshire's ambitions and wider policies, a sensitivity test using more optimistic demand assumptions than the above Standard assessment has been completed. Using the latest TAG Databook, the sensitivity test estimates a net whole-life carbon saving of approximately 35,000 tCO₂e bringing the net zero payback period to around 2050. The results of the updated assessment are presented in Appendix C of my Proof of Evidence **[CD26-01-APP-W3-2]**.
- 4.4.27 The CoCP **[CD1-26, Section 12, pages 57 to 59]** will impose requirements for using building materials and generating waste in accordance with principles of sustainable development. This means maximising the reuse of excavated soil within new earthworks and ensuring that waste management accords with best practice. There is

an assumed need to export some waste to landfill, although the contractor assigned to design and build the Scheme will be incentivised to minimise this

Cumulative Effects

- 4.4.28 The environmental assessment has also considered how effects from the Scheme might be experienced along with those of other related nearby (within 2km) schemes. The assessment teams considered potential developments whose impacts might intensify, broaden or prolong those of the Scheme, based on available information, and whether significant cumulative effects would be likely. No significant cumulative effects are predicted other than from construction noise due to works at Bourn Airfield and West Cambridge should these occur at or around the same time as those for the Scheme
- 4.4.29 Where relevant to the scope of my Proof of Evidence, more details on the significance of those effects is covered in Section 6 of this Proof of Evidence under the appropriate topic headings below.

5. ALTERNATIVES, ENVIRONMENTAL MITIGATION AND ENVIRONMENTAL DESIGN

5.1 Alternatives

- 5.1.1 Rule 11(1)(d) of the 2006 TWA Rules **[CD5-18, page 20]** provides that an ES shall include: *“(d) a description of the reasonable alternatives studied by the applicant, which are relevant to the proposed works and their specific characteristics, and an indication of the main reason for the option chosen, taking into account the significant effects of the proposed works on the environment;”* and at page 41, provision 2 of Schedule 1 regarding information to be included in ESs, in relation to alternatives it requires **[CD5-18, page 41, provision 2]** *“2. A description of the reasonable alternatives (for example in terms of project design, technology, location, size and scale) studied by the applicant, which are relevant to the works and its specific characteristics, and an indication of the main reasons for selecting the chosen option, including a comparison of the environmental effects.”*
- 5.1.2 Chapter 4 of the ES **[CD1-10.01, pages 38 to 58]** considers alternatives under the heading Evolution of the Scheme and particularly at **Section 4.3** (Alternative Routes) and **Section 4.4** (Park and Ride Locations). Mott MacDonald’s Cambourne to Cambridge Better Bus Journeys Park and Ride Study (September 2017) referred to in **Paragraph 4.5.1** of the ES **[CD1-10.01, pages 50 to 51]** provides at Table 7 the Stage 1 comparison of environmental effects and at Table 8 the Stage 2 comparison of environmental effects. This is also covered in the ES Addendum, July 2025 **[CD1-10.07]**.
- 5.1.3 Section 4.5 of the ES **[CD1-10.01, page 50 to 51]** details how the preferred options was established and Section 4.6 deals with refinement of the preferred option. Operating Alternatives are considered in Section 4.7 and Section 4.8 details the consultation undertaken.
- 5.1.4 Consideration of alternatives is dealt with under the Proof of Evidence of Jo Baker **[CD26-01-APP-W1-1]** but from an EIA perspective the ES **[CD1-10.01]** has accorded with the EIA Regulations in that the reasonable alternatives studied have been reported and reasons for selecting the chosen option have been provided. In terms of providing a comparison of environmental effects and given the large number of options studied and options reports produced the ES provided links to the associated options reports which from an EIA Regulations perspective comprises part of the environmental information. Although other options reports referred to in the ES contained links to the relevant reports unfortunately a link to three Options Appraisal Reports (OARs) produced by Mott MacDonald was omitted in the ES although Section 4.5 of the ES titled Establishing the Preferred Option describes OARs 1, 2 and 3. In order to rectify the omission links have been provided in the ES Addendum July 2025 **[CD1-10.07]** and has been consulted on.

5.2 Environmental Mitigation

- 5.2.1 The mitigation strategy is contained with the ES (Section 2.8) and elaborated in ES Section 6 **[CD1-10.01, pages 21 to 22 and 86 to 91]**.
- 5.2.2 The mitigation of potential impacts and effects is central to a successful EIA. For the environmental assessment of the Scheme, mitigation is deemed effective if it makes a potentially significant effect not significant.
- 5.2.3 Mitigation is incorporated using measures that, in order of priority, avoid, minimise, rectify or compensate for potential impacts and effects. Figure 2-4 of the ES **[CD1-10.01, page 21]** includes a graphic showing the mitigation hierarchy which has been adopted for the Scheme. The wording is reproduced below and demonstrates how mitigation starts with trying to avoid an impact before moving through the hierarchy to ultimately compensate if other forms of mitigation are not achievable.

1. Avoid (highest priority) – Avoiding an impact by not intervening at a location where it would otherwise occur;
 2. Minimise – Minimising an impact by limiting its intensity, extent, duration or frequency;
 3. Rectify – Rectifying an impact by repairing, rehabilitating or restoring the affected features; and
 4. Compensate (lowest priority) – Compensating by replacing, providing an alternative – either at affected location or elsewhere (offset) – or by remuneration.
- 5.2.4 Opportunities to avoid potential impacts tend to arise in the early stages of a project when alternative proposals are developed, compared and evaluated. Through subsequent stages of the project lifecycle - from concept design and detailed design through to implementation - opportunities to avoid and minimise adverse effects become fewer, and the emphasis shifts to rectifying and compensating.
- 5.2.5 Mitigation has included changes in the alignment, such as those described Jo Baker's Proof of Evidence **[CD26-01-APP-W1-1]**). Other examples of mitigation include:
- embankments and planted hedges to encourage elevated bat crossing of the busway;
 - various planted screens;
 - protection and relocation of veteran trees at Coton Orchard;
 - bespoke design to protect notable trees on Rifle Range; and
 - a design for the bridge over Bin Brook that lessens flood risk.
- 5.2.6 Application of the mitigation hierarchy as it applies to veteran trees at Coton Orchard is detailed in the Proof of Evidence of Chris Alder **[CD26-01-APP-W4-1]**.
- 5.2.7 Appendix ES1 of the ES contains a Mitigation Register **[CD1-10.02]**. As described at the front of the Register it provides a summary of the various measures adopted within, or an assumed part of, the proposals for Scheme. The measures are necessary to mitigate adverse environmental effects, making potentially significant effects not significant. The measures are captured through various mechanisms. Design mitigation measures are shown on the deemed planning drawings **[CD1-16.4]**. Others will be achieved at a later stage, with the commitment to implement them captured through various commitments, particularly the draft planning conditions **[CD1-14]**.
- 5.2.8 In addition to the ES, the application includes a draft Code of Construction Practice (CoCP) **[CD1-26]** which describes control measures, practices and standards to be implemented throughout the construction of the Scheme to ensure that adverse effects to people and the environment are kept as low as practicable during that period. The draft CoCP **[CD1-26]** will be refined as necessary as the project design, assessment and TWA processes progresses.

5.3 Environmental Design in Relation to Alternatives

- 5.3.1 Environmental design is covered in the context of the EIA Regulations at Section 3 of my Proof of Evidence. This section relates to certain Scheme specific design decisions that have been through the development process that affect the ES conclusions including where alternative designs have been considered in order to mitigate impacts and achieve objectives e.g. to further reduce significant effects

including through incorporating the mitigation hierarchy principles described in Section 4.7 above.

Coton Orchard Options

- 5.3.2 With regards to Coton Orchard a possible slight realignment to the north of the current Scheme was proposed by GCP in October 2022 (refer to Figure 2-3 in Environmental Statement Addendum **[CD1-10.06, page 17]**).
- 5.3.3 The ES Main Report **[CD1-10.01, page 53, paragraph 4.6.6]** provides details of the reasons for continuing with the current Scheme alignment as opposed to the northern alternative as follows: *“Recognising the environmental sensitivity of the Coton Orchard and following a range of surveys of the trees and wildlife in the orchard, a minor northward shift in alignment was proposed. This route would have taken an opportunity of using a gap between the oldest trees, so avoiding the need to fell any of them. It would also have followed a route eastwards that would have lowered the potential ecological impact further, due to it affecting fewer orchard trees and less of the mature orchard habitat. It did, though, follow a more central route through the orchard, and it would have resulted in greater severance and landtake of the agricultural fields west of Cambridge Road. Following further engagement with affected parties and considering the preferences expressed, the decision was taken to retain the alignment on its more southern alignment.”*
- 5.3.4 The Statement of Case **[CD23-01, page 35, paragraph 7.3.63]** provides additional details in relation to the more northern alignment: *“However, this alignment would have had negative commercial and landscape impacts on CPPF land west of Cambridge Road and CPPF stated that they did not favour this alignment. Houston Crest stated that they rejected all routes and regarded this suggestion as a distraction. The more northerly alignment would also have entailed more significant earthworks and would have had a more significant visual impact. As a result, the more southerly route alignment was retained.”*
- 5.3.5 Since publication of the ES and Statement of Case an ES Addendum, June 2025 **[CD1-10-06]** has been published and describes in further detail the consideration of the northern alternative and the proposed mitigation measures at Coton Orchard. In addition to the above, **paragraph 2.4.4** of the ES Addendum, June 2025 **[CD1-10-06, page 15]** reports that although the avoidance of the original Bramley apple trees had been the objective of the northern alternative, the option was not considered to offer any advantages including due to wider landscape and land use effects. **Paragraph 2.4.5** of the ES Addendum, June 2025 **[CD1-10-06, page 15]** also provides additional information in relation to adverse effects of the northern alignment in relation to accessibility, safety, severance and land take and earthworks.
- 5.3.6 The conclusions of the ES Addendum, June 2025 **[CD1-10.06, page 18]** discuss the 6 veteran Bramley apple trees within the draft Order Limits and measures to protect 3 of those veteran trees **[page 18, paragraph 2.5.2]** and the relocation of the 3 other veteran trees **[page 18, paragraph 2.5.3]** in addition to scope for positive orchard restoration management **[page 18, paragraph 2.5.4]**.

The On-line (Cambridge Past Present and Future (CPPF)) option

- 5.3.7 The ES **[CD1-10.01]** provides a summary of the on-line options studied and the ES and ES Addendum **[CD1-10.07]** provides cross references / links to the options reports. With regards to the CPPF option the ES concludes **[CD1-10.01, 4.3.10 and 4.3.11]**:

“Further on-road options were reviewed, but these required earthworks or working areas outside of the highway boundary, involving a large impact on existing vegetation alongside the A1307, including part of Madingley Wood Site of Special Scientific Interest (SSSI), and would also have required works greatly impacting the heritage

setting of the American Cemetery. An alternative that shifted the route to the south would have required significant landtake and tree removal from residential properties opposite the cemetery and would still have impacted its setting.

A low-cost alternative was also proposed by Cambridge Past Present and Future. This took the form of sections of bus lane and other traffic management measures along Madingley Road. It was presented as a package of “quick win” interventions intended to provide a “low-cost, interim solution while the details of longer-term infrastructure schemes, such as East West Rail, the CAM network and the Girton Interchange are worked out”. It was promoted again following a county council decision in March 2023 to support the TWA order application for Cambourne to Cambridge. A council motion to review the GCP proposals for the Scheme against this road alternative was presented at a council meeting in May 2023, but was rejected. As an interim solution, predicated on the delivery of uncommitted major schemes, it is not considered to provide a reasonable alternative.”

- 5.3.8 Following publication of the ES the Applicant has assessed the Cambridge Past Present and Future (CPPF) on-road Alternative Scheme in more detail and prepared a CPPF Alternative Scheme - Engineering Assessment **[CD9-31]**. The option proposes a continuous inbound bus lane along Madingley Road. In order to facilitate this proposal within the boundaries provided, the Applicant has assessed that a compliant cross section would necessitate acquisition of land outside of the highway boundary. This would impact the existing features along Madingley Road, including the commercial and residential properties to the south, as well as extensive clearance of the existing mature trees and hedge line to the south of Madingley Road.
- 5.3.9 The Engineering Assessment **[CD9-31]** sets out a number of conclusions in relation to the option including that it would not comply with the relevant design standards and significant road safety concerns associated with providing a central inbound bus lane in a high speed-road environment. The Engineering Assessment also considers environmental issues including proximity to Madingley Wood SSSI, potential issues on commuting and foraging barbastelle bats and potential impacts on the setting of the highly protected heritage designation of the Grade I Registered Park and Garden of the American Cemetery and the associated Grade II* listed memorial chapel.
- 5.3.10 The assessment of environmental effects concludes **[CD9-31, page 53, paragraph 3.10.10]** *“Overall, the Madingley Road options are far from environmentally benign, with potential impacts to some of the most highly protected heritage and ecological categories of designation in the UK, and/or for the property and amenity of people living along the southern boundary of this road. These are considered to make this proposal no better and potentially inferior in environmental terms to that proposed under the TWA Order application.”*

Adams Road / Former Rifle Range Track

- 5.3.11 With regards to design decisions taken in relation to the option of using Adams Road rather than the former Rifle Range Track, Mott MacDonald Options Appraisal Report (Part 1) (OAR 1) dated February 2018 **[CD1-20.07 - B.1 Off-Road Justification Table, page 113 onwards]** provides a comparison of effects in what is defined as Area 5: Adams Road / Former Rifle Range Track (Rugby Club) and included a range of factors / criteria including visual impact, noise, air quality, carbon, biodiversity and ecology, heritage and landscape – Green Belt. Area 5 is the end of the route, connecting into the existing bus routes around Cambridge city centre. The first option is along Adams Road. This would make a section of Adams Road bus only eastbound prior to the junction with Grange Road. The second option would be to construct a new dedicated busway along former Rifle Range track.
- 5.3.12 OAR 1 used a Mott MacDonald method of assessing options known as INSET scoring which is based on the Department for Transport’s recommended EAST (Early Assessment and Sifting) approach. Each criterion could be scored from 0 to 7, with 1 -

3 being a negative impact, 4 being no or neutral impact or as existing, and 5 - 7 being positive impacts as shown below.

1 = Significant Negative

2 = Medium Negative

3 = Slight Negative

4 = No or Neutral

5 = Slight Positive

6 = Medium Positive

7 = Significant Positive

- 5.3.13 Within the INSET table there is an option to weight the scores. It was determined that all the criteria would have a weighting of 1 but journey reliability which is a key objective of the scheme would have a weighting of 2.
- 5.3.14 Table 20 of OAR 1 **[CD1-20.07, page 83]** provided a summary comparison of the off-road options ranked based on the INSET scores and for Area 5 ranks Adams Road second and the Former Rifle Range Track first (i.e. best performing). Full details are provided in Annex A of OAR 1 with Annex A.1 presenting the off-road INSET Scoring with Adams Road scoring 3.06 and the Former Rifle Range is 4.24. A lower score ranks more poorly.
- 5.3.15 Generally, most criteria scored between 3 and 5 (i.e. no more than slight effects) but key differences in scoring were in relation to Reliability of Journey and Improved Cycle Infrastructure and Connectivity which both scored 7 (Significant Positive) for Rifle Range compared with Scores of 2 (Medium Negative) and 3 (Slight Negative) respectively for Adams Road and Impact on Existing Traffic which scored 1 (Significant Negative) for Adams Road and 3 (Slight Negative) for Rifle Range and Future Proofing which Scored 6 (Medium Positive) for Rifle Range but 3 (Slight Negative) for Adams Road. These were key factors in reaching the decision on the preferred option.

Conclusion in relation to Environmental Matters in relation to Options

- 5.3.16 Having reviewed the 3 options associated with particularly stretches of the route above I have reached the following conclusions as they apply to the reasons for selecting the Preferred Scheme taking into account environmental matters:
- **Coton Orchard options** – a slightly more northerly alignment would have greater environmental effects than the Scheme alignment. This was the overriding factor in selecting the alignment as other factors (e.g. design / cost) were not significant;
 - **The On-line (Cambridge Past Present and Future (CPPF)) option** – this option mainly raises issues due to design standards and safety but from an environmental perspective it could potentially affect some of the most highly designated sites and species in the area; and
 - **Adams Road** – environmental factors are not the main driver for discounting the Adams Road option with journey reliability and improved cycling infrastructure and future proofing being key factors.

6. MAIN ENVIRONMENTAL CONSIDERATIONS AND FINDINGS

6.1 Introduction

6.1.1 The main environmental considerations and findings are reported in the ES and are covered through the topics set out below. The scope of my evidence, as it relates to these ES topics, is as follows:

- Air Quality – covered in my Proof of Evidence;
- Acoustics (sound, noise and vibration) - a brief overview is provided in my Proof of Evidence – details are covered in the Proof of Evidence of Toby Lewis **[CD26-01-APP-W11-1]**;
- Traffic and Transport (Transit and Access) - covered in my Proof of Evidence from an EIA perspective with other traffic matters covered in the Proof of Evidence of Jo Baker **[CD26-01-APP-W1-1]**;
- Community and Human Health and Land Use - covered in my Proof of Evidence;
- Ecology - a brief overview is provided in my Proof of Evidence - details are covered in the Proof of Evidence of Ian Ellis in relation to Ecology **[CD26-01-APP-W13-1]** with the exception of veteran trees which are covered by Chris Alder **[CD26-01-APP-W4-1]** and bats, specifically Barbastelle, which are covered in the Proof of Evidence of Paola Reason **[CD26-01-APP-W12-1]**;
- Landscape and Visual - a brief overview is provided in my Proof of Evidence – details are covered in the Proof of Evidence of Chris Carolan **[CD26-01-APP-W5-1]**;
- Heritage – a brief overview is provided in my Proof of Evidence with the exception of built heritage effects including in relation to Clare Hall and the American Military Cemetery which are dealt with in the Proof of Evidence of Tom Wilson **[CD26-01-APP-W2-1]**;
- Water (including flooding) - covered in my Proof of Evidence with the exception of flooding effects at Bin Brook which are dealt with in the Proof of Evidence of Jack Southon **[CD26-01-APP-W9-1]**;
- Soil, Geology and Land Contamination - covered in my Proof of Evidence;
- Material Use and Waste – covered in my Proof of Evidence;
- Greenhouse Gases (including carbon) - covered in my Proof of Evidence;
- Climate Resilience - covered in my Proof of Evidence; and
- Cumulative Effects - covered in my Proof of Evidence.

6.1.2 Consideration of major accidents and disasters within EIA was introduced to consider the potentially significant effects of a development on the environment as a result of its vulnerability to, or introduction of, risks of major accidents and/or disasters. Major accidents and/or disasters should be considered as part of an assessment where the development has the potential to cause the loss of life, permanent injury and/or temporary or permanent destruction of an environmental receptor which cannot be restored through minor clean-up and restoration.

6.1.3 The assessment of the scoped in major accident and/or disaster types (Technical Report 9 – Major Accidents and Disasters (TR9)) **[CD1-11.09]** considered those to

which the Scheme may be vulnerable during both the temporary construction phase and the operational phase. The assessment concluded that the identified potential major accidents and/or disasters would be managed to be As Low As Reasonably Practicable (ALARP) following the implementation of the mitigation measures identified and therefore will not result in significant environmental effects.

- 6.1.4 As such major accidents and disasters are not considered further in my Proof of Evidence.
- 6.1.5 For each of the topics described below I summarise the findings of the environmental assessment reported in the ES focusing on the method and responses to the Scoping Opinion **[CD1-10.05]** proposed mitigation measures, the findings of the ES for that topic highlighting any significant effects predicted during construction and / or operation and then an overall summary for that topic.
- 6.1.6 The environmental assessment reported in the ES **[CD1-10.01]** has identified significant adverse and beneficial environmental effects. The main findings can be summarised as follows and are described in further detail by topic below:
- There could be some significant adverse effects in relation to certain Noise and Vibration receptors although these could be reduced (see below and Proof of Evidence of Toby Lewis **[CD26-01-APP-W11-1]**), for Traffic and Transport (transit and access) in relation to Bridleway 39/30, for certain Ecological and Landscape and Visual receptors, to a farm holding (during construction) and due to the permanent loss of best and most versatile agricultural land;
 - There would be significant overall beneficial effects for Walkers, Cyclists and Horse Riders and due to replacement open space and Greenhouse Gases when combined with the work done by the City Council to deter car use. In addition, the Scheme has committed to achieving over 10% and up to 20% Biodiversity Net Gain (BNG); and
 - Environmental topics where no significant effects from an EIA perspective (adverse or beneficial) are predicted are on Air Quality, Heritage, Water (including flooding), Material Use and Waste and Climate Resilience.

6.2 Air Quality

Introduction

- 6.2.1 This part of my evidence deals with Air Quality and in particular the findings reported in the ES **[CD1-10.01]**. Detailed information about the Air Quality effects associated with the Scheme and a description of the likely significant effects of the proposals is provided in ES Technical Report 2: Air Quality **[CD1-11.02]**.

Methodology

- 6.2.2 The ES Scoping Report and Opinion (Appendix ES4 of Volume 1 of the ES) **[CD1-10.05]** includes at Chapter 5 the proposed assessment methodology for Air Quality. The document also includes the Secretary of State's opinion and the Applicant's response to the opinion. The Scoping Opinion Response Tracker contained in Appendix ES4 of Volume 1 of the ES **[CD1-10.05]** demonstrates that all relevant Scoping Opinion requirements / requests in relation to Air Quality, including from the Department for Transport and Natural England, were agreed and adopted for incorporation into the ES.
- 6.2.3 Chapter 3 (Methodology and Sources) of the ES Technical Report 2: Air Quality **[CD1-11.02]** describes the data sources, consultations, site visit and assessment methods.

Mitigation

- 6.2.4 Appendix ES1 of the ES contains a Mitigation Register **[CD1-10.02]** which includes measures relating to Air Quality including reduced speeds at certain locations and planting.
- 6.2.5 The main mitigation measures in relation to air quality will be to address emissions during construction. The Code of Construction Practice (CoCP) **[CD1-26]** is a fundamental part of the Scheme proposals in that it outlines the measures needed during construction to avoid likely significant adverse effects on people and on natural and cultural assets. The environmental assessments for each topic have assumed that these measures will, as a minimum, be implemented. The measures represent a best practice approach and are generic to most construction activity for a scheme of this nature.
- 6.2.6 The draft CoCP was issued to the Greater Cambridge Shared Planning Service as an initial draft and comments received in response have, where appropriate, been reflected in the updated document.
- 6.2.7 Following permission, measures set out in the CoCP **[CD1-26]** (including any changes to them required as part of the consent) will be used as the basis for more detailed measures that will be developed by the principal contractor. These measures will take account of the detailed designs, and to the specific approach to construction that they support, accommodating where necessary, local and specific sensitivities. The detailed measures will be set out in the principal contractor's Local Environmental Management Plan (LEMP).

Findings

- 6.2.8 Impacts of the Scheme on NO₂ and particulates will be generally beneficial, with three times as many receptors experiencing a decrease in concentrations of NO₂, PM₁₀ and PM_{2.5} as would experience an increase, when compared to the situation without the Scheme. However, the overall impacts, both positive and negative, will not be significant.
- 6.2.9 The location of the modelled receptors are detailed in Appendix L of TR2 **[CD1-11.02, pages 108 and 109]**. At the majority of locations included in the assessment model (85 out of 121, or about 70%) it is predicted that there will be improvements in annual mean NO₂ concentrations as a result of the Scheme and the changes in road use that it will bring about. At only two of the 121 modelled receptors will there be an increase in NO₂ concentrations. However, at these locations, there will be a maximum increase of 0.1µg/m³ increase, well below the 10% change that would be considered a significant effect. At these and all other receptors, the annual mean NO₂ concentrations will remain well within the air quality objective.
- 6.2.10 Similarly, predicted one-hour mean NO₂ concentrations are all well within the air quality objective threshold of 60µg/m³, and the impacts of the Scheme will have a negligible bearing on this.
- 6.2.11 Considering particulate pollution, at 14% of locations included in the assessment model (17 out of 121), it is predicted that there will be improvements in annual mean concentrations of PM₁₀ (and 13 out of 121 for PM_{2.5}) as a result of the Scheme. An increase in PM₁₀ concentrations is predicted at six of the 121 modelled receptors and at only one location for PM_{2.5}, and at all these locations the increase will be less than 0.1µg/m³ (or <1% of the limit value) and therefore well below the air quality objective thresholds.
- 6.2.12 Predicted 24-hour mean PM₁₀ concentrations are all well within the air quality objective of 50µg/m³ (which is not to be exceeded more than 35 times per year), and the impacts of the Scheme will again have little bearing on this.

- 6.2.13 The World Health Organisation sets out more stringent air quality guidance levels for these three pollutants, which would be achieved at only around a third of model locations, and the Scheme will have no bearing on this.
- 6.2.14 With regards to construction effects in relation to air quality, on the basis of the measures that will be implemented under the CoCP **[CD1-26]**, and given the current local air quality in the area, the proximity of sensitive receptors to the roads likely to be used by construction vehicles and the likely numbers of construction vehicles and plant that will be used, the effects will be negligible and therefore not significant.

Conclusions

- 6.2.15 In conclusion, no likely significant effects on Air Quality are predicted during either the construction or the operational phases.

6.3 Acoustics (sound, noise and vibration)

Introduction

- 6.3.1 This part of my evidence deals with Acoustics and in particular the findings reported in the ES **[CD1-10.01]**. Detailed information about the Acoustic effects associated with the Scheme and a description of the likely significant effects of the proposals is provided in ES Technical Report 1: Acoustics **[CD1-11.01]**.
- 6.3.2 My evidence does not cover specific noise and vibration related issues principally in relation to Clare Hall's objection (**OBJ 213 / Statement of Case CD23-17**). This is dealt with in the Proof of Evidence of Toby Lewis **[CD26-01-APP-W11-1]**.

Methodology

- 6.3.3 The ES Scoping Report and Opinion (Appendix ES4 of Volume 1 of the ES) **[CD1-10.05, pages 152 to 161]** includes at Chapter 12 the proposed assessment methodology for Acoustics (titled Noise and Vibration). The document also includes the Secretary of State's opinion and the Applicant's response to the opinion. The Scoping Opinion Response Tracker contained in Appendix ES4 of Volume 1 of the ES **[CD1-10.05]** demonstrates that all relevant Scoping Opinion requirements / requests in relation to Noise and Vibration, including from Historic England in relation to the setting of historic assets, were agreed and adopted for incorporation into the ES.
- 6.3.4 Chapter 3 (Methodology and Sources) of the ES Technical Report 1: Acoustics **[CD1-11.01]** describes the data sources, consultations, site visit and assessment methods.

Mitigation

- 6.3.5 Appendix ES1 of the ES contains a Mitigation Register **[CD1-10.02]** which includes measures relating to Acoustics (noise and vibration) including reduced speeds at certain locations and measures set out in the CoCP **[CD1-26]** to control construction noise and vibration.
- 6.3.6 As described above for air quality, the CoCP **[CD1-26]** will be used to control construction effects including those that relate to noise and vibration.

Findings

- 6.3.7 Significant airborne noise levels are predicted at some 300 receptors as a result of construction works, clustered at Cambourne, Hardwick and West Cambridge, with small numbers at Coton and north Newnham. The effects will occur intermittently during construction, with only occasional periods of higher noise levels associated with particular events when the plant is working in close proximity to sensitive receptors. At six receptors the impacts will be of sufficient duration to result in a significant effect,

including Childerley Gate, a few locations along Scotland Road and immediately adjacent to the Bin Brook bridge.

- 6.3.8 Significant vibration levels are currently predicted at an estimated 95 receptors as a result of construction works. These will be concentrated at Cambourne and Hardwick, with small numbers at Coton, West Cambridge and north Newnham. In practice, as vibratory rollers will only be in operation for a few days at most, no significant vibration effects are predicted.
- 6.3.9 An assessment of construction vibration on potentially vibration-sensitive facilities due to the use of vibratory rollers has also been undertaken. There are several commercial and research facilities at West Cambridge that are within this 60m buffer that could have particularly vibration-sensitive equipment and so will potentially be subject to likely significant effects. The principal contractor will be required to consult with the relevant organisations well in advance of potentially disruptive work to agree the approach to construction that will minimise risk of vibration impacts.
- 6.3.10 An assessment of operational noise and vibration effects due to the Scheme has been undertaken and considered the operating busway, the travel hub and changes in road traffic.
- 6.3.11 Predicted night-time operational noise (after 11pm, recognising that bus services will run up to around midnight, and between 6am and 7am) of 48dB LAeq,1h could exceed impact thresholds by up to 10dB for some homes in Cambourne and Clare Hall student accommodation (the latter being dealt with in Toby Lewis' Proof of Evidence **[CD26-01-APP-W11-1]**) in Newnham that are located approximately 8m from the busway, where buses run on a dedicated route away from existing roads and traffic. Significant adverse effects are therefore possible as a result of the bus movements at night. However, bus services are likely to be less frequent at this time, and traffic noise remains prevalent in the background. Consequently, noise impacts are likely to be less and significant effects in Cambourne and Newnham may not occur once the timetabling information is known, and once fully electric buses are in use. Since production of the ES these night time noise issues have further been addressed and are detailed in the Proof of Evidence of Toby Lewis **[CD26-01-APP-W11-1]**. In summary the hourly number of bus movements during those night-time periods in relation to the properties at Camborne and Clare Hall could be reduced to reduce the impact to below the ES significance threshold or the move to electric buses would reduce significant adverse night-time effects.
- 6.3.12 At other locations along the route, the target external noise criterion will be comfortably achieved in gardens, and reasonable internal noise levels will be achieved even with windows open. The level above which significant adverse effects on health and quality of life occur (Significant Observed Adverse Effect Level) would not be exceeded during the day or night-time. Significant noise effects are therefore not anticipated from the Cambourne to Cambridge bus service.
- 6.3.13 Overall, no significant noise effects are predicted from the operational travel hub or changes in road traffic.

Conclusions

- 6.3.1 In conclusion, significant construction airborne noise levels due to duration of effects are predicted at six receptors noting that the effects will be temporary. Potentially significant construction vibration effects at several commercial and research facilities will need to be addressed by the principal contractor to minimise risk.
- 6.3.2 Following further assessment of night time operational noise issues as detailed in the Proof of Evidence of Toby Lewis **[CD26-01-APP-W11-1]** the hourly number of bus movements during those night-time periods in relation to the properties at Camborne and Clare Hall could be reduced to reduce the impact to below the ES significance

threshold or the move to electric buses would reduce significant adverse night-time effects.

- 6.3.3 The level above which significant adverse effects on health and quality of life occur (Significant Observed Adverse Effect Level) would not be exceeded during the day or night-time.

6.4 Traffic and Transport (Transit and access)

Introduction

- 6.4.1 This part of my evidence deals with the impacts of traffic and transport and their effects on people's ability to make journeys safely, expediently and conveniently and in particular the findings reported in the ES **[CD1-10.01]**. Detailed information about Traffic and Transport effects associated with the Scheme and a description of the likely significant effects of the proposals is provided in ES Technical Report 12: Traffic and Transport **[CD1-11.12]**. My Proof of Evidence covers this aspect from an EIA perspective with other traffic matters covered in the Proof of Evidence of Jo Baker **[CD26-01-APP-W1-1]**.

Methodology

- 6.4.2 The ES Scoping Report and Opinion (Appendix ES4 of Volume 1 of the ES) **[CD1-10.05]** includes at Chapter 17 the proposed assessment methodology for Traffic and Transport. The document also includes the Secretary of State's opinion and the Applicant's response to the opinion. The Scoping Opinion Response Tracker contained in Appendix ES4 of Volume 1 of the ES **[CD1-10.05]** demonstrates that all relevant Scoping Opinion requirements / requests in relation to Traffic and Transport including from the Department for Transport and Historic England, were agreed and adopted for incorporation into the ES.
- 6.4.3 Chapter 3 (Methodology and Sources) of the ES Technical Report 12: Traffic and Transport **[CD1-11.12]** describes the data sources, consultations, site visit and assessment methods.

Mitigation

- 6.4.4 Appendix ES1 of the ES contains a Mitigation Register **[CD1-10.02]** which includes measures relating to Traffic and Transport (transit and access) including reduced speeds at certain locations, measures in connection with the diversion of public right of way 55/2, bridleway 39/30 and public right of way 39/31 and measures set out in the CoCP **[CD1-26]** to control relevant construction effects.
- 6.4.5 The principal contractor will agree a Construction Traffic Management Plan (CTMP) with the GCP. The CTMP will include details of permissible routes for construction vehicles. It will limit construction traffic movements during peak periods on the local highway network.
- 6.4.6 Construction traffic will travel to the busway haul road from the A428, from either the Scotland Road junction or the Madingley Mulch junction, and from the M11 to adjacent works from haul roads, and (via the A1303) from within the Cambridge West business park and Charles Babbage Road. Use of local roads, including Grange Road, will be strictly limited. No construction traffic will be permitted to travel through local villages such as Dry Drayton, Coton and Bourn.

Findings

- 6.4.7 With the main access routes already well used, relative increases from construction traffic will be low. Grange Road is one of the more sensitive routes affected, but

construction activity on Grange Road will be for a short period only and activity will be limited to the construction of the junction with the busway.

- 6.4.8 With the relatively low increases in construction vehicle traffic (anticipated to be of negligible to minor magnitude), and with no more than medium sensitivity routes, effects on severance; pedestrian, cycle and equestrian delay and amenity; and road vehicle delay will all be negligible and therefore not significant.
- 6.4.9 Personal Injury Accident data for the period 2019-2024 identify very few records at locations affected by construction traffic. Although construction traffic will have some impact on the roads immediately surrounding the project sites and at key junctions on the identified routes, with all precautions taken to ensure safe use and management of construction vehicles (in accordance with the CTMP), and with no safety 'hotspots' identified along the Scheme's construction access routes and in the vicinity of the Scheme, significant adverse effects are not predicted.
- 6.4.10 Three public rights of way will be directly affected temporarily during construction, namely:
- FP66/17 between A1303 and Madingley Road in Hardwick, and approximately 2.9km long;
 - FP114/6, between A1303 and Worcester Avenue in Hardwick, and 70m long; and
 - FP55/2, between A1303 and Whitwell Way in Coton, and approximately 700m long.
- 6.4.11 It is proposed that pedestrian, cyclist and equestrian access along all footways and public rights of way will be maintained during construction, with careful management of crossing points and diversions where necessary.
- 6.4.12 Bridleway 39/30, which currently runs parallel to the M11 motorway, will be permanently diverted east and then west around the toe of the embankment forming the approach to the M11 motorway bridge. On this basis, only the diversion of Bridleway 39/30 over 600m will result in a moderate adverse and significant effect.

Conclusions

- 6.4.13 In conclusion, with the exception of a permanent moderate adverse (and therefore significant effect on Bridleway 39/30), no likely significant effects on traffic and transport are predicted.

6.5 Community and Human Health and Land Use

Introduction

- 6.5.1 This part of my evidence deals with Community and Human Health and Land Use and in particular the findings reported in the ES **[CD1-10.01]**. Detailed information about Community and Human Health and Land Use (including land take) effects associated with the Scheme and a description of the likely significant effects of the proposals is provided in ES Technical Report 4: Community and Human Health / Land Use and Land Take **[CD1-11.04]**.

Methodology

- 6.5.2 The ES Scoping Report and Opinion (Appendix ES4 of Volume 1 of the ES) **[CD1-10.05]** includes at Chapter 9 the proposed assessment methodology for Community and Human Health. The document also includes the Secretary of State's opinion and the Applicant's response to the opinion. The Scoping Opinion Response Tracker contained in Appendix ES4 of Volume 1 of the ES **[CD1-10.05]** demonstrates that all

relevant Scoping Opinion requirements / requests in relation to Community and Human Health and Land Use including from the Department for Transport, were agreed and adopted for incorporation into the ES [CD1-10.01].

- 6.5.3 Chapter 3 (Methodology and Sources) of the ES Technical Report 4: Community and Human Health / Land Use and Land Take [CD-11.04] describes the data sources, consultations, site visit and assessment methods.

Mitigation

- 6.5.4 Appendix ES1 of the ES contains a Mitigation Register [CD1-10.02] which includes measures relating to Community and Human Health and Land Use (mainly under the heading of Socio-economic) including measures in connection with the diversion of public right of way 55/2, bridleway 39/30 and public right of way 39/31 and measures set out in the CoCP [CD1-26] to control relevant construction effects.

Findings

- 6.5.5 The proposed developments at Cambourne West and Bourn Airfield are dependent on the introduction of the Scheme. The proposal for 3,500 new homes (40 per cent of which should be affordable) at Bourn Airfield is explicitly tied to the provision of the Cambourne to Cambridge Scheme (or an equivalent public transport link), with no more than 500 homes permitted until the Scheme is in place.
- 6.5.6 The land value uplift due to the Scheme (a measure of the difference between the value of land with and without consent for the Scheme) is almost £200M. For Cambourne West, the Scheme also offers almost £50M of land value uplift. This is key to ensuring that the potential for housing growth and, with it, the additional workforce that becomes available to local businesses, is realised. Labour market impacts are captured under wider economic impacts in the Business Case addendum.
- 6.5.7 There will be a very large permanent beneficial effect (significant) for walkers, cyclists and horse riders due to the new active travel route, which will support travel for recreation and commuting between communities along the Scheme and provide a continuous path into Cambridge.
- 6.5.8 The City Wildlife Site east of the M11 verge is designated as open space, though this is of very low quality currently. Replacement open space provided on land west of the M11 will be larger and of superior quality, representing a permanent moderate beneficial (significant) effect.
- 6.5.9 One bridleway will be permanently diverted increasing the journey length by approximately 300m, constituting a permanent moderate adverse (significant) effect, although the path is believed to be little used.
- 6.5.10 There are several agricultural land holdings that will be crossed by the Scheme resulting in permanent landtake and requiring access across the route to be provided to ensure that fields can continue to be farmed. For affected landholdings landtake will be small as a proportion of the total and there will be no significant effects on farm viability. There will be landtake from Coton Orchard, affecting about 20% of the remaining part. As the orchard has not been managed commercially for some time, the sensitivity is considered low and the effect is not significant.
- 6.5.11 The Scheme will connect people socially and economically, with health implications for the communities it serves. It has the potential to enhance health by shaping access to services and opportunities, through physical activity levels, or by improving environmental conditions, such as air quality. It also has the potential to increase health risks exposure to air pollutants, noise or visual impact, and by risks from road traffic injuries.

- 6.5.12 There are several adverse effects predicted temporarily during construction, including noise and vibration impacts and reductions in visual amenity, which could in turn result in adverse impacts for local residents' mental health. Noise and vibration effects will be limited. Significant construction noise will temporarily affect residents along the route particularly in Cambourne and Hardwick, as well as in Coton and Newnham, though construction impacts will be of short duration and significant effects will be limited to Childerley Gate, a few locations along Scotland Road and by the Bin Brook crossing. Visual amenity will improve as mitigation planting matures and increases the level of screening of the Scheme.
- 6.5.13 Some 955 full time equivalent jobs are estimated to be generated during construction, the great majority of these (c860) within South Cambridgeshire. While this is notable, it is not considered to be a significant benefit, in the context of South Cambridge and the City of Cambridge's employment as a whole.
- 6.5.14 There will be no community land or facilities directly affected during construction of the Scheme. Several community facilities and businesses will experience minor disruption to access, but with careful management in line with the CoCP [CD1-26], effects will be no more than minor and not significant.
- 6.5.15 One exception is due to the temporary occupation of agricultural land. A construction site alongside Bin Brook will temporarily displace around 1.5ha of land currently used for grazing on a tenanted basis. At around 15% of the total holding, this is considered a significant adverse effect for the farmer.
- 6.5.16 As described in Section 7.2, under transit and access, four public rights of way will be directly affected during construction. Three footpaths will be kept open with potential for minor alignment amendments and appropriate management measures in line with the CoCP [CD1-26].

Conclusions

- 6.5.17 There are positive and adverse significant effects associated with Community and Human Health and Land Use. There will be a very large permanent beneficial effect (significant) for walkers, cyclists and horse riders due to the new active travel route and replacement open space will represent a permanent moderate beneficial (significant) effect. One bridleway will be permanently diverted constituting a permanent moderate adverse (significant) effect and a construction site alongside Bin Brook will temporarily cause a significant adverse effect for the affected farmer. Significant adverse construction noise impacts will be limited to Childerley Gate, a few locations along Scotland Road and by the Bin Brook crossing.

6.6 Ecology

Introduction

- 6.6.1 This part of my evidence deals with Ecology and in particular the findings reported in the ES [CD1-10.01]. Detailed information about Ecology effects associated with the Scheme and a description of the likely significant effects of the proposals is provided in ES Technical Report 5: Ecological Impact Assessment [CD1-11.05], which is supported by several Technical Report Appendices (Technical Report Appendices 5.1 – 5.18).
- 6.6.2 Detailed evidence in relation to Ecology are dealt with in the Proof of Evidence of Ian Ellis [CD26-01-APP-W13-1] with the exception of veteran trees which are covered by Chris Alder [CD26-01-APP-W4-1] and bats, specifically Barbastelle, which are covered in the Proof of Evidence of Paola Reason [CD26-01-APP-W12-1];

Methodology

- 6.6.3 The ES Scoping Report and Opinion (Appendix ES4 of Volume 1 of the ES) **[CD1-10.05]** includes at Chapter 6.4 the proposed assessment methodology for Ecology. The document also includes the Secretary of State's opinion and the Applicant's response to the opinion. The Scoping Opinion Response Tracker contained in Appendix ES4 of Volume 1 of the ES **[CD1-10.05]** demonstrates that all relevant Scoping Opinion requirements / requests in relation to Ecology including from Natural England, were agreed and adopted for incorporation into the ES.
- 6.6.4 Chapter 3 (Methodology and Sources) of the ES Technical Report 5: Ecological Impact Assessment **[CD1-11.05]** including Technical Report Appendices 5.1 – 5.18 **[CD1-11.05 TR5.01 to CD1-11.05 TR5.18]**, describes the data sources, consultations, site visit and assessment methods.

Mitigation

- 6.6.5 Appendix ES1 of the ES contains a Mitigation Register **[CD1-10.02]** which includes a range of measures relating to Ecology including:
- Measures to mitigate impacts on great crested newts;
 - Retention of a green corridor for bats and elevation of ground levels and provision of semi-mature planting at certain locations to lift bats over the scheme;
 - Provision of hedgerow, semi-mature, and native woodland planting at certain locations;
 - Alignment on-road along St Neots Road between Scotland Farm roundabout and Long Road to avoid land take to shelterbelt between road and the A428;
 - Divergence of alignment south from St Neots Road at a point west of Comberton Plantation, to avoid a plantation;
 - The earthworks north of the proposed St Neots Road/Long Road junction are designed so that loss of woodland north of St Neots Road is avoided as far as is reasonably practicable, with land take limited to the grassland verge;
 - Maintenance of existing hedgerow to maintain green corridor;
 - Provision of mammal culverts along the section of the Scheme which traverses Coton Orchard (the mammal culverts will be accompanied by badger fencing to direct badgers towards the culverts);
 - Sequence of mitigation options (in line with mitigation hierarchy) to address potential impacts on relevant apple trees in Coton Orchard (further details are also provided in ES Addendum, June 2025 **[CD1-10.06]**;
 - Drainage attenuation and design of Bin Brook clear span bridge to avoid impacts on Bin Brook; and
 - Section of busway and service path located on platform structure at Rifle Range Road to avoid impacts on the root protection areas of Tree Preservation Order trees.
- 6.6.6 In addition, the CoCP **[CD1-26]** sets out measures to control relevant construction effects on Ecology.

- 6.6.7 The Scheme has committed to delivering a minimum of 10% biodiversity net gain (BNG). Mandatory BNG relates to applications for planning permission made under the Town and Country Planning Act 1990 but not for applications for permissions granted through other routes. As the application for the Scheme is made under the TWA and deemed planning permission route, it is not subject to mandatory BNG. Irrespective of this, the Scheme has made provision for the delivery of BNG.
- 6.6.8 The Applicant has committed to submitting a BNG Plan that will achieve no less than 10% BNG by reference to a BNG metric published by Natural England. The Applicant aims to achieve 20% BNG, which is in line with the Greater Cambridge Shared Planning Biodiversity Supplementary Planning Document and the Doubling Nature Vision, adopted by South Cambridgeshire District Council. BNG units will be maintained for at least 30 years after the development is completed.
- 6.6.9 Part of the Scheme is located within the Cambridge Nature Network, which is part of the national Nature Recovery Network. These recovery networks are designed to highlight the best areas to create new habitats and large-scale natural greenspaces. Habitat creation through the Scheme that aims to achieve over 10% and up to 20% net gain will contribute to these recovery areas.
- 6.6.10 An ES Addendum, June 2028 **[CD1-10.06]** provides further details in relation to mitigation of the effects on veteran trees at Coton Orchard and details in relation to this and to Barbastelle bats are covered in the Proofs of Evidence of Chris Alder **[CD26-01-APP-W4-1]** and Paola Reason **[CD26-01-APP-W12-1]** respectively.

Findings

- 6.6.11 The following summarises the findings of the Ecological Impact Assessment reported in the ES **[CD1-11.05]** and, as required by the EIA Regulations, is focussed on the likely significant effects. It covers both the permanent effects from the Scheme proposals and its operation, and temporary effects arising during the construction phase and takes into account the mitigation measures described above.
- 6.6.12 Due to the extent of habitat loss within the Coton Orchard County Wildlife Site, the effect on this non-statutory designated site is considered to be significant at a county scale. Despite the habitat creation within the Order Limits, there will be significant effects due to impacts on two Habitats of Principal Importance. The loss of 0.42ha of traditional orchard will not be compensated for within the Order Limits as its specific management requirements and the relatively small area concerned would preclude its creation near the busway. Similarly, a net loss of 1.29km hedgerow will not be mitigated within the Order Limits as this may not accord with wider landscape principles. The loss of both of these habitats will be a significant effect at a county scale.
- 6.6.13 There will be locally significant adverse effects on terrestrial invertebrates.

Conclusions

- 6.6.14 There will be significant effects on several ecological receptors including Coton Orchard County Wildlife Site and the traditional orchard itself, two habitats of Principal Importance, hedgerows and terrestrial invertebrates.
- 6.6.15 The Scheme will deliver over 10% and up to 20% BNG.

6.7 Landscape and Visual

Introduction

- 6.7.1 This part of my evidence deals with Landscape and Visual and in particular the findings reported in the ES **[CD1-10.01]**. Detailed information about Landscape and Visual

effects associated with the Scheme and a description of the likely significant effects of the proposals is provided in ES Technical Report 8: Landscape [CD1-11.08.1], which is supported by the Landscape and Visual Methodology [CD1-11.08.2], Landscape and Visual Figures [CD1-11.08.3] and Landscape and Visual Photomontages [CD1-11.08.4].

- 6.7.2 Detailed evidence in relation to Landscape and Visual Effects are dealt with in the Proof of Evidence of Chris Carolan [CD26-01-APP-W5-1].

Methodology

- 6.7.3 The ES Scoping Report and Opinion (Appendix ES4 of Volume 1 of the ES) [CD1-10.05] includes at Chapter 11 the proposed assessment methodology for Landscape and Visual. The document also includes the Secretary of State's opinion and the Applicant's response to the opinion. The Scoping Opinion Response Tracker contained in Appendix ES4 of Volume 1 of the ES [CD1-10.05] demonstrates that all relevant Scoping Opinion requirements / requests in relation to Landscape and Visual including from the Department for Transport, Historic England and Natural England, were agreed and adopted for incorporation into the ES.
- 6.7.4 Chapter 3 (Methodology and Sources) of the ES Technical Report 8: Landscape [CD1-11.08.1], which is supported by the Landscape and Visual Assessment Methodology [CD1-11.08.2] describes the data sources, consultations, site visit and assessment methods.

Mitigation

- 6.7.5 Appendix ES1 of the ES contains a Mitigation Register [CD1-10.02] which includes measures relating to Landscape and Visual including measures in connection with the retention of certain habitats including woodland at specific locations, semi – mature tree planting and native woodland planting at specific locations, creation of bunds, specific measures in relation to Coton Orchard, avoidance of Root Protection Areas of Tree Preservation Order trees on Rifle Range Road, requirements in relation to a principal contractor's Carbon Management Plan, maximisation of climate resilient landscaping and measures set out in the CoCP [CD1-26] to control relevant construction effects.

Findings

- 6.7.6 The following summarises the findings of the Landscape and Visual assessment reported in the ES and, as required by the EIA Regulations, is focussed on the likely significant effects. It covers both the permanent effects from the Scheme proposals and its operation, and temporary effects arising during the construction phase and takes into account the mitigation measures described above.
- 6.7.7 With regards to construction effects on landscape, within the relatively more sensitive landscape around Coton and Hardwick (Landscape Character Area (LCA) 4B) and given the prominence of much of the works across much of this area, including the main compound at Scotland Farm, the character of this area will be moderately adversely affected, which is a temporary significant effect.
- 6.7.8 In terms of operational effects on the landscape, much of the Scheme's alignment will affect areas of relatively lower landscape sensitivity, such as around Bourn Airfield; or will result in relatively small qualitative change, such as past Hardwick. However, turning southwards east of Hardwick, the Scheme crosses land with higher intrinsic visual, and historical and cultural significance, whose character is fundamental to preserving the setting and special character of Cambridge.
- 6.7.9 There would be some noticeable change to existing landscape elements and landscape character; however, the landscape mitigation proposals will be fundamental

to the Scheme's integration in the landscape, including the introduction of new earth bunds and planting alongside the busway.

- 6.7.10 The Scheme will cause noticeable alteration of existing landscape fabric and features of importance to the landscape character locally near Coton, although its impact on the wider LCA 4B will be limited.
- 6.7.11 On the basis of the landscape impacts east of Hardwick, where the Scheme crosses open rural land, and given the medium sensitivity of the LCA, and the minor/moderate magnitude of impact at year-1 winter on LCA 4B, the landscape effect will be moderate adverse, and therefore significant.
- 6.7.12 Mitigation planting will establish over time enhancing screening and embedding the Scheme more firmly in the landscape. With time this will lessen the magnitude of the impact to minor and reduce the severity of the effect, such that at year-15 summer the effect will be non-significant.
- 6.7.13 With regards to visual impacts during construction, several receptors are expected to experience significant albeit temporary adverse visual effects. These are set out in Paragraph 7.5.13 of the ES **[CD1-10.01, page 104]**.
- 6.7.14 During operation, there will be a small number of significant residual visual effects in the first year of operation, but for most of these maturing screening and landscape planting will lessen effects to a non-significant level by summer year 15.
- 6.7.15 Permanent significant visual effects will principally concern viewpoints in close proximity to the Scheme and/or with initially unfettered views of it, though maturing landscape planting will gradually become effective. These are as follows (location references to Figure 7-3 and Figure 7-4 of the ES **[CD1-10.01, pages 101 and 102]**):
- On Scotland Road (receptor (R) R5 in the ES **[CD1-10.01]**) residents of approximately 10 properties will have significant effects at winter year 1. Effects will become non-significant by summer year 15;
 - Users of the footpath east of the travel hub (R6 in the ES **[CD1-10.01]**) will be similarly affected, with significant effects at winter year 1 reduced to non-significant by summer year 15;
 - In Coton, the alignment will be well integrated into the landscape and 'though views will be possible, including those of the buses, the magnitude of impacts will be minor and will generally not result in significant effects. Users of the footpath between Madingley and Coton will be significantly affected. Maturing planting will lessen this effect for more distant southern locations (R16 in the ES **[CD1-10.01]**) by summer year 15, but where the path crosses the Scheme (R19) significant adverse effects will be permanent;
 - Also in Coton, residents at 14 properties (R21 in the ES **[CD1-10.01]**) will have significant effects at winter year 1 becoming non-significant by summer year 15; and
 - Users of footpaths west of Cambridge will be affected by views of the Scheme. In most cases, impacts will not result in significant effects, though at R26 and R31 in the ES **[CD1-10.01]**, the close viewing distance (R26 in the ES **[CD1-10.01]**) and impedance of existing view (R31 in the ES **[CD1-10.01]**) will result in a significant effect at winter year 1, lessening to non-significant by summer year 15 as landscaping and screen planting matures.

Conclusions

- 6.7.16 There will be temporary significant effects on landscape around Coton and Hardwick (Landscape Character Area (LCA) 4B) during the construction phase and significant effects during the operation phase near Coton and east of Hardwick reducing to not significant over time with the establishment of mitigation planting.
- 6.7.17 There will be temporary significant visual effects on certain receptors during construction. During operation there will be permanent significant effects to certain properties on Scotland Road, to footpath users east of the travel hub (PRoW (Dry Drayton 66/17)), users of the footpath between Madingley and Coton (PRoW (Coton 55/2)), certain properties in Coton, and users of footpaths west of Cambridge (PRoW (Cambridge 39/30)) In most cases the significance of effect will reduce to not significant over time due to the establishment of mitigation planting with the exception of the footpath between Madingley and Coton where the path crosses the Scheme significant adverse effects will be permanent.

6.8 Heritage

Introduction

- 6.8.1 This part of my evidence deals with the Historic Environment and in particular the findings reported in the ES **[CD1-10.01]**. Detailed information about the heritage along the route and describing the predicted impacts and effects of the proposals is provided in ES Technical Report 7: Heritage and Archaeology **[CD1-11.07.1]**, which is supported by a Heritage Statement **[CD1-11.07.2]** and other appendices setting out the findings of archaeological investigations **[CD1-11.07.3 and CD1-11.7.4]**.
- 6.8.2 My evidence does not cover built heritage setting issues including those raised with regards to the Clare Hall objection **[CD23-17 / OBJ-213]**. Clare Hall and other built heritage setting related matters are dealt with in the Proof of Evidence of Tom Wilson **[CD26-01-APP-W2-1]**.

Methodology

- 6.8.3 The ES Scoping Report and Opinion (Appendix ES4 of Volume 1 of the ES) **[CD1-10.05]** includes at Chapter 10 the proposed assessment methodology for Heritage (titled Historic Environment). The document also includes the Secretary of State's opinion (including in relation to responses from Historic England) and the Applicant's response to the opinion.
- 6.8.4 The Scoping Opinion Response Tracker contained in Appendix ES4 of Volume 1 of the ES **[CD1-10.05]** demonstrates that all relevant Scoping Opinion requirements / requests in relation to Heritage including from the Department for Transport, Historic England and Natural England, were agreed and adopted for incorporation into the ES **[CD1-10.01]**.
- 6.8.5 Chapter 3 (Methodology and Sources) of the ES Technical Report 7: Heritage and Archaeology (including Historic Environment Desk Based Assessment) **[CD1-11.07.1]** describes the data sources, consultations, site visit and assessment methods.

Mitigation

- 6.8.6 Appendix ES1 of the ES contains a Mitigation Register **[CD1-10.02]** which includes measures set out in the CoCP **[CD1-26]** to control relevant construction effects.
- 6.8.7 In light of the minor levels of harm to a small number of above ground heritage assets and the lack of direct physical impact to historic buildings and the nature of the scheme itself, there are no recommendations for additional mitigation for above ground heritage assets.

- 6.8.8 It is noted the Mitigation Register **[CD1-10.02]** includes **[CD1-10.02, reference 35, page 5]** *"Sequence of mitigation options (in line with mitigation hierarchy) to address potential impacts on relevant apple trees in Coton Orchard"* and reference 55 **[CD1-10.02, reference 55, page 7]** *"Section of busway and service path located on platform structure"* to avoid *"impacts on root protection areas of TPO trees"*. These measures principally relate to Ecology and Landscape and Visual mitigation.
- 6.8.9 The archaeological mitigation strategy for buried heritage assets will be set out in an agreed Written Scheme of Investigation, in consultation and approved by the County Council's archaeological advisor. Necessary measures implemented within the concentrated areas of archaeology are likely to take the form of targeted archaeological excavation and recording and/or "strip, map and record" to form preservation by record, undertaken in advance of groundworks across all areas where disturbance is proposed. It is also likely to include a programme of wider public engagement, such as public open days, local displays, and talks and webinars, and public information boards along the service road.

Findings

- 6.8.10 The following summarises the findings of the cultural heritage assessment reported in the ES **[CD1-10.01]** and, as required by the EIA Regulations, is focussed on the likely significant effects. The ES covers both the permanent effects from the Scheme proposals and its operation, and temporary effects arising during the construction phase and takes into account the mitigation measures described above. As stated above, Clare Hall and other built heritage setting related matters are dealt with in the Proof of Evidence of Tom Wilson **[CD26-01-APP-W2-1]**.
- 6.8.11 The Scheme will have no physical impact on any designated assets, such as listed buildings or scheduled monuments, except for minor alterations to create a junction within West Cambridge Conservation Area. It will pass close to a conservation area in Coton and through the edge of the West Cambridge Conservation Area, although impacts on the character of these areas will be minor. Equally, although passing several listed buildings, the infrastructure of the busway will not be prominent and will have no more than a minor and non-significant effect on the significance of buildings such as the Schlumberger Gould Research Centre on the West Cambridge science park. The ES also concludes the same for Clare Hall college off Grange Road. Clare Hall, a Grade II* listed building, is located to the north of the Scheme alignment. The impact on the identified significance of heritage assets including on Clare Hall are however dealt with in Tom Wilson's Proof of Evidence **[CD26-01-APP-W2-1]**.
- 6.8.12 The American Military Cemetery is a Grade I registered park and garden, located 275m north of the Scheme boundary. The ES reports there will be no visual or noise impacts from the Scheme and no effects to the setting of the Cemetery or to its Grade II* listed Memorial and Attached Walls, Step and Pool Surround.
- 6.8.13 In terms of archaeology, potential effects are summarised in Table 9-1 to the ES Main Report **[CD1-10.01, page 124, Table 9-1]**. In the absence of mitigation measures potential significant effects on 7 heritage assets are anticipated. However, with the implementation of an agreed mitigation strategy, residual effects will not be significant.
- 6.8.14 Historic England (Representation REP08) confirmed the following *"Historic England have reviewed the TWAO application based on the impacts to designated heritage assets (in this instance – scheduled monuments, listed buildings, registered parks & gardens, and conservation areas). Consider any adverse impact on designated heritage assets would be minimal - and agree with the conclusions of the heritage assessments. Therefore, Historic England has no objection to the application on heritage grounds."* A further letter has since been received from Historic England **[CD2-REP-08.2]** which concludes **[page 4]** *"Historic England does not wish to change its position with respect to the proposal as a whole, or raise any objections"*. The letter

does however include matters which are addressed in Tom Wilson's Proof of Evidence [CD26-01-APP-W2-1].

- 6.8.15 GCSP REP09 states in relation to heritage *"The scheme has been thoroughly reviewed by South Cambridgeshire District and Cambridge City Councils covering impacts on heritage, the green belt, landscape, arboriculture, sustainability, connectivity, accessibility, and environmental health. While the scheme impacts biodiversity and heritage assets, it aims to minimise harm through design and mitigation measures."* and *"The Councils' support the scheme but recommend ongoing engagement and further detailed design to ensure it meets sustainability, heritage, and accessibility objectives."*

Conclusions

- 6.8.16 In conclusion, no likely significant effects on built heritage are predicted. For archaeology, following agreement with the County Council's archaeological advisor in advance of construction, the implementation of a programme of archaeological mitigation will reduce potential significant effects to negligible and not significant.
- 6.8.17 As noted above, effects on the setting of built heritage features including in relation to Clare Hall Grade II* Listed Building are dealt with in Tom Wilson's Proof of Evidence [CD26-01-APP-W2-1].

6.9 Water (including flooding)

Introduction

- 6.9.1 This part of my evidence deals with Water (including flooding) and in particular the findings reported in the ES [CD1-10.01]. Detailed information about Water (including flooding) effects associated with the Scheme and a description of the likely significant effects of the proposals is provided in ES Technical Report 13: Water [CD1-11.13.1] and includes Appendices TR13.1 Flood Risk Assessment [CD1-11.13.2] and TR13.2 Water Framework Directive Screening and Scoping Assessment [CD1-11.13.3].
- 6.9.2 My evidence does not cover flooding issues raised with regards to the Clare Hall objection [CD23-17 / OBJ-213]. Clare Hall is dealt with in the Proof of Evidence of Jack Southon [CD26-01-APP-W9-1].

Methodology

- 6.9.3 The ES Scoping Report and Opinion (Appendix ES4 of Volume 1 of the ES) [CD1-10.05] includes at Chapter 15 the proposed assessment methodology for Water (titled Water Resources and Flood Risk). The document also includes the Secretary of State's opinion and the Applicant's response to the opinion. The Scoping Opinion Response Tracker contained in Appendix ES4 of Volume 1 of the ES [CD1-10.05] demonstrates that all relevant Scoping Opinion requirements / requests in relation to Water, including from the Department for Transport, the Environment Agency and Natural England, were agreed and adopted for incorporation into the ES.
- 6.9.4 Chapter 3 (Methodology and Sources) of the ES Technical Report 13 [CD1-11.13.1] describes the data sources, consultations, site visit and assessment methods.

Mitigation

- 6.9.5 Appendix ES1 of the ES contains a Mitigation Register [CD1-10.02] which includes measures relating to Water (including groundwater and flood risk) including attenuation ponds / basins, drainage attenuation geocellular tanks, Bin Brook bridge design to avoid impacts on flood storage capacity and hydrology, requirements in relation to a principal contractor's Sustainability and Carbon Management Plan, the design of minor watercourse crossings to the 1 in 1000 year event (0.1% Annual Exceedence

Probability) which accounts for flows greater than the 1 in 100 year plus 40% for climate change allowance and measures set out in the CoCP [CD1-26] to control relevant construction effects. Additional details are provided below.

- 6.9.6 The Scheme design has embedded within it the necessary measures to ensure that impacts on the water resource are mitigated and permanent significant effects are avoided. Impact on flood risk will be mitigated through use of a clear span bridge over Bin Brook, designed to the 1 in 100 year plus 19% climate change annual exceedance probability. All other watercourse crossings have been designed to accommodate the flows for the 1-in-1000 year annual exceedance probability.
- 6.9.7 The surface water drainage strategy (document number Appendix TR13.1.3 - Annex 13.1.3) [CD1-11-13.02] includes Sustainable Drainage (SuDS) measures to ensure that the Scheme has a negligible impact on water quality or quantity.
- 6.9.8 There are numerous features intended to secure sustainable drainage and mitigation of flood risk, including 10 attenuation ponds, crate drains and swales. There are specifications for the design of the Bin Brook crossing to ensure flood protection and protection of the stream's hydrology. A planning condition specifically addresses the surface water drainage scheme.
- 6.9.9 The CoCP [CD1-26] outlines the measures that will be used during construction to ensure the protection of surface water and groundwater resources; for example, through leaks and spills of chemicals, or from impacts in close proximity to watercourses or over groundwater resources. No dewatering, where groundwater or surface water is removed or drained, is proposed during construction.

Findings

- 6.9.10 On the basis of the embedded design measures, the surface water drainage strategy and the measures contained in the CoCP [CD1-26], no significant effects will occur during the construction or operation of the Scheme.

Conclusions

- 6.9.11 In conclusion, no likely significant effects on water (including flooding) are predicted.
- 6.9.12 As noted above, my evidence does not cover flooding issues raised through the Clare Hall objection in relation to Bin Brook [CD23-17 OBJ-213, paragraphs 2.3.1-2.3.3, page 29, in particular]. Clare Hall is dealt with in the Proof of Evidence of Jack Southon [CD26-01-APP-W9-1].

6.10 Soil, Geology and Land Contamination

Introduction

- 6.10.1 This part of my evidence deals with Soil, Geology and Land Contamination and in particular the findings reported in the ES [CD1-10.01]. Detailed information about Land and Contamination effects associated with the Scheme and a description of the likely significant effects of the proposals is provided in ES Technical Report 11: Soil, Geology and Land Contamination [CD1-11.11.1] which is supported by a Geotechnical and Geo-Environmental Preliminary Risk Assessment (Appendix TR11.1) [CD1-11.11.2] and a Unexploded Ordnance Report (Appendix TR11.2) [CD1-11.11.13].

Methodology

- 6.10.2 The ES Scoping Report and Opinion (Appendix ES4 of Volume 1 of the ES) [CD1-10.05] includes at Chapter 14 the proposed assessment methodology for Soils, Geology and Land Contamination. The document also includes the Secretary of State's opinion and the Applicant's response to the opinion. The Scoping Opinion

Response Tracker contained in Appendix ES4 of Volume 1 of the ES **[CD1-10.05]** demonstrates that all relevant Scoping Opinion requirements / requests in relation to Soil, Geology and Land Contamination, including from the Environment Agency and Natural England, were agreed and adopted for incorporation into the ES.

- 6.10.3 Chapter 3 (Methodology and Sources) of the ES Technical Report 11 **[CD1-11.11.1]** describes the data sources, consultations, site visits and assessment methods.

Mitigation

- 6.10.4 Appendix ES1 of the ES contains a Mitigation Register **[CD1-10.02]** which includes measures relating to Soil, Geology and Contaminated Land (under the heading Soils and Land) which cross references to the measures set out in the CoCP **[CD1-26]** to control relevant construction effects.
- 6.10.5 Agricultural land required temporarily during construction will be restored to previous use and condition on the completion of the works.
- 6.10.6 Good practice, in line with the CoCP **[CD1-26]**, will ensure that the risks of effects from contamination on human health and controlled waters during the construction and operation of the Scheme will be negligible. Requirements for a remediation strategy and for actions where encountering unexpected contamination are addressed respectively within planning conditions.

Findings

- 6.10.7 Reference to Agricultural Land Classification maps suggests some uncertainty across the Scheme as a whole. The agricultural land quality is certainly high with much of it considered to be BMV (best and most versatile) land (Grade 1, 2 and 3a). It is estimated that up to 45ha of BMV land will be occupied by the Scheme proposals. Of this, 6ha will be occupied temporarily during construction and will be restored. The assumption is therefore that up to 39ha of BMV land will be occupied permanently, which, at over the 20ha threshold, is considered to be a major adverse and significant effect.
- 6.10.8 Effects on agricultural land holdings are described in Section 6.5 addressing socio-economic and health effects
- 6.10.9 Risks from contaminated land are limited, though more notable at Bourn airfield, based on the previous uses of the site, as well as a potential for unexploded ordnance. Risks from this would be addressed during the regeneration of this site by the third party developer, following all legal requirements to protect people and the environment.

Conclusions

- 6.10.10 In conclusion, 39 hectares of best and most versatile agricultural land will be occupied permanently which constitutes a significant effect. All other effects have been assessed as not significant.

6.11 Material Use and Waste

Introduction

- 6.11.1 This part of my evidence deals with Material Use and Waste and in particular the findings reported in the ES **[CD1-10.01]**. Detailed information about Material Use and Waste effects associated with the Scheme and a description of the likely significant effects of the proposals is provided in ES Technical Report 10: Material Assets and Waste **[CD1-11.10]**.

Methodology

- 6.11.2 The ES Scoping Report and Opinion (Appendix ES4 of Volume 1 of the ES) **[CD1-10.05]** includes at Chapter 14 the proposed assessment methodology for Soils, Geology and Land Contamination. The document also includes the Secretary of State's opinion and the Applicant's response to the opinion. The Scoping Opinion Response Tracker contained in Appendix ES4 of Volume 1 of the ES **[CD1-10.05]** demonstrates that all relevant Scoping Opinion requirements / requests in relation to Material Use and Waste, including from the Environment Agency, were agreed and adopted for incorporation into the ES.
- 6.11.3 Chapter 3 (Methodology and Sources) of the ES Technical Report 11 **[CD1-11.10]** describes the data sources, consultations and assessment methods.

Mitigation

- 6.11.4 Appendix ES1 of the ES contains a Mitigation Register **[CD1-10.02]** which includes measures relating to Material Use and Waste (under the heading of Materials) and cross references to measures set out in the CoCP **[CD1-26]** to control relevant construction effects and the requirement for the principal contractor to prepare a Sustainability and Carbon Management Plan.
- 6.11.5 In addition to the commitment to reuse site arisings (see below), the CoCP **[CD1-26]** requires that the principal contractor uses aggregate with a recycled content that is (as a minimum) in line with the regional percentage target of 31%.

Findings

- 6.11.6 The imported soil and other earthwork material considers the site-won materials that can be reused on the Scheme. An estimated 211,000 tonnes of soil and earth will be excavated, of which an estimated 168,800 will be reused in earthworks and backfill for the Scheme; this represents an overall 80% recovery of materials by weight. This, together with the mitigation described above, will ensure that a significant effect is not triggered.
- 6.11.7 With no existing (unconstrained) mineral safeguarded areas or allocated sites within the Order Limits, there will be no sterilisation of mineral resources.
- 6.11.8 The estimated quantity of waste to landfill is:
- 66,200 tonnes soil/earth
 - 2,800 tonnes of demolition waste
 - 1,200 tonnes of bituminous mixtures, steel and concrete.
- 6.11.9 The impact from this waste on existing landfill capacity in the east of England (38.1 Mm³) will be less than 1% of regional capacity, and hence not give rise to a likely significant effect.

Conclusions

- 6.11.10 The assessment has concluded there will be no significant effects on Material Use and Waste.

6.12 Greenhouse gases (including carbon)

Introduction

- 6.12.1 This part of my evidence deals with Greenhouse Gases (GHG) including carbon and in particular the findings reported in the ES **[CD1-10.01]**. Detailed information about the GHG effects associated with the Scheme and a description of the likely significant effects of the proposals is provided in ES Technical Report 6: Greenhouse Gases **[CD1-11.06]**.

Methodology

- 6.12.2 The ES Scoping Report and Opinion (Appendix ES4 of Volume 1 of the ES) **[CD1-10.05]** includes at Chapter 7 the proposed assessment methodology for Greenhouse Gases. The document also includes the Secretary of State's opinion and the Applicant's response to the opinion. The Scoping Opinion Response Tracker contained in Appendix ES4 of Volume 1 of the ES **[CD1-10.05]** demonstrates that all relevant Scoping Opinion requirements / requests in relation to Greenhouse Gases, including from the Department for Transport and Natural England, were agreed and adopted for incorporation into the ES.
- 6.12.3 Chapter 3 (Methodology and Sources) of the ES Technical Report 06 **[CD1-11.06]** describes the data sources, consultations and assessment methods.

Mitigation

- 6.12.4 Although not specifically addressing the mitigation of potentially significant environmental effects, there are elements within the Mitigation Register (Appendix ES1) **[CD1-10.02]** requiring the principal contractor to ensure the choice of construction materials and techniques support strategic ambitions for net zero. A planning condition requires the principal contractor to prepare and agree a Sustainability and Carbon Management Plan which will include a requirement to set out their approach to supporting net zero.

Findings

- 6.12.5 The following summarises the findings of the greenhouse gases assessment reported in the ES and, as required by the EIA Regulations, is focussed on the likely significant effects. It covers both the permanent effects from the Scheme proposals and its operation, and temporary effects arising during the construction phase and takes into account the mitigation measures described above.
- 6.12.6 The balance of carbon emissions will reflect both those that result from the construction and operation of the Scheme (infrastructure emissions) and the changes that will arise as people move from more carbon polluting forms of travel (road vehicle) to less polluting (public transport, foot and cycle) as well as efficiency benefits to that network.
- 6.12.7 The ES reports that over the assessment period, operational savings (from people switching how they travel and changes in traffic flows) are estimated to reduce emissions by around (-)36,000 tonnes of CO₂ equivalent (denoted as tCO₂e). These benefits combined with the impact of carbon embedded in the construction materials used to build the Scheme (about +29,000 tCO₂e) and from changes in vegetation (about +2,000 tCO₂e) result in a net savings of about 5,000 tCO₂e over the assessment period. This is a minor benefit given the time taken to reach net zero and the relatively small overall carbon reduction.

- 6.12.8 An updated assessment from that presented in the ES using the latest available traffic modelling outputs and assumptions from the latest iteration of the Transport Appraisal Guidance (TAG) Databook that has been released estimates a reduction of (-)7,055 tCO₂e over the assessment period.
- 6.12.9 Sensitivity tests have been run in addition to the standard scenario to see the effects of the progressive work by the City Council to deter car use **[CD1-10.01, page 128, paragraph 10.3.6]**. The estimate reported in the ES predicted considerably higher net carbon benefits of -47,040 tCO₂e, with the Scheme becoming carbon neutral some 34 years earlier, around 2044. At the time of writing the ES this would be a moderate benefit and a significant beneficial effect. However, it is worth noting that the political and economic situation can change meaning that the benefit quoted and potentially the degree of significance could change positively or negatively. Using the latest TAG Databook, the sensitivity test estimates a net whole-life carbon saving of approximately 35,000 tCO₂e bringing the net zero payback period to around 2050. The results of the updated assessment are presented in Appendix C of my Proof of Evidence **[CD26-01-APP-W3-2]**.

Conclusions

- 6.12.10 In conclusion, minor beneficial effects on Greenhouse Gases including carbon are predicted which would be significant when combined with the work done by the City Council to deter car use.

6.13 Climate Resilience

Introduction

- 6.13.1 This part of my evidence deals with Climate Resilience and in particular the findings reported in the ES **[CD1-10.01]**. Detailed information about Climate Resilience effects associated with the Scheme and a description of any likely significant effects of the proposals is provided in ES Technical Report 3: Climate Resilience **[CD1-11.03]**.

Methodology

- 6.13.2 The ES Scoping Report and Opinion (Appendix ES4 of Volume 1 of the ES) **[CD1-10.05]** includes at Chapter 8 the proposed assessment methodology for Climate Resilience. The document also includes the Secretary of State's opinion and the Applicant's response to the opinion. The Scoping Opinion Response Tracker contained in Appendix ES4 of Volume 1 of the ES **[CD1-10.05]** demonstrates that all relevant Scoping Opinion requirements / requests in relation to Climate Resilience, including from Natural England, were agreed and adopted for incorporation into the ES.
- 6.13.3 Chapter 3 (Methodology and Sources) of the ES Technical Report 03 **[CD1-11.03]** describes the data sources, consultations and assessment methods.
- 6.13.4 Due to the short and relatively immediate construction period, the resilience of the Scheme to climate change during the construction stage has been scoped out of the assessment. The CoCP **[CD1-26]** considers extreme weather events and outlines measures to be implemented by the Principal Contractor.

Mitigation

- 6.13.5 Although not specifically addressing the mitigation of potentially significant environmental effects, there are elements within the Mitigation Register **[CD1-10.02]** requiring the principal contractor to ensure the Scheme infrastructure is resilient to climate change e.g. attenuation basis design and consideration of climate resilient planting. A planning condition requires the principal contractor to prepare and agree a Sustainability and Carbon Management Plan which will include their approach to achieving a climate resilient design.

Findings

- 6.13.6 **Table TR3-5-1** in Technical Report 3: Climate Resilience **[CD1-11.03]** provides an assessment of significance of effects for the scheme and considers climate hazards such as extreme precipitation events, receptors affected (e.g. Scheme Assets and end users) and considers effects, likelihood and consequence before assessing the significance of effect. The assessment found that by incorporating the embedded mitigation within the design and operation of the Scheme, the potential effect of future climate conditions associated with precipitation, temperature and wind are considered to be not significant.

Conclusions

- 6.13.7 The assessment of vulnerability of the Scheme to climate change during the operation phase has identified no likely significant effects.

6.14 Cumulative Effects

Introduction

- 6.14.1 The ES's description of likely significant effects should cover, amongst other things, cumulative effects. Cumulative effects are those that result from the environmental impacts of the Scheme alongside impacts resulting from other, unrelated schemes. Although the Applicant's capacity to affect the outcomes of other schemes is limited, it is important for decision-makers to appreciate how people or environmental assets might be affected as an accumulation of impacts, as this may influence if and how they wish to provide their consent.
- 6.14.2 This part of my evidence deals with Cumulative Effects and in particular the findings reported in the ES **[CD1-10.01]**. Information about the Cumulative Effects associated with the Scheme and a description of the likely significant effects of the proposals is provided in ES Chapter 11 **[CD1-10.01]** and Appendix ES3: Cumulative Developments List **[CD1-10.04]**.

Methodology

- 6.14.3 The environmental assessment has considered how effects from the Scheme might be experienced along with those of other related nearby (within 2km) schemes. The assessment teams considered potential developments whose impacts might intensify, broaden or prolong those of the Scheme, based on available information, and whether significant cumulative effects would be likely.
- 6.14.4 The method adopted for the assessment is described in paragraphs 11.3.1 to 11.3.6 of the ES **[CD1-10.01, pages 135 to 136]** and considered categories of other developments including those with extant/live consent application, granted consent, or under construction. The ES also provides details of certain major planned developments that have been scoped out of the assessment as they are in the pre-application phase (such as East West Rail at paragraph 11.3.5).

Mitigation

- 6.14.5 As described below, no significant cumulative effects are predicted unless cumulative construction noise effects occur due to the timing of the works. If this does occur then additional mitigation measures can be considered.

Findings

- 6.14.6 No significant cumulative effects are predicted to occur. It should be noted that the findings of the ES **[CD1-10.01]** were based on the developments that were committed at the time.

- 6.14.7 Likely significant combined effects have been described in the relevant chapters of the ES. However, no likely significant combined effects are predicted to occur.

Conclusions

- 6.14.8 No significant cumulative effects are predicted from other developments which were committed at the time of the ES preparation other than from construction noise due to works at Bourn Airfield and West Cambridge should these occur at or around the same time as those for the Scheme.

7. REPRESENTATIONS MADE RELEVANT TO MY EVIDENCE

7.1 Introduction

- 7.1.1 As noted in Section 6 of my Proof of Evidence, several environmental topics reported in the ES **[CD1-10.01]** are covered through other Proofs of Evidence. My Proof of Evidence and therefore representations made relevant to my evidence comprise the following:
- Traffic and Transport (Transit and Access) - from an EIA perspective
 - Air Quality
 - Community and Human Health and Land Use
 - Water (including flooding) - with the exception of flooding effects at Bin Brook.
 - Heritage – with the exception of built heritage setting effects including at Clare Hall.
 - Soil, Geology and Land Contamination.
 - Material Use and Waste.
 - Greenhouse Gases (including carbon).
 - Climate Resilience.
 - Cumulative Effects.

7.2 Statutory Objector(s)

- 7.2.1 The only relevant statutory consultee objection in relation to my Proof of Evidence is the Environment Agency (OBJ301) **[CD2-OBJ-301]**. Relevant extracts from the EA's objections as they relate to my Proof of Evidence are as follows:

"The EA consider the scheme to be acceptable in principle, provided that relevant protective provisions are included in the order. [...] The EA has previously reviewed the hydraulic model and found it unsuitable, requiring significant revisions. The EA will maintain its objection until an acceptable model is submitted [...] The EA notes that the route crosses secondary and principal aquifers. It supports conditions requiring site investigation and remediation to prevent pollution and recommends a separate piling condition to protect groundwater. It supports the proposed pollution prevention measures, including filter strips, detention basins, and oil interceptors, and infiltration SuDS maintain a 1.2m clearance above peak seasonal groundwater levels. The EA agrees with the Code of Construction Practice's measures for protecting land, water, and chemical storage but requires further details on foundation designs before works begin. Overall, the EA's position is conditional on the applicant addressing flood risk concerns, biodiversity impacts, groundwater protection, and contamination risks before proceeding with the development.

- 7.2.2 With regards to the Environment Agency and my Proof of Evidence a response to the Environment Agency is provided in Cambridgeshire County Council's Statement of Case **[CD23-01]**. At paragraph 14.30.2 the Statement of Case **[CD23-01, page 132, paragraph 14.30.2]** states with regards to flood risk:

"The Environment Agency confirmed that they had previously reviewed the modelling at the pre-application stage and that they required the model to be re-submitted to confirm that the matters raised in the (November 2023) pre-application review had been suitably addressed. To address this, the modelling and associated reporting were

provided to the Environment Agency following receipt of their request (February 2025). A meeting to review the actions undertaken in response to the pre-application feedback has been arranged and it is hoped that this will enable the Environment Agency to confirm that their core concerns have been addressed”.

- 7.2.3 Similarly at paragraph 14.30.4 Cambridgeshire County Council’s Statement of Case **[CD23-01, page 132]** addressed other matters raised which included groundwater and contaminated land as follows:

“The Environment Agency included in their response information regarding potential requirements for water vole monitoring, groundwater and contaminated land and related matters to be considered at detailed design and construction. Again, this can be addressed at detailed design.”

- 7.2.4 At the time of writing my Proof of Evidence engagement with the Environment Agency has been ongoing. All the information originally requested by the Environment Agency in their representation **[CD2-0BJ-301]** has been provided. Jack Southon’s Proof of Evidence **[CD26-01-APP-W9-1, paragraphs 6.2 and 6.3]** explains the latest situation at the time of writing my Proof of Evidence and states that the Environment Agency has indicated that they accept the technical evidence base and the conclusions of the Flood Risk Assessment and no longer have an objection to the Scheme **[CD26-01-APP-W9-2, page 191, item 9]**.

- 7.2.5 With regards to groundwater and contaminated land issues it is expected that these will be addressed satisfactorily at detailed design stage with no uncommon issues being identified at this stage.

7.3 Other Relevant (non-statutory) Objectors

- 7.3.1 This part of my Proof of Evidence is in relation to other non-statutory objectors where the broad heading of effects on the environment has been raised with matters then given in relation to various specific environmental topic areas (for example in relation to effects on landscape, heritage, flood risk).
- 7.3.2 Given the broad nature of effects on the environment I have signposted to other Proofs of Evidence where relevant, specific topic matters have been raised.
- 7.3.3 With regards to the objection made by Coton Orchard Limited, Houston Crest Properties Limited and Anna Gazeley (**OBJ 52**) although the first ground for objection (Statement of Case **[CD23-06, page 4]**) is titled “*Significant Adverse Environmental Impact*” the text that follows specifically deals with biodiversity effects on Coton Orchard including effects on the Bramley apple trees and on bats. Reference should therefore be made to the Proofs of Evidence of Ian Ellis in relation to Ecology generally **[CD26-01-APP-W13-1]**, Chris Alder in relation to veteran trees **[CD26-01-APP-W4-1]** and Paola Reason in relation to bats and specifically Barbastelle **[CD26-01-APP-W12-1]**.

7.4 Representations made in connection with Coton Busway Action Group (OBJ 143)

- 7.4.1 This part of my Proof of Evidence is concerned with the Coton Busway Action Group objection (OBJ 143) and specifically the environmental impact of the scheme. The Coton Busway Action Group’s Statement of Case **[CD23-08-1 and CD23-08-2]** under the heading of Environmental Impact **[commencing at page 16 CD23-08-1 of OBJ 143]** summarises the main points of this element of their objection as follows: “GCP’s off-road scheme would:

- *have unacceptably high levels of infrastructure carbon associated with its construction*

- *destroy much of Coton Orchard, the county's largest traditional orchard and a County Wildlife Site*
- *bisect wildlife corridors and fragment priority habitats*
- *impose unacceptable disruption and urbanisation on the village of Coton*
- *cut through Green Belt and despoil some of the most attractive and valued countryside views and walks around Cambridge*
- *compromise the setting of the American Military Cemetery at Madingley."*

7.4.2 Given this part of the objection covers several environmental topic areas the following are covered either in my Proof of Evidence or in other Proofs of Evidence as follows:

- Construction carbon and footpath severance – covered in my Proof of Evidence;
- Coton Orchard, wildlife corridors priority habitats – covered in the Proofs of Evidence of Ian Ellis in relation to Ecology generally [CD26-01-APP-W13-1], Chris Allder in relation to veteran trees [CD26-01-APP-W4-1] and Paola Reason in relation to Barbastelle bats [CD26-01-APP-W12-1];
- Urbanisation of Coton and Viewpoints – covered in the Proof of Evidence of Chris Carolan [CD26-01-APP-W5-1];
- Green Belt – covered in the Proof of Evidence of Ralph Lewis [CD26-01-APP-W10-1]; and
- American Military Cemetery – covered in the Proof of Evidence of Tom Wilson [CD26-01-APP-W2-1].

Summary of points made and my responses in relation to Coton Busway Action Group's objection (OBJ 143) and Statement of Case [CD23-08-1 and CD23-08-2]

Carbon – Point Made

7.4.3 With regards to the topics covered in my Proof of Evidence and in relation to carbon the main point made in Coton Busway Action Group's Statement of Case [CD23-08-1, page 16] is that the Scheme would "*have unacceptably high levels of infrastructure carbon associated with its construction*" and that the CPPF alternative scheme "*would have a very small fraction of the infrastructure carbon associated with the off-road scheme because it does not involve construction of a new road or new motorway bridge*".

Carbon – My Response

7.4.4 Coton Busway Action Group's Statement of Case [CD23-08-1] has not quantified the construction or operational carbon emissions associated with the CPPF alternative. In response to Coton Busway Action Group's assertion that the construction carbon of the CPPF Scheme would be a "very small fraction" [of the Applicant's proposed Scheme] it is notable that construction and new infrastructure would still be required for the CPPF scheme, with the two schemes following identical alignments west of Long Road near Hardwick and both schemes requiring the travel hub at Scotland Farm. Construction carbon impacts would be identical for this section.

7.4.5 Construction of the CPPF Scheme along Madingley Road would involve new hard standing for the widened corridor, as well as loss of hedgerows and mature trees, which each involve carbon impacts. In addition, the CPPF alternative scheme would

not meet other Scheme objectives and wouldn't be deliverable as described in CPPF Alternative Scheme – Engineering Assessment **[CD9-31]**.

- 7.4.6 In order to quantify the construction carbon of the off road alternative WSP has carried out an exercise and quantified the carbon and compared with the Scheme. This is presented in Appendix B – Off Road Alternative Carbon Calculations **[CD26-01-APP-W3-2]** with full details provided in the CPPF Alternative Scheme – Engineering Assessment **[CD9-31, pages 52 and 53, paragraphs 3.10.5 to 3.10.9]** and shows that the alternative would still require 18,100 tonnes of carbon dioxide equivalent compared with 29,130 tonnes of carbon dioxide equivalent with the Scheme. It would not therefore represent “a very small fraction” of the Scheme's carbon.
- 7.4.7 In addition, from an operational perspective, the CPPF Alternative Scheme – Engineering Assessment **[CD9-31, page 11, paragraph 1.4.3]** highlights that there would be operational traffic effects that could lead to traffic diverting to alternative routes including through Madingley, Comberton and other radial routes into Cambridge. This would likely lead to increases in operational carbon over the proposed Scheme. Coton Busway Action Group has not considered operational effects but previous work has shown this route to result in lower journey time savings and so a different outcome in terms of modal shift, as well as the issue of diverted traffic itself causing increased carbon impacts.

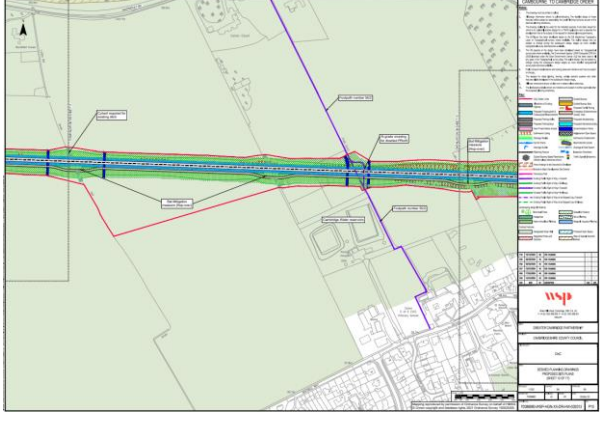
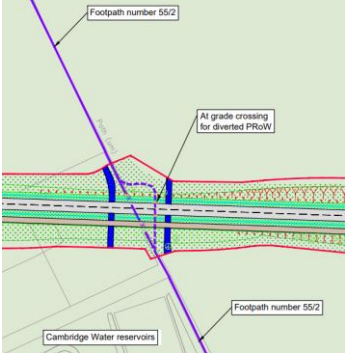
Footpath Severance (55/2) – Point Made

- 7.4.8 With regards to footpath severance the affected footpath referred to is Footpath 55/2 which runs between A1303 Madingley Road and High Street, Coton. Page 18 of the Statement of Case **[CD23-08-1, page 18]** states “*the off-road busway will run close to Coton's village school, severing a well-used footpath that children currently walk along, safely and away from traffic. No clear alternative has been proposed, and any replacement will unavoidably involve crossing two lanes of traffic, a cycleway, and pedestrian paths, thus turning a safe, simple route into a complex and hazardous journey*”.

Footpath Severance (55/2) – My Response

- 7.4.9 Sheet 12 of 17 of Deemed Planning Drawings – Proposed Site Plans **[Sheet 12 of 17 of CD1-16.4]** provides a plan of Footpath 55/2 and also shows the intended permanent diversion of the Footpath with the operation of the Scheme. Extracts are provided in the table below.

Table 7.1: Extracts from Proposed Sites Plans [Sheet 12 of 17 of CD1-16.4] showing permanent diversion of Footpath 55/2

Overview showing crossing of Footpath 55/2 with Coton Primary School to the south and A1303 Madingley Road (not shown) to the north	Zoom in showing at grade crossing / diversion of Footpath 55/2
	

- 7.4.10 Table TR4-5-4 Effects on WCH [Walking, Cycling and Horse-riding] Facilities on page 43 of Technical Report 4: Community and Human Health / Land Use and Land Take **[CD1-11.04, pages 45 to 48]** details the results of the environmental assessment of effects on Footpath 55/2. The footpath is ascribed a medium sensitivity. For the construction phase it is stated in the table:

“This footpath will be crossed by the C2C Scheme. The footpath is assumed to be kept open during construction, but the alignment may need to be adjusted slightly to accommodate construction works. Users are likely to experience some temporary PRow management during construction to ensure user safety”.

- 7.4.11 The effect is assessed as being a temporary neutral effect and therefore not significant during the construction phase.
- 7.4.12 During operation, new crossing facilities will be provided to minimise the impact of the Scheme on users of the footpath. Users will be diverted over an at grade, uncontrolled crossing of the Scheme (refer to Table 7.1 above). The effect is assessed as being a permanent, slight (adverse) effect and therefore not significant during the operational phase from an EIA perspective.
- 7.4.13 A survey of the usage of Footpath 55/2 was commissioned by WSP. Surveys were undertaken during term time on Tuesday 4th, Wednesday 5th, Thursday 6th, Friday 7th, Saturday 8th, Sunday 9th and Monday 10th of June 2024. Full results are provided in Appendix A of my Proof of Evidence **[CD26-01-APP-W3-2]**. The summary is provided in the table below.

Table 7.2: Summary of pedestrian and cyclist survey results for Footpath 55/2

AM Peak								
Date	Movement 1				Movement 2			
	Peds	Cyclists	Equestrian	Total	Peds	Cyclists	Equestrian	Total
04.06.2024	0	0	0	0	0	1	0	1
05.06.2024	1	0	0	1	0	0	0	0
06.06.2024	0	0	0	0	0	0	0	0
07.06.2024	0	0	0	0	1	0	0	1
08.06.2024	6	1	0	7	5	0	0	5
09.06.2024	2	0	0	2	3	2	0	5
10.06.2024	0	0	0	0	1	0	0	1
PM Peak								
Date	Movement 1				Movement 2			
	Peds	Cyclists	Equestrian	Total	Peds	Cyclists	Equestrian	Total
04.06.2024	0	0	0	0	1	0	0	1
05.06.2024	0	1	0	1	6	0	0	6
06.06.2024	3	0	0	3	4	1	0	5
07.06.2024	2	0	0	2	0	1	0	1
08.06.2024	1	1	0	2	0	0	0	0
09.06.2024	0	0	0	0	1	1	0	2
10.06.2024	2	0	0	2	1	0	0	1
Total								
Date	Movement 1				Movement 2			
	Peds	Cyclists	Equestrian	Total	Peds	Cyclists	Equestrian	Total
04.06.2024	2	0	0	2	5	1	0	6
05.06.2024	4	1	0	5	9	0	0	9
06.06.2024	6	0	0	6	7	1	0	8
07.06.2024	2	0	0	2	8	1	0	9
08.06.2024	18	5	0	23	14	3	0	17
09.06.2024	10	0	0	10	11	4	0	15
10.06.2024	3	0	0	3	4	0	0	4

7.4.14 The results show low usage during the school week. The Coton Primary School website states the School day starts at 9:00am, doors open at 8.50am and school ends at 3.30pm. Further analysis of the daily tables within Appendix A [CD26-01-APP-W3-2] demonstrate that pedestrian and cyclist flows are low at the start and end of the school day with no flows recorded during the survey period close to the 8.50am-9.00am school start time.

Table 7.3: Pedestrian and cyclist survey results for Footpath 55/2 at the start and end of Coton Primary School days

Day of survey	Before 9am	Between 3.30pm and 4.30pm
Tuesday 4 th	1 cycle (8.30am)	0
Wednesday 5 th	1 pedestrian (8am)	2 pedestrians
Thursday 6 th	0	2 pedestrians
Friday 7 th	1 pedestrian (7am)	4 pedestrians
Monday 10 th	1 pedestrian (7.15am)	1 pedestrian

7.4.15 Taking into account the low use of Footpath 55/2 including around Coton Primary School's opening time, the nature of the at-grade crossing with a minor diversion and the provision of appropriate crossing facilities designed to relevant safety standards and a relatively low traffic flow rate of ten buses per hour each way it can be concluded that the effect on any users of Footpath 55/2 as being a permanent, slight (adverse) effect and therefore not significant during the operational phase from an EIA perspective is correct.

Conclusions on Objection by Coton Busway Action Group (OBJ 143)

7.4.16 In conclusion and with respect to the topics covered by my Proof of Evidence:

- Carbon – with the CPPF alternative, construction carbon would not be “a very small fraction of the infrastructure carbon” compared with the Proposed Scheme and there may be operational worsening in carbon with the CPPF alternative due to rerouting; and
- Effects on users of Footpath 55/2 would not be significant and surveys have demonstrated it is not well used, with minimal usage around Coton Primary School’s start and finish times.

7.5 Representations made in connection with Gough Way Residents Association (OBJ 175)

7.5.1 This part of my Proof of Evidence is concerned with the Gough Way Residents Association (K Fry) objection (OBJ 175) and specifically the destruction of the countryside. This was item 5 in the Gough Way Residents Association’s Statement of Case [CD23-05, item 5, page 2 and 3].

7.5.2 The issues raised in relation to this point are reproduced in full as follows:

“The GCP has never explained why adapting the existing main road (A1303 between Madingley Mulch roundabout and Northampton Street) would not be viable. The road has a wide easement along most of its length and could accommodate an additional lane for buses, as congestion is only an issue inbound at peak hours. Building a busway across open country destroys valuable farming and natural landscape, including greenbelt land and of course the historic orchard at Coton. Furthermore, an off-road new route was not supported in the public consultation”.

7.5.3 Given this part of the objection covers several environmental topic areas the following are covered either in my Proof of Evidence or in other Proofs of Evidence as follows:

- Impact on valuable farming land – covered in my Proof of Evidence;
- Viability of adapting the existing main road (A1303 between Madingley Mulch roundabout and Northampton Street) – covered in the Proof of Evidence of Jo Baker [CD26-01-APP-W1-1];
- Impact on natural landscape - covered in the Proof of Evidence of Chris Carolan [CD26-01-APP-W5-1];
- Impact on Green Belt – covered in the Proof of Evidence of Ralph Lewis [CD26-01-APP-W10-1]; and
- Impact on Coton Orchard – covered in the Proofs of Evidence of Ian Ellis in relation to Ecology generally [CD26-01-APP-W13-1] and Chris Alder in relation to veteran trees [CD26-01-APP-W4-1].

Summary of points made and my responses in relation to Gough Way Residents Association (OBJ 175) and Statement of Case [CD23-05]

Farming Land – Point Made

7.5.4 The point made by Gough Way Residents Association is “that building a busway across open country destroys valuable farming....”. Given the context of the objection this is taken to mean farming land as opposed to farming practices albeit farming practices are dealt with in Section 6.5 of my Proof of Evidence.

Farming Land – My Response

7.5.5 Impact on farming land is covered in Section 6.9: Soil, Geology and Land Contamination of my Proof of Evidence. The main finding is that up to 39ha of Best

and Most Versatile Land (BMVL) will be occupied permanently, which, from an EIA perspective at over the 20 hectares threshold, is considered to be a major adverse and significant effect. Measures to reduce the potential impact on BMVL have been outlined in Section 4 of the CoCP [CD1-26, pages 19 to 22].

7.5.6 Where land used temporarily for construction is to be reinstated to agricultural use, reinstatement works will be implemented in accordance with the contract specification and in accordance with Department for Environment, Food and Rural Affairs' (Defra) Construction Code of Practice for the Sustainable Use of Soils on Construction Sites (2009), where appropriate. Such reinstatement will be carried out under appropriately qualified supervision.

7.5.7 Whilst recognising the significant effect on BMVL as a result of the Scheme the Statement of Case [CD23-01, page 60] at paragraph 9.16.22 states in relation to planning policy:

"The measures as part of the Scheme will ensure the sustainable use of soils and BMVL where reasonably practicable during the construction phase of the Scheme in accordance with Policy CC/6 of the South Cambridgeshire Local Plan (2018) and Policy 69 of the Cambridge Local Plan (2018) [CD6-01] and aligns with paragraph 187 of the NPPF [CD8-01, page 54]."

7.5.8 Paragraph 9.17 of the Statement of Case [CD23-01, page 60] includes the above consideration of BMVL in its overall conclusion on policy context in relation to the Scheme as follows:

"For the reasons above, the Applicant's position is that the Scheme accords with the development plan, read as a whole, and is supported by weighty other material considerations, including national policy and emerging local plan policy. The other material considerations do not outweigh the statutory presumption in favour of granting planning permission given by the development plan, rather they reinforce and confirm that planning permission should be granted. Taken together, this presents a compelling case for the Scheme and, in particular for the grant of planning permission. In this latter regard the Scheme demonstrates (to the extent necessary) both very special circumstances for the purposes of paragraph 153 of the NPPF (proposals affecting the Green Belt) [CD8-01, page 44] and wholly exceptional reasons for the purposes of paragraph 193 of the NPPF [CD8-01, page 56]. Further and to the extent necessary paragraph 216 of the NPPF is satisfied [CD8-01, page 61]. The Scheme benefits from the presumption in favour of sustainable development in NPPF paragraph 11 [CD8-01, page 6] and, since it is in accord with an up-to-date development plan (NPPF paragraph 11(c)), should be approved without delay."

Conclusions on Objection by Gough Way Residents Association (OBJ 175)

7.5.9 From an EIA perspective there would be a significant adverse effect on farming land due to the amount of BMVL permanently affected, however, measures would be taken to minimise effects on temporarily affected agricultural land and the sustainable use of soils and BMVL would be ensured where reasonably practicable thereby according with relevant policy.

7.6 Representations made in connection with PX Land Limited's Objection (OBJ 252) and Statement of Case [CD23-14]

7.6.1 This part of my Proof of Evidence is concerned with PX Land Limited's objection (OBJ 252) and specifically the environmental impact of the scheme. PX Land Limited's Statement of Case [CD23-14, pages 3 and 4] under the heading of Adverse Impact states:

"17. The present plans fail to incorporate adequate provision to reduce

a. the visual and noise intrusion of the scheme on the adjoining residential properties and

b. the adverse impact of additional traffic to the adjoining residential and agricultural properties.

18. The adjoining residential properties within the same ownership and control as the Objector will suffer light pollution, noise, access interruptions, disruption from construction and maintenance.

19. There are less intrusive alternatives for the proposed project that have not been adequately considered."

7.6.2 Given this part of the objection covers several environmental topic areas the following are covered either in my Proof of Evidence or in other Proofs of Evidence as follows:

- Disruption from construction and maintenance – covered in my Proof of Evidence;
- Visual intrusion including lighting on adjoining residential properties and impact of lighting – covered in the Proof of Evidence of Chris Carolan [CD26-01-APP-W5-1];
- Provision to reduce noise intrusion on adjoining residential properties – covered in the Proof of Evidence of Toby Lewis [CD26-01-APP-W11-1]; and
- Provision to reduce the adverse impact of additional traffic and access interruptions to the adjoining residential and agricultural properties and adequate consideration of alternatives – covered in the Proof of Evidence of Jo Baker [CD26-01-APP-W1-1].

Summary of points made and my responses in relation to PX Land Limited's Objection (OBJ 252) and Statement of Case [CD23-14]

Disruption from construction and maintenance – Point Made

7.6.3 The point made in PX Land Limited's Statement of Case [CD23-14, page 4] is that: *"The adjoining residential properties within the same ownership and control as the Objector will suffer....disruption from construction and maintenance".*

Disruption from construction and maintenance – My Response

7.6.4 As stated above, the application includes a draft Code of Construction Practice (CoCP) [CD1-26] which describes control measures, practices and standards to be implemented throughout the construction of the Scheme to ensure that adverse effects to people and the environment are kept as low as practicable during that period. The draft CoCP [CD1-26] will be refined as necessary as the project design, assessment and TWA processes progresses.

7.6.5 In addition, as stated above, the principal contractor will agree a Construction Traffic Management Plan (CTMP) with the GCP. The CTMP will include details of permissible routes for construction vehicles. It will limit construction traffic movements during peak periods on the local highway network.

7.6.6 Construction traffic will travel to the busway haul road from the A428, from either the Scotland Road junction or the Madingley Mulch junction, and from the M11 to adjacent works from haul roads, and (via the A1303) from within the Cambridge West business park and Charles Babbage Road. Use of local roads, including Grange Road, will be strictly limited. No construction traffic will be permitted to travel through local villages such as Dry Drayton, Coton and Bourn.

- 7.6.7 With respect to PX Lands Limited's ownership, construction noise could be significant within the vicinity of Scotland Road itself albeit Plate TR1-5-3 of Technical Report 1: Acoustics [CD1-11.01, page 16] shows that the area of effect is confined to a relatively small area away from Scotland Road. The impact of construction noise on properties is dealt with in the Proof of Evidence of Toby Lewis [CD26-01-APP-W11-1].
- 7.6.8 Any planned maintenance activities would be scheduled to minimise any disruption or potential disturbance to the adjacent properties and are likely to be less disruptive than ordinary day-to-day activities in the area.

Conclusions on Objection by PX Lands Limited (OBJ 252)

- 7.6.9 Although there would be construction effects to nearby residential properties controls would be in place to minimise those effects including the draft CoCP [CD1-26] and a CTMP.
- 7.6.10 It is not expected that disturbance due to maintenance would be significant to nearby residential properties.

7.7 Other issues raised by third parties

- 7.7.1 Third parties have raised numerous issues in relation to environmental matters, the majority of which have been responded to either through Cambridgeshire County Council's Statement of Case [CD23-01] or the various Proofs of Evidence. There is however an additional issue that has been raised and is addressed in my Proof of Evidence as set out below.

Representations made by L Hirst [CD2-OBJ-279]

- 7.7.2 L Hirst [CD2-OBJ-279, page 1] has objected to the EIA stating that the EIA is "substantially erroneous and misleading" in relation to the results of the greenhouse gases / carbon emission assessment presented in the ES and considered in Section 6.12 of my Proof of Evidence above. L Hirst makes a main point and 3 additional points which are dealt with separately and in turn below.

Carbon calculations presented in the ES – Point Made

- 7.7.3 The main point raised by L Hirst is as follows [CD2-OBJ-279, page 1]:

"Error in the assumptions: The EIA assumes average private vehicle CO₂ emissions of 413 g/km. This is already a very high estimate for today's vehicles (EU regulator target 2020-2024 95 g/km, 4X less than the value used); however, by the end of the assessment period (~2085) almost all private vehicles will have zero tail pipe emissions (100% of new vehicles by ~2035). The EIA predicts approximately linear carbon recovery over the 60 year assessment period (Fig 10-2), indicating this step change in vehicle emissions profile is not included in the calculations. The use of electric buses is extensively discussed in the report but the same for private vehicles is not mentioned. This inequality in the modelling assumptions is highly misleading. In reality we would expect almost no carbon recovery in the latter half of the assessment period. Based on this, it is clear the project is a net carbon emitter contributing >10,000 tCO₂e. There are simply not enough cars taking this route to justify the embedded carbon associated with construction."

Carbon calculations presented in the ES – My Response

- 7.7.4 The assessment has been carried out in accordance with the Department for Transport's Transport Analysis Guidance (TAG) which is the industry standard and therefore represents best practice. It does not assume "average private vehicle CO₂ emissions of 413g/km" and I cannot find a reference in the ES to this emission rate. I

have also confirmed with our team who carried out the greenhouse gas assessment that this emission rate has not been used to carry out the calculations.

- 7.7.5 While it is accepted that newer vehicles (2020-2024) would be more efficient, not all vehicles on the network are modern and the TAG Data Book accounts for this. With reference to the linear carbon recovery, the Data Book fleet assumptions only go up to 2050, therefore the 2050 figures are continued beyond that date and are therefore linear. With regards to the assumption that all vehicles on the network will have zero emissions by ~2085, while linear progression in the phasing out of internal combustion engined vehicles up to 2085 may be possible, this is not assumed in the TAG Data Book (refer to the point above about 2050 assumptions).
- 7.7.6 Since submission of the ES an updated TAG Data Book has been issued and as a result a recalculation has been undertaken to address this element of the objection. The results are discussed above in Section 6.12 and presented in Appendix C of my Proof of Evidence (Carbon Assessment Update **[CD26-01-APP-W3-2]**) and can be compared with that presented in Figure 10-2 of the ES **[CD1-10.01, page 131]**.
- 7.7.7 Appendix C of my Proof of Evidence **[CD26-01-APP-W3-2, page 18]** reports that *“The overall combined impact of these updates is marginal with the overall estimated net whole-life carbon impact and associated net zero payback period being commensurate with the scale of the original assessment”*.

Carbon sequestration – Point Made

- 7.7.8 L Hirst states **[CD2-OBJ-279, page 1, point 1]**:
- “1. The infrastructure carbon calculation does not include the loss of carbon sequestration in the soil and vegetation. The inclusion of tree planting to offset emissions while destroying mature trees can be dismissed as obvious greenwash. While tree planting should be supported generally, this provision is entirely unrelated to the off-road busway and therefore has no place in the scheme justification.”*

Carbon sequestration – My Response

- 7.7.9 Assessing the carbon associated with land use change is appropriate in the context of a Whole Life Carbon assessment, and this assessment should include loss of carbon from removed habitats and increased carbon storage in newly created habitats.
- 7.7.10 As reported in the ES **[CD1.10.01, page 130, paragraph 10.3.11]** (which states *“Vegetation loss during construction of the Scheme will result in the loss of sequestered carbon. Much of this would be restored through replacement planting, introducing the equivalent of approximately 1,600 trees. However, these would take time to accumulate equitable levels of carbon, and there is an estimated net loss of 1,910 tCO₂e over the project lifespan”*), the net change in the carbon stored in vegetation in the Do Something against the Do Minimum is assessed (including loss in construction).
- 7.7.11 The methodology uses habitat carbon values sourced from academic and industry sources. These values consider the vegetation carbon, and where available the soil carbon. However, due to lack of soil carbon values for some habitats, and in the interest of presenting a worst-case scenario, the ES reports this as the impact on vegetation only. Therefore, this can be considered a conservative approach for the vegetation carbon impacts, whilst recognising the limitation of not having a complete assessment of soil carbon.
- 7.7.12 The inclusion of tree planting is not specifically to offset emissions. As noted earlier in my Proof of Evidence, the Mitigation Register **[CD1-10.02]** summarises each of over 60 environmental mitigation measures together with the environmental objectives and a description of the mechanisms proposed to secure them. It includes a number of

planting measures, for example reference 6 [page 2], which is semi-mature tree planting either side of the Scheme together with their function, which in this instance is related to Landscape and Visual Effects. None of the planting measures contained in the Mitigation Register are attributed to measures to reduce effects on greenhouse gas emissions. Measures which will mitigate greenhouse gas emissions are instead related to speed reduction (e.g. reference 1 [page 2] and reference 40 [page 6]), and construction and carbon management (reference 57 and 58 respectively [page 8]).

- 7.7.13 I do not therefore accept that the tree planting is “greenwashing” to offset carbon emissions as these measures are not provided as mitigation for offsetting carbon emissions.

Assessment Period – Point Made

- 7.7.14 L. Hirst states [CD2-OBJ-279, page 1, point 2] that:

“2. The use of a 60 year assessment period, in an apparent attempt to make this highly polluting scheme appear carbon favourable cannot be justified. The effects of climate change are happening now and it is simply not plausible to proceed with this maximum emissions policy with an unsecured and erroneous projection of payback over so many decades.”

Assessment Period – My Response

- 7.7.15 The 60-year assessment period is the Department for Transport’s standard appraisal period for transport infrastructure. The Department for Transport’s TAG Unit A1.1 (Cost-Benefit Analysis) [CD8-25, page 4 with link to TAG Unit A1.1 and page 6, paragraphs 2.3.2 and 2.3.3 of TAG Unit A1.1] states:

“2.3.2 For many transport investments, including most road, rail and airports infrastructure, it is expected that maintenance and renewal will take place when required. This effectively means that the asset life will be indefinite, or at least as long as maintenance and renewal activity is continued.

2.3.3 For these projects the core appraisal period should end 60 years after the scheme opens and the CBA [Cost-Benefit Analysis] should include the costs of ongoing maintenance and renewal (more detail is given in TAG Unit A1.2 – Scheme Costs). Assessing scheme impacts over a standard 60 year period allows better comparison between options and schemes.”

- 7.7.16 The use of 60-year appraisal period is not therefore “an apparent attempt to make this highly polluting scheme appear carbon favourable” but a requirement to accord with the Department for Transport’s standard appraisal period.
- 7.7.17 With regards to L. Hirst’s point that the Scheme is “highly polluting” paragraph 6.2.8 of my Proof of Evidence[CD26-01-APP-W3-2, paragraph 6.2.8] provides the conclusions of the Air Quality assessment and states the “Impacts of the Scheme on NO₂ and particulates will be generally beneficial, with three times as many receptors experiencing a decrease in concentrations of NO₂, PM₁₀ and PM_{2.5} as would experience an increase, when compared to the situation without the Scheme. However, the overall impacts, both positive and negative, will not be significant.

Decommissioning – Point Made

- 7.7.18 L. Hirst states [CD2-OBJ-279, page 1, point 3] that:

“3. The EIA does not provide a whole life carbon assessment as the model does not include the substantial emissions associated with end-of-life decommissioning”

Decommissioning – My Response

- 7.7.19 With regards to decommissioning the Department for Transport's approach is not to include decommissioning as decommissioning would not be assumed after a 60-year appraisal period. A maintenance interval would typically fall under the next 60-year appraisal period and therefore is outside the scope of the assessment. The Department for Transport's Transport Analysis Guidance (TAG) updated 2024, TAG Unit A3 Environmental Impact Appraisal [CD8-25, page 5 with link to TAG Unit A3 and page 34, paragraph 4.2.12 of TAG Unit A3] states:

"4.2.12 Please note that the level of detail and data required in a WLC [Whole Life Carbon] assessment should be commensurate to the development stage of a project. In addition, undertaking a WLC assessment should not by itself change the economic appraisal period chosen for a scheme, and there is no need to appraise residual GHG impacts at the end of the appraisal period for schemes where asset demolition and removal is expected to fall under the purview of a successor project. The Department should be contacted with any queries regarding WLC assessments."

- 7.7.20 Operational maintenance in the 60-year appraisal period has been accounted for.

Conclusions on Objection by L. Hirst [CD2-OBJ-279]

- 7.7.21 Industry standards have been used to calculate greenhouse gas emissions. In addition, the calculations have been updated to reflect updated factors and the conclusions of the ES are unchanged (i.e. a minor beneficial effect).
- 7.7.22 The Scheme is not *"highly polluting"* but will be generally beneficial from an air quality perspective.
- 7.7.23 The proposed mitigation planting is not intended to offset emissions but is for other reasons such as visual amenity or ecological. It is not therefore accepted that the planting measures proposed are *"greenwashing"* to offset greenhouse gas emissions.

8. CONCLUSIONS

8.1.1 Having considered the Environmental Statement Main Report [CD1-10.01] and all associated documents (**Environmental Statement Volume 1 and Volume 2, 2024**) and ES Addendum, June 2025 [CD1-10.06] and ES Addendum July 2025 [CD1-10.07] I have concluded that, in my opinion:

- The ES and Addendums accord with relevant EIA Regulations and Best Practice / Standards;
- EIA scoping has taken on board all consultee comments made and the ES has responded to those comments;
- The design has adopted the mitigation hierarchy and the CoCP [CD1-26] and other measures will control construction effects;
- The ES has reported on all reasonable alternatives studied by the Applicant and significant environmental effects as per the EIA Regulations and the ES and ES Addendum of July 2025 have signposted the various options reports which contain comparison of environmental effects; and
- The ES has reported likely positive and negative significant environmental effects as per the EIA Regulations.

9. STATEMENT OF TRUTH

- 9.1.1 The evidence which I have prepared and provide in this Proof of Evidence is true and is given in accordance with the guidance of my professional institutions. I confirm that the opinions expressed are my true and professional opinions.