HABITATS REGULATIONS ASSESSMENT FOR AN APPLICATION UNDER THE PLANNING ACT 2008

M25 Junction 10/A3 Wisley Interchange

12 May 2022

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1. INTRODUCTION

Background

- 1.1 This document ("the HRA Report") is a record of the Habitats Regulations Assessment ("HRA") that the Secretary of State for Transport has undertaken under regulation 63 of the Conservation of Habitats and Species Regulations 2017 ("the Habitats Regulations") in respect of the Development Consent Order ("DCO"), for the proposed 'M25 Junction 10/A3 Wisley Interchange' ("the Development"). The HRA Report includes an appropriate assessment for the purposes of regulation 63 of the Habitats Regulations.
- 1.2 The Habitats Regulations were amended by The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 ("the 2019 Regulations") and the amendments were taken into account in the preparation of this HRA Report. Reference to the Habitat Regulations in this HRA Report are therefore to the latest amended version, unless otherwise stated.
- 1.3 National Highways, formerly Highways England ("the Applicant") submitted an application for development consent ("the Application") to the Planning Inspectorate ("the Inspectorate") on 19 June 2019 under section 37 of the Planning Act 2008 ("PA 2008"). The Development to which the Application relates is described in more detail in Section 2 of this HRA Report.
- 1.4 The Development constitutes a Nationally Significant Infrastructure Project ("NSIP") by virtue of it being the alteration of a highway within the meaning of sections 14(1)(h) and section 22 of the PA2008.
- 1.5 The Application was accepted for examination by the Inspectorate (under the delegated authority of the Secretary of State) on 17 July 2019.
- 1.6 The Applicant submitted requests to make changes to the Development to which the Application relates during the examination, as set out in Section 2.2. of the Examining Authority's (ExA) Recommendation Report ("the Recommendation Report"). Nine specific changes to the Development were put forward altogether and were comprised in two change requests.
- 1.7 The first change request for changes 1 to 6 was submitted on 11 February 2020. The ExA determined that changes 2 to 6 were 'non-material amendments' and issued a Procedural Decision confirming this on 27 February 2020. Proposed change 1, an extension to the green element of Cockcrow Bridge¹, was subsequently accepted into the Examination as a 'non-material' amendment in the ExA's letter dated 24 April 2020.
- 1.8 On 9 April 2020, the Applicant submitted a second change request for changes 7 to 9. The Applicant also considered these to be non-material amendments. Changes 7 to 9 were accepted into the Examination by the ExA as 'non-material' amendments, as confirmed in the ExA's Procedural Decision on 24 April 2020.

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¹ The Development includes as an enhancement measure a "green bridge" extension to Cockcrow bridge. The green bridge is intended to provide an additional enhancement measure to address historic issues relating to the severance of ecological habitats by the existing A3, including habitats that form part of the Ockham and Wisley Commons Site of Special Scientific Interest (and for which a separate designated funds application was being made by the Project team to Highways England).

- 1.9 The examination concluded on 12 July 2020. The ExA submitted the report of the examination, including its recommendation to the Secretary of State for Transport on 12 October 2020.
- 1.10 Since the submission of the Recommendation Report, the Secretary of State has, among other matters, considered the amount of Replacement Land to be provided under the DCO. Where relevant to the HRA, matters relating to the Replacement Land are discussed below.
- 1.11 The Secretary of State's conclusions in relation to European sites have been informed by the Recommendation Report, documents and representations submitted during the examination and responses to the Secretary of State's requests for comments and further information issued on 4 November 2020, 16 November 2020, 27 November 2020, 20 January 2021, 15 February 2021 26 July 2021, 16 August 2021, and 22 December 2021 as described below.

Habitats Regulations Assessment

- 1.12 The Habitats Regulations provide for the designation of sites for the protection of certain species and habitats. These are collectively termed "European sites" and form part of a network of protected sites across the UK known as the "national site network". The UK Government is also a signatory to the Convention on Wetlands of International Importance 1972 ("the Ramsar Convention"). The Ramsar Convention provides for the listing of wetlands of international importance. UK Government policy is to give sites listed under this convention ("Ramsar sites") the same protection as European sites.
- 1.13 For the purposes of this HRA Report, in line with the Habitats Regulations and relevant Government policy², the term "European sites" includes Special Areas of Conservation (SAC), candidate SACs, possible SACs, Special Protection Areas (SPA), potential SPAs, Sites of Community Importance, listed and proposed Ramsar sites and sites identified or required as compensatory measures for adverse effects on any of these sites.
- 1.14 Regulation 63(1) of the Habitats Regulations requires that:
 - "(1) A competent authority, before deciding to undertake, or give any consent, permission or other authorisation for, a plan or project which-
 - (a) is likely to have a significant effect on a European site or a European offshore marine site (either alone or in combination with other plans or projects), and
 - (b) is not directly connected with or necessary to the management of that site,

must make an appropriate assessment of the implications of the plan or project for that site in view of that site's conservation objectives..."

1.15 Regulation 64(1) goes on to state that:

"(1) If the competent authority is satisfied that, there being no alternative solutions, the plan or project must be carried out for imperative reasons of overriding public interest (which, subject to paragraph (2), may be of a social or economic nature), it may agree to the plan or project notwithstanding a

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² Paragraph 181 of the National Planning Policy Framework (NPPF)

negative assessment of the implications for the European site or the European offshore marine site (as the case may be)."

1.16 Additionally, Regulation 68 states that:

"Where in accordance with regulation 64—

- (a) a plan or project is agreed to, notwithstanding a negative assessment of the implications for a European site or a European offshore marine site, or
- (b) a decision, or a consent, permission or other authorisation, is affirmed on review, notwithstanding such an assessment, the appropriate authority must secure that any necessary compensatory measures are taken to ensure that the overall coherence of Natura 2000 is protected."
- 1.17 The Development is not connected with or necessary to the management of any European sites. Accordingly, the Secretary of State for Transport, as the competent authority for the purposes of Transport NSIPs under the PA2008, has undertaken an assessment in line with the requirements of the Habitats Regulations. This HRA Report (Sections 1 to 5) is the record of the appropriate assessment for the purposes of Regulation 63 of the Habitats Regulations. Additionally, Sections 6 to 9 of this HRA Report record the Secretary of State's considerations with respect to Regulations 64 and 68 of the Habitats Regulations.

The Report on the Implications for European Sites ("RIES") and consultation with the appropriate nature conservation body

- 1.18 The ExA, with support from the Inspectorate's Environmental Services Team, produced a Report on the Implications for European Sites ("the RIES"). The purpose of the RIES was to compile, document and signpost information submitted by the Applicant and Interested Parties ("IPs") during the examination up to and including D5a of the Examination (13 March 2020). It was issued to ensure that IPs, including Natural England ("NE") as the appropriate nature conservation body in respect of the Application for the Development, had been formally consulted on Habitats Regulations matters during the examination. The consultation period ran between 9 April 2020 and 1 May 2020.
- 1.19 Regulation 63(3) of the Habitats Regulations requires competent authorities (in this case the Secretary of State), if they undertake an appropriate assessment, to consult the appropriate nature conservation body and have regard to any representations made by that body.
- 1.20 The Applicant and the Royal Horticultural Society ("RHS") provided comments on the RIES at deadline 8 (1 May 2020). Although specific comments on the RIES were not received by NE, further responses to the examination and to the Secretary of State's further consultations were provided by NE in respect of Habitats Regulations matters.
- 1.21 A Statement of Common Ground ("SoCG") between the Applicant and NE was first submitted with the DCO application and updated at deadline 3 (28 January 2020) and deadline 5 (03 March 2020). A final signed version was submitted at deadline 8 (01 May 2020). Subsequent references to the SoCG between the Applicant and NE in this HRA Report are to the deadline 8 version, unless otherwise stated. The SoCG confirmed that all matters relating to HRA were

agreed between the two parties and that there were no HRA matters outstanding between them in respect of the Development.

Changes to the Application during examination

- 1.22 In respect of the non-material amendments to the Application identified above and described at Section 2.2 of the Recommendation Report, the Secretary of State notes that the Applicant's HRA documents were updated at deadline 4 to reflect the updated description of the Development arising from the proposed changes. The Applicant's HRA documents are described in more detail below.
- 1.23 The Recommendation Report at paragraph 6.6.9 describes the implications of the non-material changes on matters of HRA, specifically change 1 (the change to the proposed Cockcrow bridge) and change 6 (adjustments to the Order limits to accommodate a gas main diversion). The Secretary of State has considered the implication of the changes at Section 5 of this HRA Report below, where relevant.

Documents referred to in this HRA Report

- 1.24 This HRA Report has taken account of and should be read in conjunction with the documents produced as part of the application and examination, together with the responses to the Secretary of State's request for comment and further information dated 4 November 2020, 16 November 2020, 27 November 2020, 20 January 2021, 15 February 2021, 26 July 2021, 16 August 2021, and 22 December 2021 (as relevant) as listed in Annex 1 to this HRA Report.
- 1.25 The Applicant submitted with the DCO application a "Habitats Regulations Assessment: Stage 2: Statement to Inform Appropriate Assessment" report (hereafter referred to as the "Applicant's SIAA report"). Given the conclusion reached by the Applicant within the Applicant's SIAA report, that the Development could give rise to an adverse effect on integrity ("AEoI") on a European site, the Applicant also provided a "Habitats Regulations Assessment Stage 3-5: Assessment of alternatives, consideration of imperative reasons of overriding public interest (IROPI) and compensatory measures" report (hereafter referred to as the "Applicant's HRA Stage 3-5 report").
- 1.26 The Applicant's SIAA report and Applicant's HRA Stage 3-5 report were supported by the following appendices and figures:
 - Habitats Regulations Assessment Figures;
 - Habitats Regulations Assessment Annex A: Stage 1 Screening;
 - Habitats Regulations Assessment Annex B: Consultation report; and
 - Habitats Regulations Assessment Annex C: Selection of the suite of compensatory measures.
- 1.27 During examination the HRA Figures were revised on three occasions. Two revisions were submitted as Additional Submissions in July 2019 (Revision 1) and November 2019 (Revision 2), with a further version at deadline 4 to reflect the non-material change applications.
- 1.28 At deadline 2 (18 December 2019) the Applicant also submitted an updated Annex A: Stage 1 Screening (Revision 1) and HRA screening matrices for the two SACs considered in a document entitled "Update Screening Matrix 2 and 3 to Habitat Regulations Assessment Annex A". These were provided to correct minor omissions/typographical errors.

- 1.29 At deadline 4, and accompanying the non-material change requests, the Applicant submitted updated versions of their suite of HRA documents, including: the Applicant's SIAA report (Revision 1); Applicant's Stage 3-5 report (Revision 1); HRA Annex A: Stage 1 Screening (Revision 2); HRA Annex B: Consultation report (Revision 1); HRA Annex C: Selection of the suite of compensatory measures (Revision 1). All references in this HRA Report are to these versions of the Applicant's HRA documents unless otherwise stated.
- 1.30 Also of relevance to the Applicant's HRA is Environmental Statement ("ES") Appendix 7.19 SPA Management and Monitoring Plan ("MMP") submitted with the DCO application. This document was updated as an Additional Submission Revision 1 dated November 2019 and again at deadline 4 (Revision 2, dated 11 February 2020). This document is hereafter referred to as the "SPA MMP" in this HRA Report.
- 1.31 The above-mentioned documents are the principal documents prepared by the Applicant in support of HRA matters.

Structure of this HRA Report

- 1.32 The remainder of this HRA Report is presented as follows
 - Section 2 provides a general description of the Development.
 - Section 3 describes the location of the Development and its relationship with European sites.
 - Section 4 identifies the European sites and qualifying features subject to likely significant effects, alone or in combination with other plans or project (HRA Stage 1).
 - Section 5 considers adverse effects on the integrity of European sites, alone or in combination with other plans or projects and summarises the Secretary of State's appropriate assessment and conclusions (HRA Stage 2).
 - Section 6 summarises the Secretary of State's consideration of Alternative Solutions (HRA Stage 3).
 - Section 7 considers Imperative Reasons of Overriding Public Interest (HRA Stage 4).
 - Section 8 discusses Compensatory Measures (HRA Stage 5).
 - Section 9 summarises the Secretary of State's conclusion in respect of HRA Stages 3 to 5.

2. DEVELOPMENT DESCRIPTION

- 2.1 The Development comprises the alteration and upgrading of the existing Junction 10 roundabout of the M25 motorway, including new, amended and extended slip roads on and off the M25 and A3. The A3 would also be widened to dual four lanes between the Ockham Park junction and the Painshill junction. Four free-flow slip lanes would be provided on the M25 through Junction 10, together with a package of changes and additions to the local road network, private access and Public Rights of Way. The Development lies entirely within the County of Surrey in south-east England.
- 2.2 A description of the Development and its setting is included in Section 2 of the ES Chapter 2, which was updated at deadline 4 to reflect the non-material

changes proposed. The Development is shown on the Scheme Layout Plans and the Engineering Drawings and Sections. A plan showing the European sites considered in the Applicant's HRA Annex A: Stage 1 Screening and Applicant's SIAA report, and their location relative to the Development, is provided in the Applicant's HRA Figures.

- 2.3 The Development is proposed to be constructed within a period of three years. Section 2.7 of updated ES Chapter 2 describes the likely construction activities and construction sequence. The key construction stages are shown in Table 1 of the Applicant's SIAA report.
- 2.4 Following completion and once commissioning activities have taken place, the Development would be open to traffic and form part of the Strategic Road Network ("SRN").
- 2.5 The Applicant's HRA Annex A: Stage 1 Screening and SIAA report consider the likely significant effects ("LSE") of the construction and operation of the Development. Decommissioning effects were not assessed on the basis that the Development will form part of the SRN "and operation of the road will be ongoing in perpetuity".
- 2.6 The potential effects on European sites associated with the construction, and operation of the Development are addressed in Section 4 of this HRA Report.

3. LOCATION OF THE DEVELOPMENT AND RELATIONSHIP WITH EUROPEAN SITES

Location and existing land use

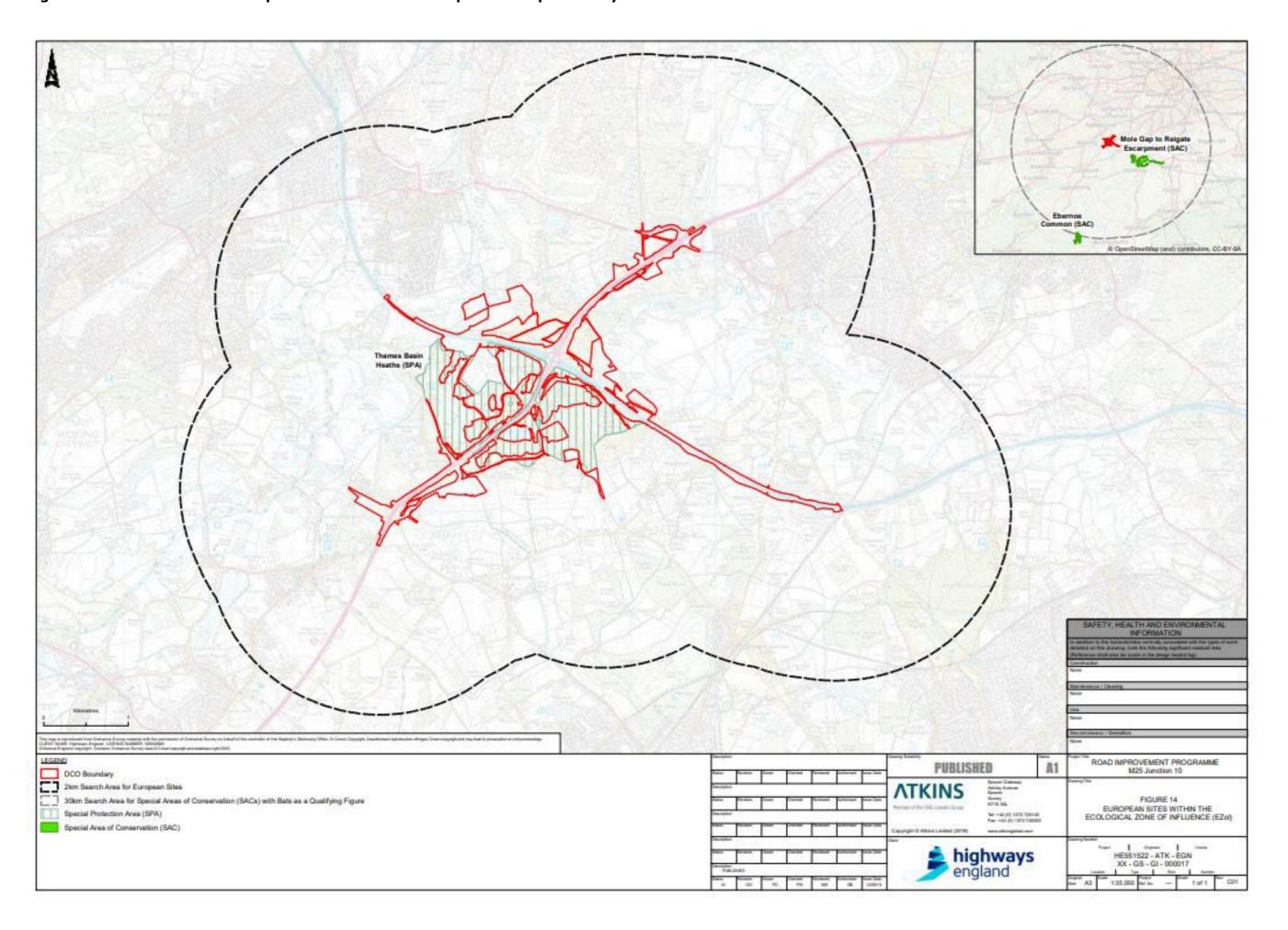
- 3.1 The Development is located entirely in the County of Surrey and lies in the south-west quadrant of the M25 London Orbital Motorway. The M25 Junction 10 and the A3 is a key route from London to Portsmouth. To the north of M25 Junction 10 on the A3 is the Painshill junction with the A245. To the south of M25 Junction 10 on the A3 is the Ockham Park junction with the B2039 and B2215.
- The Development predominantly follows the existing M25 Junction 10 and A3. A large part of the area around the Development is part of the Thames Basin Heaths SPA, and Ockham and Wisley Commons Site of Special Scientific Interest ("SSSI"), together with areas designated as a Local Nature Reserve and Site of Nature Conservation Interest. There is some ancient woodland adjacent to the Development and other ancient woodlands in the local area.
- 3.3 The RHS' Wisley Garden lies to the south west of M25 Junction 10 and Painshill Park lies to the north-east of Ockham Park junction, both are designated as registered parks and gardens of historic interest. The area immediately around the junction is designated as common land or open space. The area also includes at-grade, controlled pedestrian and equestrian crossings at M25 Junction 10 and several Public Rights of Way in the surrounding area.
- 3.4 The River Mole, River Wey and Guileshill Brook are located near to the Development and the Stratford Brook crosses under the A3 at the Ockham Park junction. Bolder Mere, a Water Framework Directive ("WFD") waterbody is adjacent to the A3 between M25 Junction 10 and the Ockham Park junction. The Bolder Mere waterbody lies within the Ockham and Wisley Commons SSSI and forms part of that designation.

European sites potentially affected by the Development

- 3.5 The Development is not connected with or necessary to the management of any of the European sites considered within the Applicant's SIAA report and HRA Annex A: Stage 1 Screening.
- 3.6 The Applicant considered the potential for LSE on the following three European sites.
 - Thames Basin Heaths SPA;
 - Mole Gap to Reigate Escarpment SAC; and
 - Ebernoe Common SAC.
- 3.7 A plan showing the three European sites identified in the Applicant's SIAA report and HRA Annex A: Stage 1 Screening and their location relative to the Development was provided as Figure 14 in the Applicant's HRA Figures (Revision 2). This figure is reproduced as Figure 1 below.
- 3.8 The Applicant's approach to identifying relevant European sites is explained at Section 2.2 of the Applicant's HRA Annex A: Stage 1 Screening. The approach adopted included the identification of European sites in accordance with Design Manual for Roads and Bridges (DMRB) guidance HD44/09 and thus considered the following:

- European sites within 2km of the Development;
- SACs within 30km of the Development with bats as a qualifying feature;
- where the Development crosses adjacent/upstream or downstream of watercourses designated as a European site; and
- any European site within 200m of the affected road network associated with increased air quality emissions as a result of the Development.
- 3.9 Of the three European sites considered, the Thames Basin Heaths SPA lies within and adjacent to the Development. Mole Gap to Reigate Escarpment SAC and Ebernoe Common SAC are located within 30km of the Development and have bat qualifying features. The two SACs are located at 6.9km and 29.3km from the Development, respectively.
- 3.10 No evidence was presented during the examination to suggest that effects from the Development could occur to any other European site. The Secretary of State is therefore satisfied that no other European site needs to be addressed in this HRA Report.

Figure 1 Location of the Development in relation to European sites potentially affected



4. STAGE 1: ASSESSMENT OF LIKELY SIGNIFICANT EFFECTS ("LSE")

Potential effects from the Development

- 4.1 Section 2 of the Applicant's Annex A: Stage 1 Screening outlines the Applicant's approach to screening for LSE.
- 4.2 Paragraph 1.5.3 of the Applicant's Annex A: Stage 1 Screening states that the HRA screening was reviewed in light of the ruling of the European Court of Justice (ECJ) in People Over Wind, Peter Sweetman v Coillte Teoranta (C-323/17) (the "People over Wind judgment")³ to ensure that no mitigation or avoidance measures were taken into account in reaching the HRA screening conclusion.
- 4.3 The Applicant's Annex A: Stage 1 Screening and HRA Screening Matrices identified the following impact types associated with the construction and operation of the Development as having the potential to give rise to LSE on European sites:
 - Habitat loss, both permanent and temporary;
 - Degradation of habitats by changes in air quality;
 - Degradation of habitats by changes in water quality;
 - Disturbance by changes in noise;
 - Disturbance by changes in recreational use;
 - Disturbance by changes in lighting;
 - Spread of invasive non-native species ("INNS"); and
 - In combination effects.
- 4.4 No evidence was presented during the examination that the Development was likely to give rise to any other effects on European sites.

Sites and features which could be affected

- 4.5 The Applicant's Annex A: Stage 1 Screening screened those European sites and qualifying features identified in Table 4.1 below to establish if significant effects were likely. The Secretary of State is content that this list includes all the sites and qualifying features which require to be considered.
- 4.6 The Applicant's screening assessment for the three European sites is included in the Applicant's HRA Annex A: Stage 1 Screening. Appendix B to that report contains the HRA screening matrices in the format prescribed by the Inspectorate's Advice Note 10⁴ for the three European sites considered. The conclusions of the Applicant's screening for LSE is also summarised at Section 2.2 of the Applicant's SIAA report.

³ ECJ case reference C-323/17, available: http://curia.europa.eu/juris/document/document.jsf?docid=200970&doclang=EN (Accessed 07/02/2022)

⁴ <u>https://infrastructure.planninginspectorate.gov.uk/legislation-and-advice/advice-notes/</u> (Accessed 07/02/2022)

Table 4.1 European sites and qualifying features screened into Applicant's HRA

European site	Pathway of effect	Relevant qualifying features	
Thames Basin Heaths SPA UK9012141	Habitat loss, both permanent and temporary	All qualifying features: • European nightjar (Caprimulgus europaeus) • Woodlark (Lullula arborea) • Dartford warbler (Sylvia undata)	
	Degradation of habitats by changes in air quality Degradation of habitats by changes in water quality	All qualifying features All qualifying features	
	Disturbance by changes in noise	All qualifying features	
	Disturbance by changes in recreational use Disturbance by changes in lighting	All qualifying features All qualifying features	
	Habitat degradation from the spread of non-native invasive plant species	All qualifying features	
	In combination effects	All qualifying features	
Mole Gap to Reigate Escarpment SAC UK0012804	Habitat loss, both permanent and temporary	 All qualifying features: Stable xerothermophilous formations with Buxus sempervirens on rock slopes Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (important orchid sites) Taxus baccata woods of the British Isles (Yewdominated woodland) European dry heaths Asperulo-Fagetum beech forests Great crested newt (Triturus cristatus) Bechstein's bat (Myotis bechsteinii) 	
	Degradation of habitats by changes in air quality	All qualifying features	
	Degradation of habitats by changes in water quality	All qualifying features	

European site	Pathway of effect	Relevant qualifying features	
	Disturbance by changes in noise	All qualifying features	
	Disturbance by changes in recreational use	All qualifying features	
	Disturbance by changes in lighting	All qualifying features	
	In combination effects	All qualifying features	
Ebernoe Common SAC UK0012715	Degradation of habitats by changes in air quality	 All qualifying features: Atlantic acidophilous beech forests with <i>Ilex</i> and sometimes also <i>Taxus</i> in the shrub layer (<i>Quercion robori-petraeae</i> or <i>Ilici-Fagenion</i>) Barbastelle bat (<i>Barbastella barbastellus</i>) Bechstein's bat 	
	Degradation of habitats by changes in water quality	All qualifying features	
	Disturbance by changes in noise	All qualifying features	
	Disturbance by changes in recreational use	All qualifying features	
	Disturbance by changes in lighting	All qualifying features	
	In combination effects	All qualifying features	

Conservation objectives

- 4.7 As mentioned in paragraph 1.15 above, where an appropriate assessment is required in respect of a European site, regulation 63(1) of the Habitats Regulations requires that it be an appropriate assessment of the implications of the plan or project for the site in view of its conservation objectives. Government guidance also recommends that in carrying out the stage one assessment (screening), applicants must check if the proposal could have a significant effect on a European site that could affect its conservation objectives.
- 4.8 The conservation objectives relevant to this HRA Report, as published by NE and the Joint Nature Conservation Committee ("JNCC"), are provided in Annex 2 of this HRA Report.

Assessment of in combination effects

- 4.9 Paragraphs 2.4.2 and 4.1.1 of the Applicant's HRA Annex A: Screening state that NE were consulted with regards to the plans and projects that should be considered to determine if there was the potential for a cumulative impact on the European sites included in the Applicant's HRA screening assessment and that NE advised that the in combination assessment should focus on the Local Plan HRAs for local boroughs within 10km of the boundary of the Development. Paragraph 2.5.5 of the Applicant's HRA Annex A: Screening also confirms that it was agreed with NE that the in combination assessment should focus on the Ockham and Wisley Commons SSSI component of the Thames Basin Heaths SPA, due to the distance from the other SSSI components to the Development and a lack of hydrological connectivity between Ockham and Wisley Commons SSSI and any other component SSSIs of the Thames Basin Heaths SPA.
- 4.10 Section 4 of the Applicant's HRA Annex A: Screening identifies the Local Plan HRAs considered, together with potential adverse effects of the Development in combination with the Local Plan HRAs at Table 4. The plans and projects identified and considered by the Applicant include:
 - Elmbridge Borough Council: Elmbridge Local Plan Habitats Regulations Assessment Stage 1: Initial Screening Report Spatial Strategy Options (2016);
 - Guildford Borough Council: Habitats Regulations Assessment for Guildford Borough Proposed Submission Local Plan: Strategy and Sites (2018 update);
 - Mole Valley District Council: Mole Valley Local Development Framework:
 Mole Valley Appropriate Assessment (2008);
 - Runnymede Borough Council: Appropriate Assessment Report Pursuant to the Conservation of Habitats and Species Regulations 2017 on the Likely Significant Effects and Adverse Effects on Integrity of Runnymede Borough Council's Local Plan: HRA Screening and Appropriate Assessment Report (2018);
 - Surrey Heath Borough Council: Surrey Heath Borough Council Draft Local Plan to 2032 Issues and Options Consultation: Habitats Regulations Assessment (2018); and
 - Woking Borough Council: Woking Borough Council Site Allocations DPD: habitats Regulations Assessment (2018).

- 4.11 The Applicant's HRA Annex A: Screening (Table 4) states that no Local Plan HRA available was available for Spelthorne Borough Council and that "No in combination adverse effect predicted as Spelthorne Borough Council is over 5 km from the Ockham and Wisley Commons SSSI component of the SPA at its closest point".
- 4.12 The signed SoCG between the Applicant and NE states their satisfaction with the methodology, approach, and findings in relation to the in combination assessment. The signed SoCG with Surrey County Council ("SCC") also confirms agreement with the Applicant's in combination assessment. The Secretary of State is satisfied that the approach to the assessment of in combination effects is appropriate.

LSE screening conclusions

- 4.13 The Applicant's HRA Annex A: Stage 1 Screening concludes that the Development would have no LSE, either alone or in combination with other plans and projects, on Mole Gap to Reigate Escarpment SAC and Ebernoe Common SAC. This conclusion was reached for all potential effects considered and all qualifying features.
- 4.14 Potential LSE were identified from the Development alone on the Thames Basin Heaths SPA and for all qualifying features. The HRA screening assessment for these sites are discussed in turn below.

Mole Gap to Reigate Escarpment SAC

- 4.15 The Applicant's screening assessment for the Mole Gap to Reigate Escarpment SAC is presented in Table 6 of the Applicant's HRA Annex A: Stage 1 Screening. Table 2 of that same report also provides summary information on the SAC, together with an HRA screening matrix at Appendix B.
- 4.16 The HRA screening concludes there would be no habitat loss, or changes to water or air quality at the SAC due to the distance between the Development and the SAC, coupled with the absence of potential effect pathways. Additionally, due to distance it is considered that changes to noise, recreation or lighting during construction or operation would have no LSE on any qualifying features of the SAC.
- 4.17 With regards to the Bechstein's bat qualifying feature of the SAC, the Applicant's survey information from 2016, 2017 and 2018, as reported in Document 6.5 ES Appendix 7.9 Bats and ES Appendix 7.10 Bat trapping, confirmed that Bechstein's bat are unlikely to regularly occur within or near the Development and therefore, coupled with the aforementioned absence of effect pathways, a conclusion of no LSE is reached in respect of this qualifying feature.
- 4.18 The final SoCG between the Applicant and NE records agreement with the findings and outcomes of the Applicant's HRA screening assessment, as reported in the Applicant's HRA Annex A: Stage 1 Screening. The Applicant's conclusion of no LSE to the Mole Gap to Reigate Escarpment SAC, alone or in combination, was also not disputed by any Interested Party ("IP") during the examination.
- 4.19 The Secretary of State has reviewed the information within the Applicant's LSE Report and the Recommendation Report and RIES. Based on this information, the Secretary of State agrees with the conclusion of no LSE on the Mole Gap to Reigate Escarpment SAC as a result of the construction and operation of the Development, either alone or in combination with other plans and projects.

Ebernoe Common SAC

- 4.20 The Applicant's screening assessment for the Ebernoe SAC is presented in Table 7 of the Applicant's HRA Annex A: Stage 1 Screening. Table 3 within that report also provides summary information on the SAC, together with a HRA screening matrix at Appendix B.
- 4.21 Ebernoe SAC is located at a distance of 29.3km from the Development. As for the Mole Gap to Reigate Escarpment SAC above, the HRA screening concludes there would be no habitat loss, or changes to water or air quality at Ebernoe SAC due to the distance between the Development and the SAC coupled with the absence of potential effect pathways. Due to distance it is also considered that changes to noise, recreation or lighting during construction or operation would have no LSE on any qualifying features of the SAC.
- 4.22 With regards to the Barbastelle and Bechstein's bat qualifying features of the SAC, the Applicant's survey information from 2016, 2017 and 2018, as reported in Document 6.5 ES Appendix 7.9 Bats and Document 6.5 ES Appendix 7.10 Bat trapping confirmed that both Barbastelle and Bechstein's bats are unlikely to regularly occur within or near the Development and therefore, coupled with the aforementioned absence of effect pathways, a conclusion of no LSE is reached.
- 4.23 The final SoCG between the Applicant and NE records agreement with the findings and outcomes of the Applicant's HRA screening assessment, as reported in the Applicant's HRA Annex A: Stage 1 Screening. The Applicant's conclusion of no LSE to the Ebernoe SAC, alone or in combination, was also not disputed by any IP during the examination.
- 4.24 The Secretary of State has reviewed the information within the Applicant's LSE Report and the Recommendation Report and RIES. Based on this information, the Secretary of State agrees with the conclusion of no LSE to the Ebernoe SAC as a result of the construction and operation of the Development, either alone or in combination with other plans and projects.

Thames Basin Heaths SPA

- 4.25 The Applicant's Annex A: Stage 1 Screening concludes the potential for LSE to the three qualifying features of the SPA, namely European nightjar, woodlark, and Dartford warbler, arising from the Development alone as a result of the following effects:
 - Habitat loss during construction, both temporary and permanent;
 - Habitat degradation from air quality changes during construction and operation;
 - Habitat degradation from water quality changes during construction and operation;
 - Disturbance to the qualifying features from noise, recreational pressure and lighting during construction and operation; and
 - Habitat degradation arising from the spread of INNS during construction.
- 4.26 The final SoCG between the Applicant and NE records agreement with the findings and outcomes of the Applicant's HRA screening assessment, as reported in the Applicant's HRA Annex A: Stage 1 Screening.
- 4.27 The Secretary of State agrees with the Applicant's conclusion of potential LSE to the Thames Basin Heaths SPA arising from the above effects and as a result

of the Development alone. These effects, together with any in combination effects, are therefore considered in the Secretary of State's appropriate assessment at Section 5 below.

Summary of European sites requiring appropriate assessment

4.28 The Secretary of State has summarised the European sites, pathways of effect and qualifying features for which an appropriate assessment is required in Table 4.2 below.

Table 4.2 Summary of European sites and qualifying features requiring an appropriate assessment

European Site	Pathway of effect	Construction (C) / Operation (O)	Qualifying Features
Thames Basin Heaths SPA	Habitat loss, both temporary and permanent	C*	European nightjar Woodlark Dartford warbler
	Habitat degradation from air quality changes	С, О	European nightjar Woodlark Dartford warbler
	Habitat degradation from water quality changes	C, O	European nightjar Woodlark Dartford warbler
	Disturbance to the qualifying features from noise, lighting, and recreational pressure	C, O	European nightjar Woodlark Dartford warbler
	Habitat degradation arising from the spread of INNS	С	European nightjar Woodlark Dartford warbler
	In combination effects with other plans and projects for the above effects	C, O	European nightjar Woodlark Dartford warbler

^{*} Loss of habitat would occur during construction. No additional habitat loss would occur as a result of the operation of the Development.

- 4.29 The Secretary of State has considered the Applicant's conclusions and the Recommendation Report and RIES for all other European sites, qualifying features and pathways of effect that are set out above and concludes that there would be no LSE.
- 4.30 In reaching the conclusion of the screening assessment, the Secretary of State took no account of any measures intended to avoid or reduce the potentially harmful effects on any European site.

5. STAGE 2: APPROPRIATE ASSESSMENT

As LSE cannot be excluded, the Secretary of State as the competent authority is required to undertake an appropriate assessment to determine the implications for the conservation objectives of the affected European sites. In line with the requirements of Regulation 63 of the Habitats Regulations:

'the competent authority may agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the European site'; and

'In considering whether a plan or project will adversely affect the integrity of the site, the competent authority must have regard to the manner in which it is proposed to be carried out or to any conditions or restrictions subject to which it proposes that the consent, permission or other authorisation should be given'.

- As noted in Section 1 of this HRA Report, the competent authority is obliged to consult the appropriate nature conservation body and have regard to any representations made by that body. For this purpose, the ExA prepared a RIES as set out in Paragraphs 1.18 to 1.20 of this HRA Report. Although NE did not specifically provide a response to the RIES consultation, NE were actively engaged with the examination, including at deadlines following the issue of the RIES, and provided confirmation of their agreement with the Applicant's findings and outcomes in respect of HRA matters in their signed final SoCG at deadline 8. Additionally, NE have engaged with the Secretary of State's further consultations. The Secretary of State is therefore satisfied that NE have been consulted in line with Regulation 63 of the Habitats Regulations.
- 5.3 In accordance with the precautionary principle embedded in the integrity test and established through case law, the competent authority (subject to Regulation 64) may agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the European site, and this must be demonstrated beyond all reasonable scientific doubt⁵. If the competent authority cannot exclude AEoI of the affected European sites, then it can only agree to a plan or project if it complies with the requirements of Regulation 64 of the Habitats Regulations. Regulation 64 provides that the competent authority may agree to the plan or project only if satisfied that there are no alternative solutions, and that the plan or project must be carried out for imperative reasons of overriding public interest. In addition, Regulation 68 requires compensatory measures to be secured which maintain the overall coherence of the national site network.

Adverse Effects on the Integrity ("AEoI") of the Thames Basin Heaths SPA

5.4 The Secretary of State has undertaken an objective scientific assessment of the implications of the Development on the qualifying features of the Thames Basin Heaths SPA, using best scientific knowledge in the field. The assessment has been made in light of the conservation objectives for the SPA, which are

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⁵ CJEU Case C-127/02 Waddenzee 7 September 2004, Reference for a preliminary ruling from the Raad van State (Netherlands) in the proceedings: Landelijke Vereniging tot Behoud van de Waddenzee and Nederlandse Vereniging tot Bescherming van Vogels v Staatssecretaris van Landbouw, Natuurbeheer en Visserij.

set out in Annex 2 of this HRA Report. A summary of the Secretary of State's appropriate assessment is presented below.

In combination effects

- 5.5 As described at paragraphs 4.9 to 4.12 above, the Applicant and NE agreed the scope and focus of the in combination assessment. It was agreed that the in combination assessment should focus on the Ockham and Wisley Commons SSSI component of the Thames Basin Heaths SPA, due to distance to other component SSSIs and the absence of potential effect pathways from the Development.
- As per the HRA screening assessment, the Applicant's SIAA report considered in combination effects with the local plans listed at paragraph 4.10 above. The Applicant's SIAA report also considered all projects within 2km of the Ockham and Wisley Commons SSSI component of the SPA that were taken to Stage 2 in ES Chapter 16 (Cumulative Impacts). A total of 10 projects were considered. These are listed in Table 11 of the Applicant's SIAA report.
- 5.7 The Secretary of State notes the discussions between the Applicant and NE concerning the exclusion of the proposed expansion of Heathrow Airport in the Applicant's traffic modelling, and therefore in the Applicant's in combination assessment, and notes the subsequent agreement between the parties that this project should be excluded on the basis of information available confirming the commitments made for that project to avoid net increase in vehicle movements. The Secretary of State agrees that the proposed expansion of Heathrow Airport should be excluded on this basis.

Mitigation

- The Applicant's SIAA report at Appendix D lists the mitigation measures relied upon for the purposes of the Applicant's assessment of AEoI. Table D.1 in Appendix D lists the embedded measures within the construction and operation of the Development that are not purely measures for HRA purposes. These measures are committed to in the Applicant's ES. Table D.2 in Appendix D lists HRA-specific mitigation measures. These measures are committed to in the ES and are to be secured through the Construction Environmental Management Plan ("CEMP"). The CEMP is secured by Requirement 3 of the DCO. The CEMP is to be substantially in accordance with the outline CEMP and is to be submitted to and approved in writing by the Secretary of State, following consultation with the relevant planning authority and the local highway authority. The latest version of the outline CEMP is Revision 5, submitted at deadline 8.
- Appendix G to the outline CEMP includes the Register of Environmental Actions and Commitments ("REAC"). The REAC comprises of the schedule of mitigation commitments at Table G.1 and the Environmental Action Plan schedules at Tables G.2 (Actions required before the start of construction), G.3 (Actions required during the construction period) and G.4 (Actions required after the end of construction). Although forming Appendix G to the outline CEMP, the REAC was also submitted separately to the examination. The latest version of the REAC is Revision 5, produced in response to the Secretary of State's further consultation. Both the outline CEMP and REAC are certified documents listed in Schedule 11 to the DCO. The Applicant's SIAA report takes into account these measures when concluding on AEoI.

Thames Basin Heaths SPA

- 5.10 The Thames Basin Heaths SPA is a composite SPA 8,274.7ha in size, located across the counties of Surrey, Hampshire, and Berkshire in southern England. It encompasses all or parts of 12 component SSSIs. The Development is located within one of the component SSSIs, Ockham and Wisley Common SSSI. The next nearest SSSI of the Thames Basin Heaths SPA is Horsell Common SSSI, approximately 6km from the boundary of the Development.
- 5.11 The SPA was designated in 2005 under Article 4.1 of the Birds Directive for supporting significant populations of the Annex I bird species Dartford warbler, nightjar, and woodlark. At the point of designation, counts during the breeding season indicated that the SPA supported at least 27.8% (445 pairs), 7.8% (264 pairs) and 9.9% (149 pairs) of the breeding populations of Dartford warbler, nightjar and woodlark in Great Britain, respectively.
- 5.12 The SPA consists of areas of agriculturally unimproved heathland, scrub and woodland which were once almost continuous but are now fragmented by roads, urban development, and farmland. As noted above, it supports important breeding populations of a number of birds which are strongly associated with heathland habitat, especially the ground nesting birds nightjar and woodlark, and also the Dartford warbler which often nests close to the ground amongst dense heather and gorse. NE's Supplementary Advice⁶ for the SPA further confirms that the principal habitats supporting the three qualifying species are lowland heathland and rotationally managed coniferous plantation woodland.

Existing threats and pressures

- 5.13 NE have produced a Site Improvement Plan ("SIP") for the Thames Basin Heaths SPA⁷, which includes a high-level overview of the key threats and pressures (both current and predicted) affecting the qualifying features of the SPA. It also outlines the priority measures required to improve the condition of the qualifying features. NE's Supplementary Advice for the SPA describes the range of ecological attributes on which the qualifying features depend, and which are most likely to contribute to a site's overall integrity. It also sets out minimum targets for each qualifying feature to achieve in order to meet the site's objectives.
- 5.14 Key threats and pressures for the Thames Basin Heaths SPA include:
 - Public access/disturbance;
 - Undergrazing;
 - Forestry and woodland management;
 - Inappropriate scrub control;
 - Wildfire/arson;
 - Air pollution: impact of atmospheric nitrogen deposition;
 - Feature location/extent/condition unknown;

⁶ Natural England (2016) European Site Conservation Objectives: Supplementary Advice on Conserving and Restoring Site Features Thames Basin Heaths Special Protection Area (SPA) Site Code: UK9012141 (version 2). Submitted by NE at deadline 5 of the examination.

⁷ http://publications.naturalengland.org.uk/publication/6249258780983296 (Accessed 07/02/2022)

- Military; and
- Habitat fragmentation.
- 5.15 The SIP and Supplementary Advice relate to the entire SPA. The Applicant also provided information from the Surrey Wildlife Trust's (SWT) Wisley and Ockham Commons Management Plan 2010-2020, which includes species population objectives for the qualifying features at Ockham and Wisley Common SSSI. This can be found at Section 4.4 of the Applicant's SIAA report. The Wisley and Ockham Commons Management Plan was also submitted to the examination by SWT at deadline 10.

Qualifying species potentially exposed to risk

Dartford warbler

- 5.16 Dartford warblers are found almost exclusively in lowland dry heathland and favour areas containing a mix of heather (Calluna vulgaris) and gorse (Ulex spp.). Dartford warblers particularly favour areas with tall dense gorse and tall mature heather for nesting. They are resident and can be found in heathland all year-round. The core breeding season is typically between April and June. They feed entirely on invertebrates, such as spiders and weevils, which are typically foraged in areas of shorter but structurally diverse vegetation.
- 5.17 NE's Supplementary Advice further confirms the importance of vegetation characteristics and structure for this species and identifies the optimal mix of vegetation to be maintained or restored in nesting areas with areas of structurally diverse vegetation (which is >50% cover of heather and/or gorse, <25 trees/ha and of 0.5-3 m height). It also confirms the strong association of this species with stands of gorse due to its high invertebrate biomass.
- 5.18 Section 4.5 of the Applicant's SIAA report describes the population estimates of the qualifying features of the Thames Basin SPA within the Ockham and Wisley Commons SSSI of the SPA. The Applicant's information was supported by breeding bird surveys undertaken at Ockham and Wisley Commons in 2016, 2017 and 2018 and data from 2Js Ecology⁸ for the period 2013-2018, as reported in Appendix B to the Applicant's SIAA report and shown on Figures 2a to 2k of the Applicant's HRA Figures (this includes all three qualifying species).
- The data indicates that current baseline for Dartford warbler at the Ockham 5.19 and Wisley Commons SSSI component of the SPA comprises three territories within Wisley Common and four within Ockham Common, equating to approximately 1.9% of the Dartford warbler territories compared with figures provided in JNCC (2016) "The status of the UKs SPAs in the 2000s: the Third Network Review", or 1.6% of the SPA territories compared to the figures at the point the SPA was designated. This indicates an increase in the population at the SSSI since the period 2003-2007 (the data period in SWT's 2010-2020) Wisley Ockham Management Plan). The 2010-2020 Wisley and Ockham Management Plan also includes a discretionary target for the SSSI to maintain the population of Dartford warbler at two individuals or above.

8 The Applicant's SIAA report explains that "2J's is a voluntary group of ornithologists who survey all of

the Thames Basin Heaths SPA sites every breeding bird season, to monitor the numbers of SPA qualifying species. The 2J's data for the Ockham and Wisley Commons component of the SPA is gathered by Surrey Wildlife Trust staff. This data is utilised by the RSPB and Natural England."

5.20 SWT also confirmed during the examination that SCC, as the landowner, and SWT, as the site manager, have reversed the fortunes of the protected heathland habitats on Wisley and Ockham over the last 20 years and that SPA bird populations have significantly increased due to the management works undertaken.

Woodlark

- 5.21 Woodlark are associated with heathland habitat and nest on the ground, often in more densely vegetated or tussocky areas of heathland, but also within recently cleared felled areas of coniferous plantation woodland. The core breeding season for woodlark is between February and June inclusive, but they can arrive for breeding as early as January and continue breeding into July. Woodlark require open areas with bare, short, sparse vegetation for foraging. They forage for all of their food on the ground. Key prey items of woodlarks are spiders, weevils, and caterpillars. Woodlark are known to forage within areas of open and unobstructed terrain, typically within 0.2km of their nesting areas. Open areas outside of the SPA boundary may include land adjacent to heathland, including grassland areas, arable fields, and golf courses. Woodlark also use wide rides and open areas in woodland plantation.
- NE's Supplementary Advice states that management should retain the open, mosaic structure of lowland wet and dry heath, ensuring that all life cycle stages of heather are present. It also identifies that occasional taller trees should be present to provide song posts. Areas of bare or sparsely vegetated ground created as a result of rotational forestry management can also be valuable. The Supplementary Advice confirms that areas of plantation forestry should continue to be managed by providing permanent open space and rotational clear-fell and restocking, which can temporarily create suitable breeding habitat for up to 10 years.
- 5.23 As described for Dartford warbler above, population estimates for woodlark were informed by the surveys and 2Js data. This information indicates that the current baseline for woodlark at the Ockham and Wisley Commons SSSI component of the SPA comprises one territory within Wisley Common and one within Ockham Common, equating to approximately 1.0% of the woodlark territories in the SPA when compared with figures provided in JNCC (2016) "The status of the UKs SPAs in the 2000s: the Third Network Review", or 1.3% of the SPA when compared to figures at the point the SPA was designated. This indicates a slight increase in the population at the SSSI since the period 2003-2007 (the data period in SWT's 2010-2020 Wisley and Ockham Commons Management Plan). The SWT 2010-2020 Wisley and Ockham Commons Management Plan includes a discretionary target for the SSSI of one individual or above.

European nightjar

- 5.24 Nightjar are summer visitors to the UK, arriving to breed between late-April to mid-May and typically departing in August. They nest within heathland and open areas of plantation woodland. Nightjars are insectivorous, feeding primarily on flying insects such as moths and beetles.
- 5.25 NE's Supplementary Advice states that habitat management should retain the open, mosaic structure of lowland wet and dry heath, ensuring that all life cycle stages of heather are present. It also states that it may, in certain areas, be appropriate to maintain scrubby vegetation and occasional taller trees should be available for the nightjar to 'churr' from. The advice for managed

- plantation woodland is that it should continue to be managed by providing permanent open space and by rotational clear-fell and re-stocking, which can temporarily create suitable breeding habitat for up to 10 years.
- 5.26 The Supplementary Advice confirms the importance of vegetation characteristics and structure for this species and the preference of nightjar for bare patches or areas of very short vegetation with widely scattered trees where they are able to see predators approaching. It identifies the optimal mix of vegetation to be maintained or restored throughout nesting areas, which typically comprises vegetation mostly of 20-60 cm with frequent bare patches of >2m², 10-20% bare ground and <50% tree/scrub cover overall; trees <2m in height.
- 5.27 As above, population estimates for European nightjar were informed by the surveys and 2Js data. This information indicates that the current baseline for European nightjar at the Ockham and Wisley Commons SSSI component of the SPA comprises three territories within Wisley Common and four within Ockham Common, equating to approximately 2.3% of the nightjar territories in the SPA when compared with figures provided in JNCC (2016) "The status of the UKs SPAs in the 2000s: the Third Network Review", or 2.7% of the SPA when compared to figures at the point the SPA was designated. This indicates an increase in the population at the SSSI since the period 2003-2007 (the data period in SWT's 2010-2020 Wisley and Ockham Commons Management Plan). The 2010-2020 Wisley and Ockham Commons Management Plan also includes a discretionary target for the SSSI to maintain the nightjar population at two individuals or above (75%), with a loss of one individual (25%) or more as unacceptable.

Current conservation status/condition

- As noted for the individual species above, the populations of the three qualifying features within the SPA in the component SSSI of Ockham and Wisley Commons have significantly increased since the point of both designation in 2005 and the SPA review undertaken in 2016. They are also higher than the discretionary targets set in the SWT 2010-2020 Wisley and Ockham Commons Management Plan.
- 5.29 The condition assessments of the SSSI, available through NE's designated sites view⁹ and linked from the NE's Supplementary Advice, identify that 54% of the SSSI is in 'favourable' condition and 46% is 'unfavourable recovering' condition. Of the nine SSSI units, the three 'unfavourable recovering' units include Bolder Mere, Ockham Common and land north of the M25. The latter unit is located outside of the SPA boundary. The habitats identified and assessed for favourable condition within the SSSI include lowland dwarf shrub heath and standing open water and canals.
- 5.30 NE and SWT confirmed during the examination that the management measures undertaken to date within the Ockham and Wisley Commons SSSI have facilitated the increase in the populations of the three qualifying features. SWT submitted to the examination at deadline 10 that there have been substantial increases in nightjar numbers (x3) in line with the increase in heathland areas and a reduction in pine woodland, and that there have been substantial increases in woodlark (x2) following forestry works and bare

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https://designatedsites.naturalengland.org.uk/SiteDetail.aspx?SiteCode=s1001052 (Accessed 07/02/2022)

- ground creation. A significant increase in Dartford warbler (x1.5) was also noted following the increase in heathland area.
- 5.31 NE confirmed at deadline 2 of the examination that the maintenance of the integrity of the SPA, and the maintenance of the favourable conservation status of the SSSI, is achieved to a satisfactory level through the management of the existing areas of open heathland and open water.
- 5.32 The Applicant reiterated their view on the current favourable condition of the SPA and the three qualifying features in their response to the Secretary of State's consultation of 20 January 2021, stating that the qualifying feature populations are demonstrated to be in favourable condition.

Habitat loss

- 5.33 The Applicant's assessment of habitat loss is presented in Section 7.2 (paragraphs 7.2.1 to 7.2.24) and summarised in Appendix E (HRA integrity matrix) of the Applicant's SIAA report.
- 5.34 The Applicant's SIAA report identifies that the Development will result in the permanent loss of 5.9ha of the Thames Basin Heaths SPA, together with a temporary loss of 8.7ha. The permanent loss is the equivalent of approximately 0.1% of the total area of the SPA; the temporary loss is also equivalent to 0.1% of the total SPA. In terms of the habitat loss within the Ockham and Wisley Commons SSSI, the permanent loss equates to approximately 2.7% of the SSSI and the temporary loss would be 3.9%, when compared to the total area of the component SSSI of 222.2ha.
- 5.35 The Applicant's HRA Annex A: Stage 1 Screening identified that the temporary and permanent land take within the SPA includes land for the junction improvements, a small amount of land take associated with the widening of the A3, the installation of a new gas mains crossing south of the M25 (change 5), two toad underpasses (change 2) and construction requirements, such as site compounds, including the Cockcrow Hill compound. The Applicant's HRA Stage 1 Screening confirmed that the non-material changes 1, 3, 4 and 6 did not result in any additional land take (temporary or permanent) from within the SPA.
- 5.36 The extent of the permanent and temporary land take from within the SPA is shown on Figure 1 of the Applicant's HRA Figures. Figure 3 also presents the Phase 1 habitat information for the area within and adjacent to the SPA in respect of the Development. The habitats within the SPA permanently lost to the Development comprise 5.8ha of Scots pine (*Pinus sylvestris*) dominated woodland and 0.1ha of open water at Bolder Mere¹⁰. Habitat within the SPA boundary temporarily lost comprises 8.7ha of Scots pine dominated woodland.
- 5.37 The breeding bird surveys undertaken and 2Js data confirmed that there were no records of the qualifying features within any of the woodland areas within the SPA, including those habitats within the DCO boundary. Section 4.7 and Section 7.2 of the Applicant's SIAA report describes the findings for the three qualifying features in more detail.

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¹⁰ Bolder Mere is described in the Applicant's ES Chapter 7: Biodiversity as "a shallow lake (approximately 1 m deep and 8.1 ha in size) supporting a mix of habitats including reedbed, mixed emergent vegetation, wetland acid bog and open water". Bolder Mere lies within the Ockham and Wisley Commons SSSI and is an interest feature of the SSSI.

- 5.38 The Applicant's SIAA report concludes that there would be no direct effects on the heathland habitat of the SPA and therefore no direct effect on the SPA qualifying features themselves or on their nesting or roosting habitat, due to their absence from within the Scots pine woodland area to be lost to the Development (as demonstrated by the bird surveys/data), the absence of functionally linked land for the qualifying features within the wider DCO boundary, and due to their nesting and foraging preferences.
- 5.39 The Applicant's SIAA report also describes that whilst the woodland lost to the Development does not directly support the qualifying features as a nesting or foraging resource, it does form habitat within the SPA boundary, which is considered to potentially contribute to the overall invertebrate resource, particularly for nightjar. However, the Applicant's SIAA report also explains that the heathland habitats are key to the invertebrate resource. The Applicant stated during the examination, and in response to the Secretary of State's consultations, that the identification of an adverse effect is a precautionary approach, as it is considered that the heathland habitats, rather than the woodland habitats, are likely to provide all of the invertebrate resource the qualifying features require.
- The conclusion reached in the Applicant's SIAA report is that whilst the loss of woodland habitat would not result in a physical reduction in the number or distribution of the qualifying features, it would reduce the overall size of the SPA and therefore would result in a reduction of habitat, such as a woodland buffer between the roads and open heathland areas. A loss of invertebrate resources could impact two targets identified in NE's Supplementary Advice and thus could interrupt progress towards achieving the conservation objectives of the SPA. These targets include food availability (maintain or restore the distribution, abundance and availability of key prey items at prey sizes preferred by all three of the qualifying species), and extent and distribution of supporting habitat for the breeding season (maintain the extent, distribution and availability of suitable breeding habitat which supports each of the three qualifying species for all necessary stages of their breeding cycle (courtship, nesting, feeding and roosting).
- 5.41 Adverse effects on integrity as a result of the permanent land take would result in a permanent reduction in the extent of habitat within the SPA, although it is noted that this habitat comprises plantation woodland that is not rotationally managed and does not provide suitable nesting, roosting or foraging habitat for the qualifying features. The temporary land take would be reinstated with shrub and tree planning; therefore, any adverse effects from the temporary loss would not be permanent but would be in the long-term (ie deemed to be up to 20 years, until the shrub and trees are established).
- The Applicant's SIAA concludes that it is not possible to ascertain that the above described loss of habitat would have no AEoI of the SPA alone, due to the potential reduction in the extent and/or distribution of SPA habitat of the three qualifying features and a potential reduction in food resource. This is confirmed to be on a precautionary basis by the Applicant, as described in their deadline 12 response to RHS, which states:

"The SiAA identified an adverse effect as a result of physical loss of established woodland, based on the precautionary approach that this could reduce the overall invertebrate resource of the SPA. This is based on the assumption that the complete clearance of 14.6 ha of woodland (5.9 ha permanent and 8.7 ha temporary) would result in the complete loss of invertebrates from this area. However, as explained the response

to question 4.4.13 on pages 16-18 of Highways England's comments to Deadline 10 submissions [REP11-007], it is considered highly likely that the existing 78 ha of heathland provides sufficient invertebrate resource to support the SPA qualifying species that are currently present. The consideration of the physical loss of established woodland potentially resulting in reduced invertebrate resource for the SPA is purely a precautionary approach".

Measures to mitigate habitat loss

- 5.43 The Applicant states in the SIAA report (also at Table D.2) that the final design option selected for the Development was the option that included the smallest land take from the SPA. The land take (or "Order limits") for the Development is shown on the Land Plans, the Works Plans and Temporary Works Plans. The Applicant's SIAA report also stated with regards to the one satellite compound in the SPA, that this has been restricted to the minimum size for its intended function. This is shown on the Scheme Layout Plans.
- Article 4(1) of the DCO grants development consent for the authorised development to be carried out only within the Order limits and the powers of compulsory acquisition and temporary possession under the DCO may only be exercised in respect of the areas shown on the Land Plans. Furthermore, Requirement 5 of the DCO secures that the authorised development must be designed in detail and carried out so that it is compatible with the preliminary scheme design shown on the Works Plans, the Scheme Layout Plans and the engineering drawings and sections, certified in the DCO, unless otherwise agreed in writing by the Secretary of State, following consultation with the relevant planning authority and the local highway authority on matters related to their functions, unless otherwise agreed by the Secretary of State, and provided that the Secretary of State is satisfied that any amendments would not give rise to any materially new or materially different significant environmental effects in comparison with those described in the ES.

Conclusion in respect of habitat loss

- 5.45 The Secretary of State notes that NE agrees with the Applicant's conclusion that there will be an AEoI on the Thames Basin Heaths SPA as a result of the Development arising from the permanent and temporary habitat loss. This is recorded in the final SoCG between the Applicant and NE. No other IPs disputed the Applicant's conclusion of an AEoI on the Thames Basin Heaths SPA due to habitat loss during the examination.
- The Applicant's SIAA report and accompanying submissions to the examination have been considered carefully by the Secretary of State, together with the Recommendation Report. The Secretary of State agrees with the view of the Applicant, NE and the ExA that there could be an AEoI on the Thames Basin Heaths SPA due to habitat loss as a result of the Development, which could conflict with the conservation objectives to 'maintain the extent and distribution of the habitats of the qualifying features' and 'maintain or restore the distribution, abundance and availability of key prey items'.
- 5.47 The Secretary of State therefore considers the requirements of Regulations 64 and 68 of the Habitats Regulations in relation to Alternative Solutions and Compensatory Measures in Sections 6 to 8 of this HRA Report.

Habitat degradation due to changes in air quality

- The Applicant's assessment of effects on the SPA arising from changes in air quality is presented in Section 7.2 (paragraphs 7.2.25 to 7.2.52) and summarised in the HRA matrix at Appendix E of the Applicant's SIAA report. Figure 4 of the Applicant's HRA Figures presents the estimated change in nitrogen deposition rates as a result of the Development for the year of opening (2022) and Figure 5 shows the estimated percentage change to the critical load of nitrogen deposition as a result of the Development for the year of opening (2022). Cross reference is also made to the Air Quality Assessment presented in ES Chapter 5.
- 5.49 A number of additional air quality calculations were provided during the examination, predominantly in response to issues/concerns raised by the RHS. A Technical Note on Air Quality Assessment was provided as Appendix B to the signed SoCG with NE, which provided an explanation of the updated air quality calculations submitted by the Applicant in light of issues raised by RHS in their written representations. Annex A to this HRA Report lists documents and submissions relevant to the assessment of air quality effects and HRA from the Applicant and IPs, including submissions by the RHS.
- 5.50 The Applicant's SIAA report identified three critical load class habitat types for the Ockham and Wisley Commons SSSI component of the SPA, as obtained from the Air Pollution Information System ("APIS") site information. The Applicant explained that it has taken the critical load of the SSSI to be 10kgN/ha/year, as this is the lower limit of the critical load for all three critical load class habitat types. A baseline year of 2015 is used for the Applicant's assessment. As confirmed in the Applicant's SIAA report, the data shows that the Ockham and Wisley Commons SSSI component of the SPA already exceeds the critical load for nitrogen deposition (Table 7 of the Applicant's SIAA Report baseline year of 2015). The RHS also submitted APIS information to the examination identifying that the maximum critical load for the qualifying features within coniferous woodland in the Thames Basin Heaths SPA is 22.26kgN/ha/yr. While the maximum critical load for the three qualifying species in dry heaths is 13.58kgN/ha/yr.
- 5.51 The Applicant agreed with NE that a potentially significant effect can be considered where there is an increase in the nitrogen deposition rate of 1%, or greater, of the critical load of a habitat as a result of the Development, when compared against predictions without the Development taking place. As noted in NE's 2018 guidance¹¹ submitted to the examination at deadline 3, a 1% change threshold is applied to determine whether more investigation is needed (ie at the screening for LSE stage) rather than confirming that there will be a significant effect. NE confirmed during the examination their satisfaction that the Applicant has adopted a precautionary approach to the air quality modelling and has followed appropriate guidance with respect to air quality.
- 5.52 The Applicant's SIAA report provides the Applicant's assessment of the impacts resulting from changes in nitrogen deposition during both construction and operation, together with dust emissions during construction. These impacts were considered in terms of the potential for degradation of habitats

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 $^{^{11}}$ Natural England's approach to advising competent authorities on the assessment of road traffic emissions under the Habitats Regulations. June 2018

- that support the three qualifying features of the SPA and their invertebrate food resource.
- 5.53 With regards to dust deposition during construction, the Applicant relies on the embedded mitigation measures described below to ensure there would be no adverse effects arising from dust deposition and concludes no AEoI.
- 5.54 With regards to nitrogen deposition, the Applicant estimated the changes in nitrogen deposition rates along six transects in the SPA and at distances of 5m to 75m from the M25 and A3, for both construction and operation, and calculated these as a percentage of the lowest range of critical load when comparing the construction of the Development at 2022 against no scheme at 2022. These are set out in Table 7 (changes as a result of construction) and Table 8 (changes as a result of operation) of the Applicant's SIAA report.
- 5.55 The Applicant's SIAA report describes that all increases in nitrogen deposition rates as a result of construction compared to the no Scheme are predicted to be less than 1% of the lowest range of the critical load (Table 7). The total nitrogen deposition during the construction is also still predicted to be below the current (2015) levels, due to predicted technological improvements between now and the time the Development would be operational.
- 5.56 During operation, and as for construction described above, the total nitrogen deposition with the Development during operation is predicted to be below the current (2015) baseline levels for all locations (due to predicted technological improvements in vehicle emissions between now and the time the Development is operational). The Applicant's assessment concludes no increases in nitrogen deposition greater than 1% of the relevant critical load within the SPA for transect 2, and although potential increases in nitrogen deposition were predicted in all other transects, the Applicant's SIAA report identified this would be within the first 12m from the operational boundary.
- 5.57 Table 8 of the Applicant's SIAA report was updated at deadline 5, with revised nitrogen deposition rates to take into account the following: "revised nitrogen deposition velocities that were released into DMRB guidance after the air quality assessment was undertaken; and traffic travelling to and from RHS Wisley and the A3 to the south using the signposted route, which is assumed by the traffic model to route via Ripley." The revised Table 8 also included nitrogen deposition rates for transect distances of 150m and 200m for completeness and to enable a full understanding of the changes in nitrogen deposition at the distances at which the heathland occurs. Revised Table 8 presents that levels, measured as a change between the with Development and no Development scenarios, would be below 1% beyond the following distances from the operational road edge: 25m at transect 1; 10m at transect 3; and 25m at transect 4. Transects 5 and 6 show a betterment with the Development at all distances when compared with no Development scenario. All locations within the SPA are shown to be subject to lower nitrogen deposition (both with and without the Development) than the current baseline.
- 5.58 The Applicant's assessment confirmed that for each of the transects within the SPA, the heathland habitats occur at a distance of 150m or greater from the roads, and any points closer than 150m fall within the woodland buffer present between the Development and the heathland habitats. This is supported by the survey information and data, as described earlier in this HRA report.
- 5.59 The Applicant concludes that, even after taking into account the revised nitrogen deposition rates (Table 8, deadline 5), the Development would not lead to an AEoI of the SPA as a result of air quality impacts. This is on the

basis that the nitrogen deposition rates at the distance at which the habitat that supports the qualifying features of the SPA occurs (ie 150m at the closest point), fall well below 1% of the lower range of the critical load for heathland. Additionally, all areas of the SPA would experience reduced nitrogen levels both with or without the Development (as modelled during operation at 2022 and taking account of autonomous measures¹² to improve air quality). In several locations, nitrogen deposition within the mature woodland will also be reduced with the <u>Development</u> when compared against the no Development 2022 scenario.

- The Applicant concludes, both in the Applicant's SIAA report and in later submissions responding to questions and challenges to the assessment of air quality effects, that changes to air quality as a result of the construction and operation of the Development would have no perceivable effect on any habitats within the SPA, nor the favourable conditions of the site upon which the qualifying species rely. Concluding that there would be no AEoI of the qualifying features of the Thames Basin Heaths SPA as a result of changes in air quality during construction or operation of the Development. The Applicant considers that a high level of confidence can be placed on this conclusion. The final SoCG with NE also confirmed agreement that AEoI from changes in air quality (during both construction and operation) can be excluded.
- 5.61 The Secretary of State notes that a number of questions were raised by the ExA during the examination regarding the assumptions made by the Applicant in the air quality assessment. The Applicant's assessment of air quality effects on the SPA, including the assessment methodology and conclusion on adverse effects on integrity has been contested by the RHS throughout the examination, as set out in ER 6.6.15 to 6.6.48 of the Recommendation Report. The RHS maintained their standpoint in relation to the Applicant's conclusion of no AEoI arising from air quality changes during the decision period, as detailed in their submissions in response to the Secretary of State's consultations.
- 5.62 The RHS raised the following concerns regarding the methodology, as summarised in the Recommendation Report:
 - the inclusion of NOx calculations;
 - inclusion of ammonia emissions;
 - nitrogen deposition velocities;
 - air quality effects on mature woodland/woodland 'buffer';
 - air quality effects on invertebrate resource; and
 - air quality effects on heathland restoration.
- 5.63 These matters are discussed below, together with the points raised in the responses to the Secretary of State's consultations.

The Applicant's assessment methodology – inclusion of NOx calculations; inclusion of ammonia emissions; and nitrogen deposition velocities

5.64 The Secretary of State has reviewed the information and representations provided to the examination, together with the findings of the

¹² These include predicted technological improvements in vehicle emissions between now and the time the Development is operational

Recommendation Report, and submissions in response to the Secretary of State's consultations and considers the Applicant's methodology and approach to assessment to be robust and appropriate. This position is supported by NE, as confirmed in their signed SoCG with the Applicant (including the meeting note of 24 January 2020 submitted as Appendix A to the SoCG), which provides evidence that the Applicant's assessment methodology had been agreed with NE. It also includes agreement with the Applicant that with regards to NOx calculations, DMRB LA105 air quality guidance does not require NOx concentration screening but focuses instead on nitrogen deposition, and that nitrogen deposition is the pertinent issue when considering AEoI. Although the Applicant maintained its view that this is unnecessary, the Applicant also provided NOx screening information from the ES relevant to receptor points within the SPA. This identified that there would be no exceedances of the 30 $\mu g/m^3$ critical level for NOx at any of the receptor points.

- 5.65 With regards to ammonia, NE confirmed that: it does not have specific guidance or rationale regarding the assessment of ammonia for effects from motor vehicles; the Applicant has followed relevant guidance on the pollutants to assess the Development; and it was satisfied that this matter had been addressed by the Applicant. NE stated its satisfaction that the Applicant had demonstrated adequately that even with the inclusion of ammonia deposition, there is no likely significant effect on the habitat features supporting the qualifying features of the SPA.
- 5.66 With regards to nitrogen deposition velocities, the final, unsigned SoCG between the Applicant and the RHS at deadline 8 stated agreement on the velocities used. The final SoCG with NE also stated agreement has been reached on the conclusions of the Applicant's SIAA in light of the updated nitrogen deposition rates.
 - Air quality effects on mature woodland/'woodland buffer' and on invertebrate resource
- As described above, the qualifying features of the SPA are heathland birds and in this location the SPA comprises a mixture of heathland and woodland habitats, the latter consisting of deciduous and coniferous trees. As noted by the ExA, the SPA was designated under the provisions of the Birds Directive because of the presence of the three specific qualifying bird species. Unlike SACs, within SPAs the habitat that supports the qualifying features is not subject to express protection under the Habitats or Birds Directives, as transposed into UK law by the Habitats Regulations.
- The Applicant's assessment demonstrates that there would be some increase in nitrogen deposition within the coniferous woodland areas of the SPA that adjoin the M25 and A3, such that the critical load for coniferous woodland of 10kgN/ha/yr would continue to be exceeded, for at least the time as vehicle type and numbers continue to be dominated by petrol or diesel fuelled vehicles. However, the Applicant's assessment also shows that the heathland areas of the SPA, which have been demonstrated by the Applicant's bird surveys and 2Js Ecology baseline data as described above, to provide the habitat in which the qualifying features are present (and which lies further than 150m from the Development boundary), would continue to be subject to a load of less than 10kgN/ha/yr. This is due to the declining concentration of nitrogen deposition with distance from the source (in this case the vehicles using the M25 and A3). The Applicant concludes that the heathland habitats

favoured by the qualifying features would be unaffected by nitrogen deposition and would continue to be available to the qualifying features. The Applicant also identifies that the operational nitrogen deposition for all transects within the SPA will experience lower deposition levels than the current baseline. The signed SoCG between the Applicant and NE records agreement in this regard.

- The opinion of David Forsdick QC and submissions of Freeths LLP and Richard Max & Co, submitted on behalf of the RHS and in response to the Secretary of State's consultations, have focused on the role of the woodland habitat close to the M25 and A3 (referred to during the examination as the 'buffer') and this has been a key area of discussion and dispute between the RHS and the Applicant, both during and following the examination. The principal contention of the RHS is that the coniferous woodland habitat in this location is in fact 'supporting habitat' for the qualifying features of the SPA, and for nightjar and woodlark in particular, when having regard to the proper interpretation of the conservation objectives. The RHS contend that an adverse effect cannot be ruled out on the basis that these woodlands have a target of 10kg N/ha/yr nitrogen deposition, as specified in NE's Supplementary Advice, and this target is being exceeded, so affecting the insect resource in that area and thus meaning that the conservation objectives to restore are not met.
- 5.70 In the opinion of David Forsdick QC, the RHS also criticised the Applicant's conclusion that the predicted changes in air quality/nitrogen deposition will not adversely affect the current baseline within the woodland buffer or the current insect resource largely because of the autonomous measures (see paragraph 5.59 above) and have argued that this wrongly treats the absence of a net worsening (once off-setting autonomous measures are taken into account) as sufficient. The RHS argues that this reveals an incorrect approach to the conservation objectives, in cases where an SPA is not in favourable condition and where there is a conservation objective to restore the supporting processes.
- 5.71 The role of the mature woodland/woodland area adjoining the M25 and A3 and the question of whether in the context of the conservation objectives and Supplementary Advice it forms supporting habitat, was explored by the ExA during the examination and addressed in further responses from the Applicant and the RHS to the Secretary of State's consultations.
- 5.72 During the examination, NE responded to the ExA's questioning on the matter of the woodland and its function. NE confirmed that it considers the mature woodland immediately adjoining the M25 and A3 functioning as an important buffering role, forming a physical barrier between the SRN and heathland habitats of the SPA, the latter of which are primarily inhabited by the qualifying features. NE stated that:

"Any woodland immediately adjacent to the M25 and A3 is likely to have an important 'buffering' function in respect to the maintenance of the SPA, that is it may help to ameliorate the potential effects of raised nutrient levels from vehicle emissions (by helping to disperse emissions), it helps to provide a barrier against litter arising from the road reaching open heathland and may help to reduce the risk of fires spreading from the roadside and into open heath. These would not be considered to be critical functions by Natural England but they are important in this location."

5.73 NE further confirmed to the examination that it has consistently advised against removal of the woodland 'buffer' in areas alongside the M25 and A3,

- given that the presence of these belts of mature trees provide an effective mechanism to disperse vehicle emissions away from sensitive habitats alongside busy roads. The final SoCG between the Applicant and NE records agreement that the woodland areas to be lost do not support the qualifying bird species.
- 5.74 The Applicant responded to the RHS' assertion that the mature woodland 'buffer' is supporting habitat both during the examination and in response to the Secretary of State's further consultations. The Applicant's view with regards to the role of this habitat is that it does not form part of the principal habitats supporting the SPA qualifying features, namely 'lowland heathland and rotationally managed coniferous woodland', as specified in the Supplementary Advice for the SPA. Additionally, with reference to the habitat requirements for the species described in the Supplementary Advice, and in particular that for nightjar and woodlark, the requirements for continuous management of coniferous plantation woodland by providing "permanent open space and by rotational clear-fell and re-stocking, which can temporarily create suitable breeding habitat for up to 10 years." The Applicant identifies that there are no areas of rotationally felled and replanted woodland within the Ockham and Wisley Commons SSSI and the woodland buffer area comprises entirely of mature woodland several decades in age. Therefore, it does not contain the type of rotationally managed habitats these two qualifying features require. The Applicant and NE's position is also supported by SWT, who manage the SSSI.
- 5.75 The Applicant contends that this mature woodland habitat therefore does not form a supporting habitat in the context of the conservation objectives and is not a habitat of the qualifying features. The Applicant's SIAA report acknowledges that the established woodland 'buffer' may contribute to the wider invertebrate resource within the open heathland, as could any adjacent areas such as road verges, but states that this does not necessarily make them supporting habitat. The Applicant states that in line with their precautionary approach, the potential contribution to the invertebrate resource was considered, with the potential for some flying invertebrates flying out of the woodland and into open heathland, forming a small part of a nightjar's food resource. However, the Applicant considers it more than likely that the open heathland provides all the invertebrate resource that nightjars require. The Applicant confirmed that due to their feeding preferences, this flying invertebrate resource in the mature woodland does not benefit woodlark or Dartford warbler. Discussions on the matter of invertebrate resource in the woodland were also held during the examination, as reported in ER 6.6.42 to 6.6.45. NE and SWT explained that overall abundance of invertebrates is likely to be of most importance to the qualifying features, and nightjar in particular. NE agreed with the Applicant that the woodland buffer may contribute to the invertebrate resource, but that the predicted changes in air quality would be insufficient to change the resource such that it would affect the qualifying features of the SPA.
- 5.76 The RHS questioned, both during the examination and in response to the Secretary of State's further consultations, whether the conservation objective to maintain or restore "The supporting processes on which the habitats of the qualifying features rely" applies to the mature woodland 'buffer'. The Applicant responded during the examination, and in response to the further consultations, that the invertebrate resource is not a 'supporting process on which the habitats of the qualifying features rely', as the invertebrates are not relied upon for the heathland to function. The Applicant also reiterated that

- the SIAA report concluded a potential for AEoI because of the physical loss of mature woodland, very much on the precautionary basis that this could reduce the overall invertebrate resource.
- 5.77 With regards to the air quality target in the supplementary advice "Restore as necessary concentrations and deposition of air pollutants to at or below the site-relevant Critical Load or Level values given for this feature of the site on the Air Pollution Information System¹³", the Applicant said that this target does not apply to the mature woodland buffer as it is not supporting habitat. The Applicant also referred to NE guidance¹¹ which states that a site's conservation objectives are unlikely to apply equally to all parts of a site. The Applicant considered that reference to 'this feature' in the advice related to the qualifying features in their principal habitats (ie lowland heathland and rotationally managed plantation woodland), as set out in the Supplementary Advice and APIS website. It is noted that the APIS website justifies the use of broad habitat type 'coniferous woodland' (EUNIS code G3) on the basis that this "EUNIS class contains, overlaps with or is contained within the Broad Habitat, or component of the broad habitat in which the feature occurs and represents the most equivalent EUNIS class for which a critical load is set." Thus, the Applicant considers that whilst this target applies to the heathland present in the component SSSI of the SPA, given that there is no rotationally managed plantation woodland, it does not apply to the mature woodland "buffer".
- 5.78 The Applicant also commented on the wording in the supporting/explanatory notes to NE's Supplementary Advice in respect of the air quality target and its reference to affecting the "quality and availability of nesting, feeding or roosting habitats". The Applicant contended that this makes clear that the air quality target in the Supplementary Advice relates to the nesting, feeding and roosting habitats, which again are principally the heathland habitats and not the mature woodland buffer.
- 5.79 There is clearly a difference of opinion with respect to the correct interpretation of the conservation objectives, definition of supporting habitat, and the Supplementary Advice in respect of air quality. The Secretary of State notes that NE confirmed during the examination in response to the ExA's questions that they are "...satisfied that Highways England properly understands the conservation objectives for Thames Basin Heaths SPA, including how those relate to the Ockham and Wisley Commons SSSI component". NE's agreement with the Applicant's conclusion in respect of air quality effects and no AEoI as a result of the Development due to changes in air quality also supports the Applicant's position in this regard.

Secretary of State's conclusion

5.80 The Secretary of State considers that the Applicant's modelling demonstrates beyond reasonable scientific doubt that there will be no discernible effect on the nitrogen deposition rates at a distance of 150m from the SRN (ie within the heathland principal habitats of the SPA) as a result of the Development. The Applicant's surveys, desk-based data, and known habitat preferences of the qualifying features, together with confirmatory agreements between the Applicant, NE and SWT also confirm that the qualifying features are routinely recorded within the heathland habitats and are not primarily found within the

¹³ For the nightjar qualifying feature

mature woodland buffer adjoining the SRN. The only qualifying feature that is considered likely to rely in some form on invertebrate resource within the mature woodland buffer is the nightjar. Whilst the APIS website containing the site relevant critical loads information for the Thames Basin SPA identifies for all three qualifying features that the heathland habitat is sensitive to nitrogen deposition and thus there could be a potential negative impact on these species due to impacts on the species' broad habitat identified as heathland, the Secretary of States notes that the APIS website states that nightjar are not sensitive to nitrogen deposition in the broad habitat identified as coniferous woodland, and states there is "No expected negative impact on species due to impacts on the species' broad habitat." The APIS website states in respect to the woodlark qualifying feature only that the broad habitat type coniferous woodland is sensitive to nitrogen deposition. However, due to the habitat and feeding preferences of woodlark, as explained in paragraphs 5.21 to 5.23 above, and as supported by the survey and desk study information, it is considered that any air quality changes within the woodland buffer would have no adverse effect on this qualifying feature. Additionally, Dartford warbler are solely reliant on heathland habitats and associated invertebrate resource with the heathland. The woodland buffer does not contribute to their invertebrate food resource and rotationally managed coniferous plantation woodland is not identified as a supporting habitat for Dartford warbler on the APIS website. Any air quality changes within the woodland buffer would therefore have no adverse effect on the Dartford warbler qualifying feature.

- The predicted continued exceedance of the (lower) critical load of 10kgN/ha/yr within the SPA boundary in parts of the mature woodland buffer with the Development is noted by the Secretary of State. However, this predicted deposition during operation is also noted to be much lower than current baseline levels. Although predicted deposition with the no Development scenario would also be lower than the current baseline, the predicted percentage change between the with Development and no Development scenario is also shown to be much less than 1% of the lower range of critical load at distances beyond 25m from the SRN, and in some areas of the mature woodland (transects 5 and 6), the Development scenario would represent a betterment when compared with the no Development scenario.
- The Secretary of State notes the continued dispute with regards to whether the mature woodland buffer is 'supporting habitat' within the meaning of the conservation objectives and Supplementary Advice, and whether the air quality target applies specifically to this area. The Secretary of State is persuaded by the Applicant's view, as supported by NE (the appropriate nature conservation body, also responsible for the conservation objectives and Supplementary Advice) and SWT (as managers of the SSSI), that the conservation objectives and supplementary advice do not apply equally to all areas of an SPA, coupled with the evidence that this mature woodland area is not rotationally managed to maintain or restore the population of the qualifying features in this component SSSI of the SPA.
- 5.83 Additionally, and in any event, the assessment of AEoI needs to involve more than identifying whether there is currently an exceedance of the APIS critical load for that habitat type. The Secretary of State when determining AEoI has therefore considered the extent of the affected area of woodland buffer habitat that would be subject to changes in air quality, the significance and implications of such change for the qualifying features of the European site and for the achievement of the conservation objectives, the role of the mature woodland buffer and any proposed future changes to future management of

- the SPA in this location, together with the expected future trend in air quality for this area, both with and without the Development.
- 5.84 The Secretary of State considers the area of the mature woodland buffer that would experience some increases in nitrogen deposition compared with the no Development scenario is small and not within an area primarily used by the qualifying features. The three qualifying features have been shown to be doing well in this location, with numbers increasing since designation and over time, and it is apparent to the Secretary of State that the management of the SSSI, in particular the heathland habitats, for the benefit of the three qualifying features has resulted in these increases and is more likely to influence the distribution of the qualifying features than the effect of air quality changes to the mature woodland buffer in this location. Additionally, as noted in paragraph 5.80 above, the only qualifying feature that is likely to rely in some form on invertebrate resource within the mature woodland is the nightjar. The Secretary of State notes that the APIS website containing the site relevant critical loads information for the Thames Basin SPA states that nightjar are not sensitive to nitrogen deposition in the broad habitat identified as coniferous woodland, and states there is "No expected negative impact on species due to impacts on the species' broad habitat."
- The Secretary of State notes the air quality target in the Supplementary 5.85 Advice to the conservation objectives for nightjar states "restore as necessary the concentrations and deposition of air pollutants to at or below the siterelevant Critical Load or Level values given for this feature of the site on the Air Pollution Information System (www.apis.ac.uk)". The air quality objective being "maintain or restore as necessary..." for woodlark and Dartford warbler. The Secretary of State considers that on the basis of the evidence provided that has demonstrated the favourable condition of the population of qualifying features of the SPA and in this component SSSI, which has been attributed to the successful management of the heathland habitats within the SSSI, coupled with the role the mature woodland provides as a buffer between the SRN and the principal habitats of the qualifying features (ie heathland), meeting the air quality target by restoring the concentrations and deposition of air pollutants to at or below the site-relevant Critical Load or Level values in this location is not, in the opinion of the Secretary of State, necessary in order to ensure there would be no AEoI arising from the Development, nor would the Development hinder the achievement of such a target.
- The Secretary of State has considered the significance of the exceedances for the qualifying features of the SPA against the conservation objectives and considered whether there is credible evidence that there is a real risk of the conservation objectives being undermined by potential air quality changes arising from the Development. The Secretary of State concludes that the potential changes to air quality, including nitrogen deposition increases predicted in parts of the woodland buffer habitat of the SPA with the Development, would not have a detrimental effect on the qualifying features or their supporting habitat and would not undermine the conservation objectives and thus would not lead to an AEoI on the Thames Basin Heaths SPA.

Air quality effects on heathland restoration

5.87 The RHS also argued during the examination (maintained in response to the Secretary of State's consultations), that the air quality effects of the Development would prevent the future restoration of the mature woodland

- adjacent to the M25 and A3 to heathland, and that air quality effects on woodland had not been considered.
- 5.88 The ExA explored this matter during the examination, including any implications for the Applicant's SPA MMP. The Applicant confirmed the distinction between the areas to be thinned as part of the SPA MMP and the woodland buffer, which is to remain following completion of the Development. NE reiterated their view during the examination that the achievement of favourable condition for this component part of Thames Basin Heaths SPA is dependent upon improvement of condition of the existing heathland resource, not expansion of heathland through large-scale felling of woodland. NE confirmed that there is no plan to restore the woodland 'buffer' area to heathland. The Development is not considered to prevent the proposed management measures for the SPA achieving their aim in the longer-term. NE also responded that

"In the event that a decision is made to create heathland or some other habitat in place of the existing woodland buffer raised nutrient levels may be a factor which would have to be taken into account when planning operations but it would not be an insurmountable problem. There are many cases where heathland and other habitats of biodiversity value have been created close to busy roads. These projects need careful planning and different management techniques in comparison with lower nutrient solutions. However, they are achievable."

- 5.89 The Secretary of State concurs with the ExA based on the evidence submitted to the examination that this woodland buffer is distinct from areas to be thinned as part of the SPA MMP and that changes in air quality would not undermine the success of future restoration.
 - Measures to mitigate air quality
- 5.90 The embedded measures to minimise the incidence of dust emissions during construction are identified in Table D.1 of the SIAA report and included in the Applicant's outline CEMP and REAC. Requirement 3 of the DCO secures the CEMP to be produced substantially in accordance with the outline CEMP. Both the REAC and outline CEMP are certified documents in the DCO.
- 5.91 Requirement 3(2)(c)(iii) of the DCO also requires a management plan for the control of dust, odour, and smoke to be included in the CEMP.
 - In combination effects
- The Applicant's SIAA report considered the in combination projects and plans described at paragraph 5.5 to 5.7 above. The Applicant concludes no AEoI of the SPA due to changes in air quality in combination with other projects and plans. The Secretary of State notes dispute remaining between the Applicant and RHS with regards to the Applicant's in combination assessment. The final SoCG between the Applicant and NE confirms agreement with the scope and findings of the Applicant's in combination assessment. Having reviewed the evidence provided to the examination and in response to the Secretary of State's further consultations, the Secretary of State agrees with the scope of the Applicant's in combination assessment and is content the Applicant has identified and considered the relevant plans and projects with the potential to have in combination effects. The Applicant's assessment of potential air quality effects from increased traffic considers forecast traffic growth based on a

- combination of background growth and relevant other developments and therefore accounts for any in combination effects.
- 5.93 The Secretary of State concurs with the findings of the Applicant that there would be no AEoI on the Thames Basin Heaths SPA arising from the Development in combination with any other plans or projects for the reasons given by the Applicant. In reaching this conclusion the Secretary of State has considered the advice of NE, as the ANCB, who also agree with the Applicant's position.

Conclusion in respect of air quality changes

- 5.94 The Secretary of State is confident that the measures proposed by the Applicant to minimise dust emissions during construction will be effective. With these measures in place the Secretary of State concludes that there would be no AEoI on the Thames Basin Heaths SPA and its qualifying features as a result of the construction of the Development either alone or in combination with other plans or projects.
- 5.95 The Secretary of State also concludes that there would be no AEoI arising from air quality changes during the operation of the Development, either alone or in combination with other plans or projects. The Secretary of State acknowledges that the RHS disagrees with this conclusion but considers that the available information supports its finding of no AEoI of the Thames Basin Heaths SPA beyond all reasonable scientific doubt as a result of changes to air quality.
- 5.96 The final signed SoCG between the Applicant and NE [REP8-022] confirms agreement with the Applicant's conclusion that there would be no AEoI arising from changes to air quality and the Secretary of State agrees with those conclusions.

Habitat degradation due to changes in water quality

Alone

- 5.97 The Applicant's assessment of effects to the SPA arising from changes to water quality, including consideration of surface water, groundwater and flood risk effects, is presented in Section 7.2 (paragraphs 7.2.53 to 7.2.66) and summarised in the HRA matrix at Appendix E of the Applicant's SIAA report.
- 5.98 Section 7.2 concludes that the dietary and habitat requirements of the qualifying features demonstrate a strong reliance on heathland habitats for foraging and invertebrate resource, rather than any wetland habitats or associated wetland invertebrates. The Applicant's assessment therefore focused on any potential adverse effects arising from changes to hydrology and water quality at the surrounding heathland areas from both construction and operation of the Development.
- 5.99 The Applicant's SIAA report considers temporary impacts during construction arising from potential impacts such as the mobilisation of sediments or contaminants, through activities such as excavation and deposition of soils, accidental spillages, and surface water run-off. Potential impacts considered during the operational phase of the Development include uncontrolled surface water run-off from drainage, flood risk, and accidental spillages.

Measures to mitigate water quality

- 5.100 The embedded measures to mitigate for changes in hydrology and/or water quality during construction and operation are identified in Table D.1 of the Applicant's SIAA and included in the Applicant's outline CEMP and REAC. Table D.2 of the Applicant's SIAA report identifies one HRA-specific measure for water quality during operation the proposed drainage design to ensure runoff from the Development is attenuated before reaching watercourses.
- 5.101 Mitigation measures for effects on hydrology and water quality are included in more detail in ES Chapter 8 (Section 8.9), the WFD Compliance Assessment Report, and in the outline CEMP and REAC at Tables G.1 to G.4. These measures, including industry standard best practice measures, are ultimately to be delivered through contractual requirements and the CEMP and associated management plans¹⁴. DCO Requirement 3 secures the CEMP, substantially in accordance with the outline CEMP. The outline OEMP and REAC are certified documents in the DCO.
- 5.102 Requirement 3(c) of the DCO also secures that the CEMP must include the following management plans and method statements of relevance to the protection of hydrology/water quality: the management of materials; the management and storage of topsoil; the management of site waste; the protection and drainage of surface water and groundwater; the protection of ecological habitats and species; and pollution prevention plan and procedures for dealing with any unexpected environmental emergencies.
- 5.103 The DCO includes a specific requirement for the protection of the Bolder Mere waterbody at Requirement 10. This secures that no part of Work No 5(c) is to commence until details of the environmental mitigation and enhancement measures to be undertaken in the Bolder Mere mitigation and enhancement area (Work No.55) have been submitted to and approved in writing by the Secretary of State, following consultation with the Environment Agency (EA), NE, SCC and the relevant planning authority. The details must substantially accord with the ES and WFD Report, which are certified by the DCO. Requirement 10(3) also includes for the submission to and approval of the surface water drainage and pollution control measures by the Secretary of State, following consultation with the EA, NE, SCC and the relevant planning authority, and that the authorised development must be constructed in accordance with the detailed drainage scheme approved (Requirement 10(4)).
- 5.104 The preliminary drainage design for the Development, including the location of attenuation ponds and attenuation ditches, is shown on the Scheme Layout Plans. A drainage strategy report was also included at Appendix 8.1 to the ES, as submitted with the DCO application. The REAC states that a "permanent drainage system will be developed and approved by relevant parties before the construction phase commences". Requirement 5 of the DCO secures that the authorised development must be designed in detail and carried out so that it is compatible with the preliminary scheme design shown on the Scheme Layout Plans, which are certified in the DCO, unless agreed by the Secretary of State, and provided that the Secretary of State is satisfied that any amendments would not give rise to any materially new or materially different significant environmental effects in comparison with those described in the ES.

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¹⁴Also referred to as Environmental Control Plans (ECPs) in the Applicant's outline CEMP, which are proposed to form Appendix F to the final CEMP

- 5.105 The final SoCG between the Applicant and the EA records the discussions with respect to Bolder Mere and agreement with the proposed mitigation, including Requirement 10 of the DCO. The final SoCG between the Applicant and NE records agreement with the findings of the Applicant's SIAA report in respect of hydrology/water quality.
- 5.106 The Secretary of State is satisfied that the measures proposed through both the design and DCO Requirements 3 and 10, secure and deliver best practice measures to conclude no AEoI due to changes in hydrology/water quality.

In combination effects

5.107 The Applicant's SIAA report considered the in combination projects and plans described at paragraph 5.5 to 5.7 above. The Applicant concludes no AEoI to the SPA due to changes in hydrology/water quality in combination with other projects and plans. The final SoCG between the Applicant and NE confirms agreement with the findings of the Applicant's assessment.

Conclusion in respect of water quality changes

- 5.108 The final signed SoCG between the Applicant and the EA confirms agreement with the package of mitigation measures and the mechanism for delivery, subject to matters to be agreed at the detailed design stage. It also confirms agreement with the Applicant's conclusion that there would be no AEoI arising from changes in hydrology/water quality. The Secretary of State notes that no other IPs have disputed the Applicant's conclusion of no AEoI due to changes in hydrology/water quality.
- 5.109 The Secretary of State is satisfied that the design and control measures proposed are secured such that there would be no AEoI on the Thames Basin Heaths SPA due to potential changes to hydrology/water quality, either alone or in combination with other plans or projects.

Habitat degradation due to the spread of INNS during construction

Alone

- 5.110 The Applicant's survey methodology and findings in respect of INNS is presented in ES Chapter 7: Biodiversity. The ES explains that during the Phase 1 habitat survey and NVC survey, a search for invasive plants was undertaken within the DCO boundary. In addition, observations of invasive animal species were recorded during the Phase 1 habitat survey and other field surveys for protected or notable species. ES Chapter 7 identified that aquatic INNS (including Nuttall's waterweed (*Elodea nuttallii*), New Zealand Pygmy weed (*Crassula helmsii*), carp (*Cyprinus carpio*) and Turkish crayfish (*Astacus leptodactylus*)) were recorded in Bolder Mere. A number of plant INNS were also recorded within the SPA during the surveys, including Rhododendron, Japanese knotweed (*Fallopia japonica*) and Indian Balsam (*Impatiens glandulifera*).
- 5.111 The Applicant's consideration of habitat degradation due to the spread of INNS is presented in Section 7.2 (paragraphs 7.2.119 to 7.2.120) of the Applicant's SIAA report and summarised in the HRA matrix at Appendix E of the Applicant's SIAA report. The Applicant's HRA Annex A: Stage 1 Screening identified that the movement of machinery and the works during construction has the potential to cause the spread of any non-native invasive plants that may be present within the DCO boundary. This in turn could have an adverse

effect on the habitat communities within the SPA that support the qualifying species.

Measures to mitigate spread of INNS during construction

- 5.112 The Applicant's SIAA report at Table D.1 identifies that as part of a Precautionary Method of Working, a check for INNS will be undertaken prior to all works commencing, and that any INNS will either be avoided or removed by a suitably qualified specialist.
- 5.113 The outline CEMP and REAC include for the carrying out of invasive species surveys prior to construction, the preparation of INNS control method statements and the implementation of any requirements of the method statements. Management plans would also be produced detailing the methods of control and disposal. These would be implemented through the final CEMP which is secured by Requirement 3 of the DCO and is required to be substantially in accordance with the outline CEMP certified by the DCO. Requirement 3(c) includes for the production of a management plan for the control of invasive species.

In combination effects

5.114 The Applicant's SIAA report considered the in combination projects and plans described at paragraph 5.5 to 5.7 above. The Applicant concludes no AEoI of the SPA due to the spread of INNS in combination with other plans and projects. The final SoCG between the Applicant and NE confirms agreement with the findings of the Applicant's assessment.

Conclusion in respect of the spread of INNS

- 5.115 The final signed SoCG between the Applicant and NE confirms agreement with the Applicant's conclusion that there would be no AEoI arising from the potential spread of INNS. The final signed SoCG between the Applicant and the EA also record agreement with regards to the assessment and mitigation in respect of Bolder Mere. The Secretary of State notes that no other IPs have disputed the Applicant's conclusion of no AEoI due to the spread of INNS.
- 5.116 The Secretary of State is confident that the measures proposed by the Applicant to identify and control the spread of INNS will be effective. With these measures in place the Secretary of State concludes that there would be no AEoI on the Thames Basin Heaths SPA and its qualifying features as a result of the Development either alone or in combination with other plans or projects.

Disturbance due to changes in noise

Alone

- 5.117 The Applicant's assessment of disturbance due to changes in noise during construction and operation is presented in Section 7.2 (paragraphs 7.2.67 to 7.2.89) of the Applicant's SIAA report.
- 5.118 Predicted construction noise levels after mitigation at different distances are shown in Table 9 of the Applicant's SIAA report. Figures 7 and 8 of the Applicant's HRA Figures also present the predicted daytime and night-time noise levels as contours. These demonstrate that the existing noise levels within the SPA are already greater than 60dB throughout the heathland areas on Wisley Common during the daytime (and over 55dB at night-time) and 55dB throughout the heathland areas at Ockham Common (day and night).

- Figure 6 presents the location of the territories of the SPA qualifying features, which are all located greater than 200m from the Development boundary.
- 5.119 The Applicant's SIAA report concludes that the construction activities, with the exception of bridge demolition activities, will not lead to increased disturbance of qualifying species, as the levels of noise resulting from the construction activities will be lower than the background noise in the heathland where the qualifying species occur and only lead to minor increases in background noise.
- 5.120 With respect to the bridge demolition activities, each bridge demolition will take place during a single night closure so a higher noise level (approximately 68dB at 200m) would be extremely short in duration. Piling activities would result in some temporary, localised increases but the piling locations along the A3 are located over 200m from the qualifying feature breeding territories.
- 5.121 Figures 10 and 11 of the Applicant's HRA Figures present the daytime and night-time noise levels during operation. These show that noise levels in the SPA (Ockham and Wisley Commons SSSI component) will either increase by 1dB or decrease by 3dB as a result of the Development. The reductions are due to the use of low noise road surfacing. Any localised increases of ≥3dB fall within the retained woodland buffer immediately adjacent to the M25 and do not occur within the heathland areas of the SPA or SPA enhancement areas¹⁵. The heathland areas where the qualifying features occur, all potential functionally linked habitat and the proposed heathland creation areas would be subject to increases of less than 1dB or decreases of up to 3dB in background noise levels. The Applicant therefore concludes, with reference to DMRB Volume 11, that changes as a result of noise are classed as negligible longterm changes and do not have any measurable effect on the SPA qualifying species.
- 5.122 The SoCG between the Applicant and NE confirms that NE agree with the Applicant's conclusion in respect of no AEoI due to noise disturbance during construction or operation.

Measures to mitigate noise

- 5.123 The embedded measures to mitigate for changes to noise during construction are identified in Table D.1. These measures are included in the Applicant's outline CEMP and REAC. Requirement 3 of the DCO secures the CEMP to be produced substantially in accordance with the outline CEMP. In respect of low noise surfacing, and in response to the ExA's first written question 1.1.10, the Applicant also submitted Document '9.22 Plans detailing Road Surfacing' to show the geographical extent of the carriageway surfacing works. This document is certified at Schedule 11 of the DCO.
- 5.124 Table D.2 of the Applicant's SIAA report identifies as an HRA-specific measure that the Development will include new noise barriers at M25 Junction 10 and low noise road surfacing along the A3. These will be similar in specification to the existing noise barriers but more extensive. Figure 9 of the Applicant's HRA Figures shows the extent of the changes to the noise barriers. Works No 61 of the DCO includes the new or replacement environmental barriers, as also shown on the Works Plans.

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¹⁵ See Section 8 of the HRA Report below

In combination effects

5.125 The Applicant's SIAA report considered the in combination projects and plans described at paragraph 5.5 to 5.7 above. The Applicant concludes no AEoI of the SPA due to changes in noise in combination with other plans and projects. The final SoCG between the Applicant and NE confirms agreement with the findings of the Applicant's assessment. The Secretary of State is satisfied that there would be no additional effects from other plans or projects that could act in combination with the Development to result in AEoI.

Conclusion in respect of disturbance

5.126 Having considered the measures above, the Secretary of State is satisfied that they are secured by relevant provisions in the DCO and concludes that with the implementation of such measures, there would be no AEoI to the Thames Basin Heaths SPA as a result of disturbance due to noise, either alone or in combination with other plans or projects.

Disturbance due to changes in recreational pressure

Alone

- 5.127 The Applicant's assessment of disturbance due to changes in recreational pressure is presented in Section 7.2 (paragraphs 7.2.90 to 7.2.116) of the Applicant's SIAA report.
- 5.128 With regards to disturbance due to recreational pressure, the Applicant's SIAA report confirms that the SPA will remain open to the public during construction of the Development, although there will be localised restrictions for example, within the DCO boundary. Parking for the SPA/SSSI will also not be enhanced and there may also be some partial closures or reduced parking capacity. A small number of vehicle recovery operatives (up to 20) would stay overnight in static caravans but these are located away from the SPA.
- 5.129 During operation, the Development would not improve access to Wisley or Ockham Common, nor will it change existing car parking options or increase parking opportunities. The Development would provide new surfaced non-motorised user ("NMU") routes within the SPA and a new bridge linking Ockham Common to the Chatley Wood Replacement Land in the north-east (although see further discussion of Replacement Land below), these are shown on Figure 12 of the Applicant's HRA Figures and described in paragraphs 7.2.108 to 7.2.112 of the Applicant's SIAA report. During the examination the Applicant also provided responses to the ExA's First Written Questions concerning the existing and new access points and NMUs within and around the SPA. This is shown on the plan submitted at deadline 5 'Document 9.61 Existing and Proposed Access Points for the SPA (Response ExQ 2.4.12)'.
- 5.130 The Applicant's SIAA report states that the new NMU routes would fall outside the heathland areas of the SPA where the qualifying species occur and "will allow visitors to the SPA to increase their current walking route options and are therefore likely to lead to some changes in the recreational use of the SPA with some visitors being drawn away from the sensitive heathland areas."

Replacement Land

5.131 The Development would involve the loss of 13.77ha of registered common land and open space and the acquisition of permanent rights over other areas of common land and open space affecting the use of that recreational open

- space. Common land and open space constitute Special Category Land (SCL) and under s131 and 132 PA2008 there are provisions to provide Replacement Land, with the Replacement Land needing to be no less advantageous for persons entitled to rights of common, or other rights and to the public. The Applicant's DCO application included for 39.8ha of Replacement Land to be acquired using powers of Compulsory Acquisition (CA) through the DCO.
- 5.132 The matter of reducing the amount of Replacement Land (ie 39.8ha) that would be provided under the DCO through CA was discussed during the examination and also explored further in the Secretary of State's consultations of 4 November 2020, 27 November 2020, 20 January 2021, 15 February 2021, and 22 December 2021 following the ExA's recommendation at ER 8.8.1 to 8.2.126. Proposals for reducing the Replacement Land were included in the Secretary of State's consultation letters dated 4 November 2020, 27 November 2020 and 20 January 2021, and further clarified in the consultation letter of 22 December 2021.
- 5.133 The Secretary of State's consultation of 20 January 2021 described a proposal to reduce the amount of Replacement Land from 39.8ha to 16.40ha. This proposal would remove, amongst others, the Replacement Land at Chatley Farm (CF1 to CF4) and part of the land at Park Barn Farm (part of land parcel PBF3). In the further consultation of 22 December 2021, the Secretary of State clarified a discrepancy and confirmed that it is minded to propose that the area of PBF3 to be used for Replacement Land should be 2.83ha rather than 2.95ha, thus ensuring a figure of 16.40ha to provide a 1:1 ratio of replacement land to SCL to be lost to the Development. In summary, the updated Replacement Land proposal is that it should amount to 16.40ha in total (as previously proposed on 20 January 2021), to comprise the whole of the sites identified by the Applicant as PBF1 and PBF2 on Figure B.1 in REP12-004 (together 13.57ha) and 2.83ha drawn from the southern part of PBF3, namely all of land plots 11/17i and 11/17j and part of the southern end of land plot 11/17h shown in REP8-006.
- 5.134 The extent of the updated Replacement Land proposal is shown on the amended Scheme Layout Plans (Revision 5), provided by the Applicant in response to the Secretary of State's consultation of 22 December 2021. These plans also show the SPA compensation land and SPA enhancement areas (see Section 8 below) and the new NMU routes. Updated Land Plans (Revision 5) were also provided by the Applicant, identifying the revised land plots.
- 5.135 The Applicant responded to the Secretary of State's consultation of 20 January 2021, providing other environmental information in respect of the proposal for the Replacement Land. The Applicant reiterated that, for the reasons previously described above, the Development would not lead to an AEoI of the SPA. These reasons were that the Development would not improve access to the SPA or increase parking options for recreational users and that the Development would provide additional NMUs access through the wooded fringes of the SPA, together with signage, and draw users away from the sensitive heathland habitats. This conclusion would be unaffected by the proposals to remove the Replacement Land at Chatley Farm and the part of the Replacement Land at Park Barn Farm. In response to the clarification in the Secretary of State's consultation of 22 December 2021, the Applicant confirmed that, given the very small area of land in question (a difference of some 0.13ha in comparison to the Secretary of State's previous proposal), the revised proposal of 22 December 2021 would not give rise to any new or different significant environmental effects in comparison to those set out in

- Document 9.155: 'Other information in respect of environmental effects requested by the Secretary of State in relation to his Replacement Land proposals' or as reported in the ES.
- 5.136 With respect to matters of HRA, the package of Replacement Land proposed by the Applicant was identified as embedded mitigation as part of the DCO application and thus considered as such in the Applicant's SIAA Report. However, the Applicant confirmed both during the examination and in response to the Secretary of State's subsequent consultations that the Replacement Land does not form part of the compensatory measures for the SPA (see Section 8 below) and confirmed in Document 9.156 ('Other environmental information requested by the Secretary of State in respect of his Replacement Land proposals to inform the Appropriate Assessment') that the Replacement Land was "not the key factor in determining the conclusion, as is set out in paragraphs 7.2.115 and 7.2.116 of the SIAA".
- 5.137 The Applicant reiterated their conclusions at Section 4.2 of Document 9.150, their response to the Secretary of State's consultation of 4 November 2020. In response they stated that the provision of additional NMUs routes and Replacement Land at Park Barn Farm (PBF1 to PBF3) and Chatley Farm (CF1 to CF4), as originally proposed, would increase the opportunities for recreational users of Ockham and Wisley Commons, potentially drawing users away from the SPA. However, they also confirmed that the new overbridge linking the SPA to existing common land and Chatley Farm Replacement Land to the north of the M25 (which replaces the existing pedestrian crossing at Junction 10) would "link with the NMU through Ockham Common, allowing recreational visitors to access existing common land on the other side of the M25 and providing opportunities for circular routes, even without the provision of Chatley Farm replacement land. Therefore, recreational users will still potentially be drawn away from the SPA." The Applicant concluded, as per the Applicant's SIAA report, that due to access to the SPA not being improved by the Development and due to the provision of additional NMU routes, the Development would not lead to an increase in recreational pressure on the sensitive heathland areas of the SPA.
- 5.138 In response to the Secretary of State's consultation of 20 January 2021, the Applicant also provided a figure (Document 9.158) showing the NMU routes and their interpretation of the reduced amount of Replacement Land as described in the Secretary of State's consultation of 20 January 2021. The subsequent minor update to the replacement land proposal contained in the Secretary of State's consultation of 22 December 2021 does not materially affect this figure.
- 5.139 The RHS responded to the Secretary of State's consultations on reduced Replacement Land, raising concerns that the Secretary of State could not be satisfied that disturbance from recreational impacts from the Development would not have an AEoI of the Thames Basin Heaths SPA and thus this impact would have to be carried through to an assessment of alternative solutions, IROPI and compensatory measures. The RHS in its response to the Secretary of State's consultation of 4 November 2020 contended that the provision of publicly accessible Replacement Land, to draw recreational users away from the SPA, has been relied on as mitigation in respect of recreational disturbance for the purposes of the Applicant's HRA and thus "...the removal of 59% of the Replacement Land seriously undermines that mitigation and renders unsafe any conclusion that there will be no adverse effect on the SPA from

- disturbance by changes in recreational use, from the DCO Scheme alone or in combination with other plans or projects."
- 5.140 The RHS identified a number of references in the Applicant's SIAA and supporting documents, such as the CEMP, to inferred reliance on Replacement Land as mitigation for recreational pressure. Confirming in its view that the removal of parcels CF1 to CF4 is likely to have particular significance. These points were reiterated in its response to the Secretary of State's consultation of 27 November 2020.
- 5.141 In response to the RHS, the Applicant directed to Section 4.2 of Document 9.150 (noted above) and confirmed that there still would be no increase in recreational disturbance without CF1 to CF4 and reiterated that its SIAA was clear that Replacement Land does not form any compensation for the SPA.
- 5.142 The Secretary of State noted the comment made by SWT at deadline 12 of the examination that visitors being attracted to the Replacement Land may lead to decreased disturbance to bird species of the Thames Basin Heaths SPA. Support for the inclusion of the Applicant's proposed Replacement Land, including the potential benefit to draw users away from the SPA, was also stated in the responses to the Secretary of State's consultation of 4 November 2020 and 15 February 2021 received from NE, SWT, SCC, Ockham Parish Council and the RSPB. However, as noted previously, the Applicant's assessment does not rely on the provision of the Replacement Land and any potential perceived benefit of the Replacement Land in its assessment and its conclusion of no AEoI.
- 5.143 NE's response to the Secretary of State's consultation of 15 February 2021 confirmed their agreement that the Applicant's HRA did not rely upon biodiversity enhancements to be delivered by the proposed Replacement Land parcels. On this basis, a reduction in provision of Replacement Land is not considered to affect the conclusions of the Applicant's HRA. Whilst both the Applicant, NE and other parties supported the Applicant's original extent of Replacement Land and the additional opportunities it provides for recreation, the Applicant and NE remain of the view that there would be no AEoI on the SPA, as the Development would not increase recreational pressure on the SPA.
- 5.144 On the basis of the arguments presented, the Secretary of State is satisfied that there would be no AEoI due to recreational pressure as a result of the Development or due to the proposed reduction in Replacement Land.
- 5.145 With regards to the provision of the green bridge element as part of the proposed Cockcrow bridge (Change 1), the Applicant's SIAA report stated that should the green bridge be installed at Cockcrow, it may attract some recreational visitors to walk over the bridge, potentially attracting more visitors from Ockham Common into Wisley Common and thus reducing recreational pressure on the heathlands of Ockham Common. However, the Applicant also subsequently confirmed during the examination that the green element of the proposed bridge is not required to mitigate any effects of the Development on the SPA.
 - Measures to mitigate disturbance due to recreational pressure
- 5.146 HRA-specific measures to mitigate for disturbance due to recreational pressure during construction and operation are identified in Table D.2 of the Applicant's SIAA report. During construction, this includes a ban on construction workers having pets on site, which is stated to be secured through the CEMP. The

- CEMP is secured by Requirement 3 of the DCO and the final version of it is subject to the approval of the Secretary of State.
- 5.147 For operational effects, the Development would provide signage and waymarking to inform users of recommended routes. These are intended to focus on the surfaced NMU routes and linkages with areas outside the SPA, such as new areas of open space. Signage and waymarking would be installed during construction and are included in the outline CEMP and REAC. They would be delivered through the CEMP, which is secured by Requirement 3 of the DCO. The implementation of the NMUs and replacement overbridges are secured by the DCO.

In combination effects

5.148 The Applicant's SIAA report considered the in combination projects and plans described at paragraph 5.5 to 5.7 above. The Applicant concludes no AEoI for the SPA due to the changes in recreational disturbance in combination with other plans and projects. The final SoCG between the Applicant and NE confirms agreement with the findings of the Applicant's assessment. The Secretary of State is satisfied that there would be no additional effects from other plans or projects that could act in combination with the Development to result in AEoI.

Conclusion in respect of disturbance

5.149 The Secretary of State concludes that the Development would not increase recreational pressure to the SPA and is satisfied that the design and control measures proposed are secured such that there would be no AEoI on the Thames Basin Heaths SPA due to recreational disturbance, either alone or in combination with other plans or projects. The Secretary of State has not relied upon the Replacement Land in reaching this conclusion. This conclusion is consistent with NE's position, as confirmed in the final signed SoCG with the Applicant.

Disturbance due to changes in lighting

Alone

- 5.150 The Applicant's assessment of disturbance due to changes in lighting is presented in Section 7.2 (paragraphs 7.2.117 to 7.2.118) and summarised in Appendix E (HRA integrity matrix) of the Applicant's SIAA report. The Applicant's HRA Annex A: Stage 1 Screening identified that increased levels of lighting within the Thames Basin Heaths SPA during construction and operation of the Development could potentially lead to increased disturbance of breeding birds which are qualifying features of the site. The potential for increases in lighting levels to have an adverse effect on habitats which support the qualifying features (ie as an invertebrate food resource) was also noted.
- 5.151 In response to the ExA's first written question 1.4.15, the Applicant confirmed the design parameters and assumptions applied to the proposed lighting elements for the purposes of the assessment of disturbance on SPA qualifying features and the mitigation measures proposed in respect of lighting.
- 5.152 Taking account of measures included in the CEMP, the Applicant's SIAA report states that there would be no increase in lighting within the SPA as a result of construction or operation of the Development. As such, the Applicant concludes that there would be no AEoI on the qualifying features of the Thames Basin Heaths SPA as a result of lighting changes.

5.153 The SoCG between the Applicant and NE confirms that NE agree with the Applicant's conclusion in respect of no AEoI due to lighting disturbance during construction or operation.

Measures to mitigate disturbance

- 5.154 One embedded measure to mitigate for changes to lighting is identified in Table D.1 of the Applicant's SIAA report, specifically that the design of the lighting would minimise light spill outside the Development footprint during construction and operation.
- 5.155 The outline CEMP states that night-time construction works would be minimised where possible and operational lighting would aim to avoid illuminating habitats adjacent to the Development. Requirement 3 of the DCO secures the CEMP to be produced substantially in accordance with the outline CEMP. The inclusion of a management plan for construction site artificial lighting in the CEMP is secured by Requirement 3(2)(c)(iv) of the DCO.
- 5.156 In respect of operational lighting, the proposed lighting columns and existing lighting to be retained are shown on the Scheme Layout Plans. The Applicant's SIAA report explains that column mounting heights will not exceed those of the existing columns and will be used in similar locations to existing lighting. Requirement 5 of the DCO secures that the authorised development must be designed in detail and carried out so that it is compatible with the preliminary scheme design shown on the Scheme Layout Plans, as certified in the DCO, unless otherwise agreed by the Secretary of State, and provided that the Secretary of State is satisfied that any amendments would not give rise to any materially new or materially different significant environmental effects in comparison with those described in the ES.

In combination effects

5.157 The Applicant's SIAA report considered the in combination projects and plans described at paragraph 5.5 to 5.7 above. The Applicant concludes no AEoI of the SPA due to the changes in lighting in combination with other plans and projects. The final SoCG between the Applicant and NE confirms agreement with the findings of the Applicant's assessment. The Secretary of State is satisfied that there would be no additional effects from other plans or projects that could act in combination with the Development to result in AEoI.

Conclusion in respect of disturbance

5.158 Having considered the measures above, the Secretary of State is satisfied that they are secured by relevant provisions in the DCO and concludes that with the implementation of such measures, there would be no AEoI to the Thames Basin Heaths SPA as a result of disturbance due to changes in lighting, either alone or in combination with other plans or projects.

Conclusion of the appropriate assessment and integrity test

- 5.159 As the competent authority for Transport NSIPs as defined under the PA2008, the Secretary of State for Transport has undertaken an appropriate assessment under Regulation 63 of the Habitats Regulations in relation to the Thames Basin Heaths SPA.
- 5.160 The Secretary of State is satisfied that, given the relative scale and magnitude of the identified effects on the qualifying features of these European sites and where relevant, the measures in place to avoid and reduce the potential

harmful effects, there would not be any implications for the achievement of the conservation objectives for the Thames Basin Heaths SPA arising from changes to air quality, changes to hydrology/water quality, spread of INNS, and disturbance due to noise, lighting or recreational pressure. The conservation objectives for the SPA are set out in Annex 2 of this HRA Report.

- 5.161 The Secretary of State concurs with the Applicant and NE that AEoI of the SPA could occur as a result of permanent and temporary loss of habitat within the SPA due to the construction of the Development. The Secretary of State has not identified any further mitigation measures that could be imposed in respect of the effect of habitat loss, which would remove the potential AEoI identified, and has therefore proceeded to consider the derogation provisions of the Habitats Regulations, as presented in Sections 6 to 9 below.
- 5.162 Based on the submissions to the examination, as summarised in the ExA's RIES and Recommendation Report, together with the further consultations undertaken by the Secretary of State after the close of examination, the Secretary of State is satisfied that the views of NE as the appropriate nature conservation body have been considered and that they are in agreement with the scope and conclusions of the Applicant's HRA assessment.

6. STAGE 3: CONSIDERATION OF ALTERNATIVE SOLUTIONS

6.1 During the consideration of alternative solutions, the Secretary of State has had regard to guidance provided by the Department for Environment, Food and Rural Affairs (Defra) (2012)¹⁶ and the European Commission (2018)¹⁷, together with recently published guidance by Defra, NE, the Welsh Government and Natural Resources Wales (2021) on 'Habitats Regulations Assessment: protecting a European site' (the "2021 joint guidance")¹⁸. It is noted that the Defra (2012) guidance was withdrawn on 15 March 2021. This former guidance has subsequently been updated and replaced by the 2021 joint guidance.

Project objectives

- After setting out the Development¹⁹ objectives as described in the Road Investment Strategy ("RIS"), the Applicant set out objectives for the Development ("the Project") in Table 3.3 of their HRA Stage 3-5 report. These define both the strategic function of the Project and other considerations that influence certain aspects of the Project design to reflect the geographical constraints. These included the following:
 - Route Operation: Support any projected traffic increases from other committed schemes on the strategic road network and avoid or mitigate against causing adverse effects elsewhere on the Local Road Network.
 - Customer: Throughout the design and delivery stages, the scheme should ensure that customers and communities are fully considered. Specifically, this should include:
 - Understanding the needs of all segments of customers (including vulnerable users), stakeholders and partners
 - Responding to those needs such that the end product delivers an improved customer experience
 - Assessing the impact of works on road users and communities, minimising disruption and delivering appropriate mitigation measure. The assessment should look at issues through customer's eyes.
 - Capacity: Reduce the average delay (time lost per vehicle per mile) on the mainline A3 and on M25 through junction running.
 - Capacity: Smooth the flow of traffic by improving journey time reliability on the mainline A3.
 - Safety: Reduce annual collision frequency and severity ratio on the main line A3, slip roads and M25 Junction 10 gyratory.

¹⁶ Defra (2012) Habitats and Wild Birds Directives: Guidance on the application of article 6(4) Alternative solutions, imperative reasons of overriding public interest (IROPI) and compensatory measures.

¹⁷ European Commission (2018) Managing Natura 2000 sites: The provisions of Article 6 of the Habitats Directive 92/43/EEC

Defra, NE, the Welsh Government and Natural Resources Wales (2021) 'Habitats Regulations Assessment: protecting a European site' https://www.gov.uk/guidance/habitats-regulations-assessments-protecting-a-european-site (Accessed 07/02/2022)

¹⁹ NB. referred to as the 'scheme' by the Applicant

- Social: Support the projected population and economic growth in the area.
- Social: Support walking and cycling by incorporating safe, convenient, accessible and attractive routes for pedestrians, cyclists and equestrians and improving crossing facilities.
- Social: Take account of the concerns of local communities and other key stakeholders raised during consultations.
- Environment: Support compliance with the UK's legally binding limits and targets on air quality and water quality status and support targets to cut greenhouse gas emissions and objectives for local air quality management areas.
- Environment: Avoid, mitigate and compensate for adverse effects on the integrity of the Thames Basin Heaths Special Protection Area and other statutory designated nature conservation sites and promote opportunities.
- Environment: Recognise the significance of designated heritage assets close to the route of the scheme, including at Painshill Park and at Wisley Gardens through incorporating suitable mitigation and/or design measures to avoid or reduce significant harm.
- Environment: Improve the quality of life for nearby residents, through addressing the effects of noise on people in the declared noise important area's and ensuring that significant noise effects are mitigated.
- Environment: Ensure through good design, that an appropriate balance is achieved between functionality and the scheme's contribution to the quality of the surrounding environment, addressing existing problems wherever feasible, avoiding, mitigating or compensating for significant adverse impacts and promoting opportunities to deliver positive environmental outcomes.
- 6.3 The Secretary of State also notes the Applicant's conclusions for the 'do nothing' scenario in Table 3.4 and 'strategic need for the Scheme' at Section 3.2 of the Applicant's HRA Stage 3-5 report, and the specific discussion around congestion, delay, unreliable journey times, safety concerns and economic growth.
- 6.4 Having regard to the Applicant's objectives in the context of the National Networks National Policy Statement ("NNNPS"), and RIS (1²⁰ and 2²¹), the Secretary of State considers that there is a specific problem at this location and this is recognised in the RIS which describes the Project as follows:
 - "improvement of the Wisley interchange to allow free-flowing movement together with improvements to the neighbouring Painshill interchange on the A3 to improve safety and congestion across the two sites".
- The Secretary of State has taken account of the Applicant's list of objectives as set out above, and in the context of national policy, the Secretary of State

²¹https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/87 <u>2252/road-investment-strategy-2-2020-2025.pdf</u> (Accessed 07/02/2022)

²⁰ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment data/file/38 7223/npsnn-web.pdf (Accessed 07/02/2022)

considers that the following are the overall objectives of the Development for the purposes of considering alternative solutions:

- improve journey time reliability on the A3 and reduce delay on the A3 and M25 through this junction.
- improve safety and reduce collision frequency and severity on the main line A3, slip roads and M25 Junction 10 gyratory.
- support projected population and economic growth in the area surrounding the M25 Junction 10/A3 Wisley interchange and support any projected traffic increases from other committed schemes on the SRN whilst minimising impacts on the surrounding local road network (LRN) and the local environment.
- 6.6 In accordance with guidance published by Defra^{16,18}, the Secretary of State does not consider the development of alternative modes of transport (eg building a new railway line) to meet the objectives of the Development.
- 6.7 The Secretary of State has therefore considered the following alternative solutions: Alternative highway scheme options considered by (or available to) the Applicant (including the Do Nothing option); and alternative highway scheme options put forward by other developers to achieve the same objectives.

Consideration of Alternative Solutions

Do Nothing

- 6.8 Not proceeding with the Development would remove the risk of direct habitat loss from the Thames Basin Heaths SPA; however, it would not meet the objectives of the Project as identified above.
- The Applicant establishes the need for and benefits of the Development in Section 3 of the Applicant's HRA Stage 3-5 report and in the Applicant's Statement of Reasons, Planning Statement and Chapter 2 of the ES. The Applicant also identifies key objectives and challenges for the Development in the Transport Assessment. These include the context of the Development with regards to national and local policy.
- 6.10 The Secretary of State considers that the do nothing scenario would not achieve the objectives and concurs with the Applicant's conclusion that it would result in continued congestion, delay and unreliable journey times around the M25 Junction 10/A3, and would not address safety concerns at this junction. It would also not support economic growth.
 - Alternative highway scheme options considered by, and/or available to the Applicant
- 6.11 The Secretary of State has considered the alternative options considered by and available to the Applicant.
- The Applicant has set out the various studies and option selection processes in Sections 3.4 and 3.5 of the Applicant's HRA Stage 3-5 report. This included the identification and testing of a 'long list' of 21 options against the Applicant's objectives for the Development. Table 3.5 to the Applicant's HRA Stage 3-5 report provides a summary for each of the 21 long list options. These 21 options were then reduced to the most feasible ten options. This list was identified following the discounting of a number of strategic solutions which did not involve junction improvements.

- 6.13 The Applicant carried out several rounds of initial feasibility and cost assessments of the ten options, before identifying a short list of three options: Options 9, 14 and 16, which were identified as best meeting the Project objectives. Of these three options, only Option 16 would have allowed free movement in all directions through M25 Junction 10, but it would have had the greatest impact on the Thames Basin SPA and would exceed the Project budget. This option was therefore discounted and Options 9 and 14 were included in the public (non-statutory) consultation between December 2016 and February 2017. The consultation did, however, also seek the views of the public as to whether the Applicant had taken the right decision to reject Option 16.
- 6.14 The Applicant identified that Option 9 offered a greater level of free running through M25 Junction 10 compared with Option 14 as originally envisaged. However, Option 9 would have required greater land take within the SPA and had a greater environmental impact overall compared with Option 14. Paragraphs 3.4.16 to 3.4.41 of the Applicant's HRA Stage 3-5 report expand on the testing of these options by the Applicant, including further refinements made to Option 14. The Applicant looked at reducing the environmental impact of Option 9 and improving the traffic performance of Option 14. Option 14 was ultimately chosen on the basis that it met the objectives of the Project and would involve less land take within the Thames Basin Heaths SPA.
- 6.15 In addition to the formal option appraisal, the Applicant undertook a step-back review to explore any other potential solutions not previously identified. This is reported at paragraph 3.5.7 of the HRA Stage 3-5 report.
- 6.16 The Secretary of State notes the exploration by the ExA of the Applicant's alternatives and the role of cost considerations in the option selection process. The Applicant confirmed that cost considerations were not the sole consideration for the assessment and not the primary reasons for the selection of alternatives and the ExA was satisfied with the Applicant's submissions on these points.
- 6.17 The Secretary of State also notes the discussions held during the examination on what is termed the "RHS Alternative". The RHS Alternative is described in ER 5.2.88 to 5.2.151 of the Recommendation Report and is presented in drawn form (drawing M16114-A-026A) as Appendix J in the RHS' response to the Applicant's preferred route announcement consultation (March 2018), a document that forms Appendix A of the RHS' deadline 1 submission: Highways and Traffic Representation with Appendices. The RHS Alternative concerns the southern end of the Project, between Wisley Lane and the Ockham Park Junction, and proposes a left turn from Wisley Lane directly onto the A3 and south facing slips to be installed at the Ockham Park Junction.
- 6.18 The Secretary of State is aware that such a proposal does not form part of the Project proposed by the Applicant and is not currently a stand-alone proposal at any stage in the planning process. Submissions to the examination and the ExA's findings are that it amounts to a variant upon the Project, which the Applicant considered at the options stage prior to the submission of the DCO but discounted, particularly on design standards compliance and safety grounds.
- 6.19 It is noted that the proposed RHS Alternative would result in an increased land-take from the SPA in comparison with the Development and that NE confirmed to the examination that such additional land-take would need to be compensated for. Although the RHS submits in its opinion that the RHS

Alternative would result in reduced operational traffic emissions and therefore less harm to the SPA with regards to air quality effects, the Secretary of State also notes the Applicant's calculations on this matter that showed a maximum difference of 0.2kgN/ha/yr less nitrogen deposition 5m from the A3 for the RHS Alternative, which the Applicant considered would not alter the conclusions of its SIAA report.

- 6.20 The RHS during the examination and in response to the Secretary of State's consultations, also suggested that the proposed RHS Alternative would result in reduced journey times for visitors of the RHS Wisley Garden and fewer carbon emissions as a result of the reduced distance/journey times associated with the RHS Alternative. The matter of reduced journey times with the RHS Alternative was not disputed by the Applicant during or after the examination. However, the extent and significance of the journey time differences between the Project and the RHS Alternative was not agreed between the two parties.
- 6.21 With regards to carbon emissions, the RHS submitted to the examination that with traffic following the signed route to RHS Wisley Garden, emissions of carbon dioxide would be 4,064 t/yr higher. Concluding that the RHS Alternative would reduce this overall increase in emissions with the Project by more than 16%. The Applicant disputed this assertion, stating that "The carbon dioxide emissions as regards the Scheme would be 639 t/yr higher if all traffic visiting the gardens from the south (and returning to the south) follows the signposted route to and from RHS Wisley (as opposed to routing via the B2215), representing 0.04% of total emissions with the Scheme, which is considered negligible." This is stated to be disagreed between the two parties in the unsigned SoCG.
- 6.22 Having taken all this information into account, the Secretary of State considers that although the RHS Alternative could achieve some of the individual objectives listed above, it would not achieve the overall objective of the Project (including the objective of safety) and considers that the RHS Alternative is not a feasible alternative. It would also not have a lesser effect on the Thames Basin Heaths SPA due to the additional habitat loss within the SPA.
- 6.23 The Secretary of State has reviewed the options process undertaken by the Applicant and is of the view that there are no other feasible ways of delivering the objectives of the Project by the Applicant that would be less damaging to the integrity of the Thames Basin Heaths SPA.
 - Alternative highway scheme options considered by other developers
- 6.24 The Secretary of State is not aware of any other highway schemes, not available to the Applicant, that could deliver the objectives for the Development/Project.
- 6.25 In regard to the RHS Alternative, and as described above, the Secretary of State has considered the submissions and concurs with the ExA that the RHS Alternative only amounts to a variant upon the submitted Project and is not currently a stand-alone proposal at any stage in the planning process. It would also not have a lesser effect on the Thames Basin Heaths SPA due to the additional habitat loss within the SPA and overall, the Secretary of State considers that it would not be less damaging to the integrity of the SPA.
- 6.26 The Secretary of State is of the view that there are no other feasible ways of delivering the objectives of the Project by other developers that would be less damaging to the integrity of the European site.

Conclusions on Alternative Solutions

- 6.27 The ExA considered information on alternatives submitted by the Applicant and IPs and was satisfied that no feasible alternative solution exists that would represent a lesser effect.
- 6.28 Having identified the objectives of the Project and considered all alternative solutions that provide a means of fulfilling these objectives, the Secretary of State is also satisfied that no alternative solutions are available.

7. STAGE 4: IMPERATIVE REASONS OF OVERRIDING PUBLIC INTEREST

- 7.1 The Habitats Regulation derogation provisions provide that a Project having an AEoI on a European site may proceed (subject to a positive conclusion on alternatives and provision of any necessary compensation, considered in Section 8 below) if the Project must be carried out for Imperative Reasons of Overriding Public Interest ("IROPI").
- 7.2 As the European site concerned is a SPA, there are no priority habitats or species present. Therefore, the IROPI for the Project can include the consideration of the social and economic benefit, in addition to reasons of human health, public safety, or beneficial consequences of primary importance to the environment.
- 7.3 The parameters of IROPI are explored in guidance¹⁸, which identify the following principles:
 - imperative it's essential that it proceeds for public interest reasons
 - in the public interest it has benefits for the public, not just benefits for private interests
 - overriding the public interest outweighs the harm, or risk of harm, to the integrity of the European site that's predicted by the appropriate assessment.
- 7.4 The guidance identifies that National strategic plans, policy statements and major projects are more likely to have a high level of public interest and be able to show they are imperative and overriding. Additionally, it identifies that plans or projects that only provide short-term or very localised benefits are less likely to be able to show IROPI.
- 7.5 The Applicant provided a case for IROPI at Section 4 of the Applicant's HRA Stage 3-5 report. The ExA has also described their findings in respect of IROPI at Section 6.8 of the Recommendation Report. The Secretary of State has reviewed this supporting information and having regard to relevant guidance^{16,17,18}, has set out the three key elements of the IROPI test below.

Imperative reasons

- 7.6 Paragraphs 4.4.1 to 4.4.21 of the Applicant's HRA Stage 3-5 report set out the Applicant's reasoning that there is an imperative need for the Development. The strategic need for the Project is also set out in Section 3.2 of that report.
- 7.7 The Project itself is positioned on a critical section of the SRN. At the point of application, the M25 formed part of the 'Ten-T' Trans-European Transport Network and continues to be a nationally important link providing access to global markets and connections to Heathrow, Gatwick and the channel ports for much of the UK, as well as for the south east region. Additionally, the A3 is also an important strategic route, linking London with the international port of Portsmouth, as well as Guildford, which is the largest centre of employment in Surrey. The importance of the critical links the SRN provides is set out in the NNNPS²².

²² Paragraph 2.13

- 7.8 The M25 Junction 10 is also located on the edges of the Borough of Guildford, and the Borough of Elmbridge, with the Borough of Woking nearby. Together these boroughs have a population of over 375,000 and all have strong and diverse economies, containing offices of multi-national companies as well as local retail, business centres and important public services such as Royal Surrey Hospital. The M25 Junction 10/A3 Wisley interchange area is on the eastern side of the Enterprise M3 Local Enterprise Partnership area, which has a population of 1.6 million and sustains 740,000 jobs. The M25 and the A3, converging at Junction 10 of the M25, are both key corridors connecting people to employment, services, and leisure activities.
- 7.9 The Applicant's HRA Stage 3-5 Report (paragraph 4.4.2) sets out that many links on the existing M25 Junction 10 and its approaches are significantly over capacity in the baseline (2015) scenario which leads to regular congestion and has an adverse effect on the frequency of accidents on this part of the SRN. Forecast traffic levels for 2037 would exacerbate this with delays at junctions increasing by 39% in the am peak and 53% in the pm peak.
- 7.10 The Secretary of State notes that the current challenges associated with the M25 Junction 10/A3 Wisley interchange are further set out in the Outline CEMP and include:
 - "Congestion and delay disrupting journeys on the Strategic Road Network (SRN);
 - Poor resilience resulting in frequent disruption and unreliable journey times;
 - Safety concerns; and
 - Congestion causing a barrier to growth. Enterprise M3 Local Enterprise
 Partnership has highlighted the M25 junction 10/A3 Wisley interchange as
 a part of the transport network where projected increases in traffic would
 cause further congestion and delays and hinder growth in the area unless
 addressed."
- 7.11 Given that this is a critical part of the SRN, linking to local employment areas as well as global market connections the Secretary of State agrees with the Applicant that a failure to proceed with the Project would have considerable adverse social and /or economic consequences (paragraph 4.4.2 of the Applicant's HRA Stage 3-5 report). The Secretary of State is therefore satisfied that there are imperative reasons for the Project.

Public Interest

- 7.12 The NNNPS sets out the need for, and Government's policies to deliver, development of NSIPs on the national road networks in England. It identifies and confirms the critical need to improve the national networks to address road congestion to provide safe, expeditious and resilient networks that better support social and economic activity; and to provide a transport network that is capable of stimulating and supporting economic growth²³. The NNNPS recognises that improvements may also be required to address the impact of the national networks on quality of life and environmental factors.
- 7.13 The Recommendation Report confirms its findings at paragraph 7.2.2 that the need for the Development is established through the NNNPS; that the

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²³ Paragraph 2.2

- Development is in general conformity with the policy in the NNNPS; and when considered in conjunction with the relevant caveats, there are no instances of non-compliance with the NNNPS.
- 7.14 The Project is specifically identified in the RIS (1 and 2). The RIS identifies improvements to M25 Junction 10 and the A3 interchange as a key investment in the SRN within the London and South East region. The RIS sets out the Governments long-term strategic plan for, and investment in the road network, with a strategic aim and vision to delivering by 2040 safer, more stress-free journeys that everyday users need, as well as the enhanced reliability and predictability that is so important to business.
- 7.15 The Secretary of state is therefore satisfied that delivering the Project would be in line with national policy.
- 7.16 The Recommendation Report also sets out at 7.3.2 that the ExA considers that the strategic benefits of the Development in terms of addressing existing and predicted congestion around Junction 10 of the M25 and the stretch of the A3 from the Ockham Park Junction to Painshill roundabout, improving road safety and facilitating planned economic growth in the area would be significant. There would also be benefits in terms of improvements to NMU routes and recreational opportunities.
- 7.17 In conclusion, this section of the M25 is one of busiest sections on the SRN and, in line with government policy, there is a critical need to deliver the Project to add capacity to the junction, improve public safety, reduce congestion and support growth that would otherwise be restricted by the existing congestion and safety issues at this location. The Secretary of State therefore concurs with the Applicant that the Project is in the public interest and is in the long-term.

Overriding

- 7.18 The impact considered for AEoI is the permanent loss of 5.9ha of land within the SPA, together with a temporary loss of 8.7ha. As described in Section 5 above, the habitats within the area that would be lost predominantly comprise Scots pine-dominated woodland, which is not considered to form part of the breeding habitat or core foraging habitat used by the qualifying features of the SPA. The surveys and studies undertaken to inform the assessment also record an absence of qualifying features within the habitats to be lost and there would be no net loss of nesting, roosting, or breeding territories of the qualifying features. The assessment of AEoI does, however, recognise that the invertebrate community on which the qualifying features feed will be supported by the wider invertebrate community within the SPA and therefore the habitat loss within the SPA (within the component SSSI) could adversely affect the integrity of the European site. The temporary loss of habitat from the SPA would be restored as part of the Development.
- 7.19 The Secretary of State is satisfied that the Project is in accordance with the NNNPS which sets out a critical need to improve the national networks and that this Project is identified in the RIS as a key investment for the South east region. The Secretary of State considers that the long term benefit of the Project for both current and future users of the Project in terms of reduced congestion, improved safety, as well as supporting growth in the wider area outweighs the potential harm to the integrity of the Thames Basin Heaths SPA given the absence of the qualifying features core habitats for nesting, roosting and foraging in the area to be lost. In reaching this decision, the Secretary of

State has not taken into account proposed compensatory measures, which are discussed at Section 8 below. The Secretary of State also notes that NE consider that there are strong grounds to conclude there are IROPI for the Project.

The Secretary of State's conclusions

- 7.20 The Secretary of State agrees with the conclusions of the ExA as set out in ER 6.8.8 of the Recommendation Report and is satisfied that there are imperative reasons of overriding public interest for the Project to proceed, which include social and economic benefits as well as public safety, on the basis that there are no priority habitats or species present for this European site.
- 7.21 In arriving at this decision, the Secretary of State has reviewed how the Project provides an essential public benefit that is imperative, despite the harm to the integrity of the Thames Basin Heaths SPA.
- 7.22 In accordance with Regulations 64 and 68 of the Habitats Regulations, where a Project is agreed to, notwithstanding a negative assessment of the implications for a European site, this is subject to securing any necessary compensatory measures to ensure the overall coherence of the National Site Network. Compensatory measures are discussed further at Section 8 of this HRA report.

8. STAGE 5: COMPENSATORY MEASURES

8.1 The Secretary of State having in accordance with Regulation 64 determined that there are no alternative solutions and that the Project must be carried out for imperative reasons of overriding public interest, has considered below the requirements of Regulation 68, which are to secure that any necessary compensatory measures are taken to ensure that the overall coherence of the national site network is protected.

The proposed compensatory measures

- 8.2 In view of the findings in relation to habitat loss effects resulting from the permanent land take of 5.9ha and temporary land take of 8.7ha from within the Thames Basin Heaths SPA, the Applicant has proposed a package of compensatory measures as detailed in Section 5 of the Applicant's HRA Stage 3-5 report. These measures are to be implemented in accordance with the SPA MMP submitted to the examination, as secured by Requirement 8 of the DCO. The latest SPA MMP is Revision 2 submitted at Deadline 4.
- 8.3 The package of compensatory measures is designed to compensate for the loss of SPA land and for the potential reductions in invertebrate resource within the SPA. It comprises two main elements, 'SPA compensation land' and 'SPA enhancement areas', as summarised below:
 - SPA compensation land: two new areas of habitat creation to be designated as part of the SPA, amounting to an approximate ratio of 1:1 of replacement for the permanent loss (referred to as the "C1 Old Lane SPA compensation land" and the "C2 Wisley SPA compensation land"); and
 - SPA enhancement areas: a suite of enhancement measures to be applied to 47.4ha of land within the existing SPA boundary, applying a 3:1 ratio of enhancement area for the permanent and temporary land take within the SPA (eight parcels of land have been identified, referred to as enhancement areas E1 to E8).
- 8.4 The SPA compensation land and SPA enhancement areas, as illustrated on Figure 13 of Document 5.3: HRA Figures, are all located within the DCO boundary. A copy of Figure 13 is included as Annex 3 to this HRA Report.
- 8.5 Work no.57 of the DCO provides for the C1 Old Lane SPA compensation land and the C2 Wisley SPA compensation land, while Work no.58 of the DCO provides the SPA enhancement areas, which lie within the existing SPA boundary. These are shown on the Works Plans, Temporary Works Plans and Scheme Layout Plans. The RHS own the proposed compensation land referred to as 'C2 Wisley Compensation Land'. SCC owns the 'C1 Old Lane SPA compensation land', as well as the land in which the SPA enhancement areas are located. Both areas of SPA compensation land and the SPA at Ockham and Wisley Commons are managed by SWT.
- The design of the suite of compensatory measures, including selection of the land parcels, appropriate ratios and management measures, was undertaken and agreed with NE, Forestry Commission ("FC"), SCC, SWT and the RSPB during the pre-application stage and discussions on the suite of measures continued during the examination. Reasons for selection of the specific land parcels, including reference to consultation with NE and other key stakeholders, are detailed in the Applicant's HRA Annex C Compensatory

- Measures, Revision 1 submitted at Deadline 4. Records of consultations with stakeholders on compensatory measures are also provided in the Applicant's HRA Annex B Consultation Report, Revision 1 submitted at Deadline 4.
- 8.7 The detailed proposals for the SPA compensation land are included at Section 5 of the Applicant's SIAA report and in the SPA MMP. The C1 Old Lane SPA compensation land (2.0ha in size) and C2 Wisley SPA compensation land (6.1ha in size) would provide grazed grassland fields and wood pasture habitat directly adjacent to areas of heathland forming part of the SPA. Additional tree planting in these areas and linkage with existing open habitats of the SPA is specifically intended to increase invertebrate resource and may also provide foraging opportunities for the nightjar and woodlark qualifying features.
- 8.8 As the SPA compensation land parcels would take several years to enhance their value as an invertebrate resource and as a means of offsetting the temporary loss of SPA land, the Applicant is also proposing to undertake habitat management works within the SPA enhancement areas. The detailed proposals for the SPA enhancement areas are included at Section 5 of the Applicant's SIAA report (e.g. paragraphs 5.1.36 to 5.1.69) and in the SPA MMP. The management objectives for the SPA enhancement areas are targeted towards creating and maintaining suitable habitat and structural conditions to support the SPA qualifying features, through increased provision of nesting and foraging habitat and increased invertebrate food resource.
- 8.9 The SPA enhancement proposals would lead to the clearance of existing Scots pine dominated mixed woodland habitats, allowing heathland habitats to regenerate. The Applicant considers that, based on existing evidence that increased heathland provision within Wisley Common and Ockham Common led to large increases in numbers of all three SPA qualifying species²⁴, it can be assumed with confidence that the breeding territories of all three qualifying species will increase as a result of increased heathland habitat. This conclusion is supported by NE and SWT. In addition, the Applicant considers that a long-term management plan for the cleared SPA enhancement areas will ensure they are maintained as diverse heathland habitat to provide excellent invertebrate resource²⁵. Thinning of the woodland is proposed to increase invertebrate resource²⁶ and foraging opportunities for the qualifying features.
- 8.10 The temporary loss of SPA land would be reinstated with a mixture of woodland edge and shrub habitats, providing protection from wind and a further contribution to invertebrate resource of the SPA. The reinstatement of land subject to its former condition is provided for in the DCO. Requirement 17 provides for a restoration scheme to be submitted to the Secretary of State for approval (following consultation with the relevant planning authority, SCC and NE). The reinstatement proposals are shown on the Scheme Layout Plans.

²⁴ Based on 2J's data, between 2003-2007, it was estimated that the Ockham and Wisley Common SSSI component of the Thames Basin Heaths SPA supported a mean of three individuals of Dartford warbler, two individuals of nightjar and a single woodlark. Between 2013-2017, this had increased to a mean of three Dartford warbler breeding territories, five nightjar breeding territories and four woodlark breeding territories (refer to Table B3 in Appendix B of the Applicant's SIAA report).

²⁵ Buglife (2013) Promoting habitat mosaics for invertebrates: lowland heathland (<u>https://cdn.buglife.org.uk/2019/08/HM-Heathland-mosaic-proof-FINAL.pdf</u>) (Accessed 07/02/2022)

²⁶ Although Scots pine can support an array of invertebrate species, a more diverse mix, both in terms of spacing and in terms of variety of trees and shrubs, will provide more varied wildlife habitat and support a greater range of invertebrates (as explained in Alexander, K., Butler, J. and Green, T. (2006). The value of different tree and shrub species to wildlife. British Wildlife 18(1) pp18-28).

- 8.11 The objectives of the package of compensatory measures are to enable the populations of the three SPA qualifying species to remain stable or to increase and to ensure that the coherence of the national site network is maintained. Specific objectives for each land parcel and habitat type are included in the SPA MMP.
- 8.12 The Secretary of State considers that the proposed compensatory measures are targeted to the adverse effects identified, in that they address the loss of SPA habitat and potential reduction in invertebrate resource. The measures are considered to be sufficiently diverse to provide habitats that will enhance the invertebrate assemblage of the SPA and provide increased structural diversity within the proposed and existing habitats, leading to increased foraging or nesting habitat for the three qualifying features.
- 8.13 The Applicant's HRA Stage 3-5 report cites evidence that the type of measures proposed are reliable, proven, tried and tested habitat creation and management techniques, based on sound science, which would create and enhance heathland habitats and the habitats of value to the qualifying features. Evidence provided by SWT on existing and past management at Ockham and Wisley Commons demonstrates that increasing the area of heathland habitats leads to significant increases in the population of the three qualifying features in the Thames Basin Heaths SPA and at this component SSSI, and therefore supports the proposed measures. The objectives and types of measures, as presently set out in the SPA MMP, are considered by the Secretary of State to be well planned and clear.
- 8.14 The Secretary of State notes agreement between the Applicant and NE, SWT, and the RSPB with regards to the proposed ratio of compensatory measures, both with regards to the SPA compensatory land ratio of 1:1 for permanent land take, and the ratio of 3:1 for the SPA enhancement areas for both permanent and temporary land take. This is in addition to the restoration of areas of temporary land take. The Secretary of State agrees that the ratios proposed and the extent of measures are sufficient to provide adequate compensation to ensure that the coherence of the national site network is maintained. In reaching this conclusion, consideration has been given to the period of time that the proposed tree planting in SPA compensation land areas will take to establish and lead to an enhanced invertebrate resource. Consideration has also been given to the need to offset temporary losses of habitats before restoration.

Additionality

- 8.15 As set out in ER 6.9.3 and 6.9.4 of the Recommendation Report, the ExA explored the existing management plans for the SPA in order to establish whether the compensation and enhancement measures proposed under the DCO could be considered to be in addition to normal practice.
- 8.16 In response to the ExA's Written Question Q1 1.4.9, the Applicant confirmed it considers the works to be additional to normal practice. This position was supported by responses from NE, SCC and SWT and is also reflected in the final signed SoCG with NE.
- 8.17 The ExA considered submissions from the RHS at Deadline 11, which drew this matter into question, along with responses to the contrary from the Applicant and SWT at Deadline 12 but was ultimately satisfied that the compensation package is additional to normal practice.

- 8.18 In response to the Secretary of State's further consultations, the RHS reiterated its view that the suite of compensatory measures overlaps with the measures in the SWT Wisley and Ockham Commons Management Plan, referring back to the information it provided at deadline 11 and 12 which compared woodland clearance and thinning proposed as part of the SPA compensation land and SPA enhancement area with such works identified in the SWT Management Plan.
- 8.19 The Applicant responded to the points raised by RHS at deadline 12 and in response to the Secretary of State's further consultations, including Document 9.154: 'Applicant's response to the submissions of the Royal Horticultural Society on Habitats Regulations Assessment' matters dated February 2021. The Applicant reiterated its position that the compensatory measures were designed in consultation with NE, SWT, RSPB, SCC and FC, and that during these consultations it was made clear that the suite of compensatory measures must be in addition to 'normal practice'.
- 8.20 The Applicant and SWT confirmed during the examination and reiterated in response to the Secretary of State's further consultations that the thinning and clearance works to be undertaken by SWT as part of their Management Plan (which was drafted in 2009/2010) were completed by the early 2010s, and that no further works of this type are proposed to be undertaken.
- 8.21 The Applicant repeated the response of NE provided to the examination, that "There are no legal requirements on SCC or SWT to carry out the works proposed as compensation and enhancement measures arising out of the designation of the land as SSSI or SPA. The maintenance of the integrity of the SPA and the maintenance of the SSSI in favourable condition is achieved to a satisfactory level through management of the existing areas of open heathland and open water this has consistently been the basis of our advice to SWT." The Applicant responded that the Conservation Objectives and the favourable conditions for the SSSI (as defined in the SWT Management Plan) are to maintain the habitats and geological features in favourable condition, and that these are identified as dwarf shrub heath and open standing water and canals; thus the focus of the Conservation Objective in the SWT management plan is to maintain the existing heathland habitat.
- 8.22 As noted above, NE confirmed during the examination that the agreed compensatory measures and enhancement measures are outside of the scope of existing management plans and legal agreements. SCC and SWT have similarly confirmed that the works are in addition to and outside of the works to be undertaken or planned within its management plan.
- 8.23 Having given due consideration to the information presented to him, including the responses to the Secretary of State's consultations, the Secretary of State agrees with the position of the Applicant, the advice of NE, SCC and SWT and the recommendations of the ExA and concludes that the compensation package is additional to normal practice. The Secretary of State acknowledges that the RHS disagrees with this conclusion but considers that the available information adequately supports its finding that the proposed compensatory measures are additional to normal practice, being measures outside of existing management plans and legal agreements relevance to the Ockham and Wisley Common SSSI component of the Thames Basin Heaths SPA.
- 8.24 The Secretary of State in reaching this view is persuaded by the evidence provided by NE as the ANCB and author of the Conservation Objectives,

together with SWT as the body responsible for managing the SSSI/SPA in this location.

Timing, feasibility and deliverability of the compensation package

- 8.25 The delivery and timing of the compensatory measures is explained in Section 5.2 of the Applicant's HRA Stage 3-5 report and in the SPA MMP, including reference to how this would be implemented and evolve over the short, medium and long term. The ExA examined the timing, feasibility and deliverability of the proposed compensation package, as reported in ER 6.9.8 to 6.9.13 of the Recommendation Report.
- 8.26 As noted above, the SPA compensatory land and SPA enhancement areas are included within the DCO boundary and specified in the DCO at Works No 57 and 58. Requirement 8 of the DCO secures details of the compensatory habitat creation and enhancement measures to be undertaken in respect of the Thames Basin Heaths SPA and that these should be submitted to and approved in writing by the Secretary of State, in consultation with the relevant planning authority, SCC and NE. The details are required to be "substantially in accordance with the preliminary Scheme design shown on the Scheme Layout Plans and must reflect the measures set out in the Environmental Statement, the REAC and in the Habitats Regulations Assessment." The compensatory habitat creation and enhancement measures must be carried out and maintained, managed, and monitored in accordance with the details.
- 8.27 Requirement 8(a) to (g) list the information that the approved details must include. Requirement 8(g) requires "a scheme for the maintenance, management and monitoring of the compensatory habitat creation and enhancement measures in respect of the Thames Basin Heaths SPA that reflects the measures set out in the SPA Management and Monitoring Plan." Requirement 1 defines the SPA MMP as the document of that name which forms part of the ES. The ES, including the SPA MMP (as ES Appendix 7.19) is to be certified at Schedule 11 of the DCO.
- 8.28 Requirement 8(3) states that "Unless otherwise approved by the Secretary of State in writing, following consultation with Natural England, the compensatory habitat creation measures on the proposed Thames Basin Heaths SPA compensation land must be begun before any part of the authorised development within the boundary of the SPA may commence."
- 8.29 The Secretary of State notes the discussions during the examination with regards to Requirement 8(3), which relates to the timing of works in the SPA compensation land. In its response to the ExA's Written Question ExQ1 1.4.6, the Applicant stated that the works within the SPA compensation land will have 'begun' prior to construction and will continue throughout the construction period under a phased programme of works as set out in the SPA MMP.
- 8.30 The Applicant's HRA Stage 3-5 report and SPA MMP confirms that the habitat improvement works (including tree planting) in the two SPA compensation land parcels will be undertaken during the site preparation works in these land parcels. As noted above, Requirement 8(3) ensures these commence before works take place in the SPA boundary. Requirement 8(1) and (2) ensure that all compensatory works are carried out and maintained, managed and monitored in accordance with the approved details, which in turn must include: a timetable for the completion of the environmental mitigation and

- enhancement works (8(1)(f)); and a scheme for the maintenance, management and monitoring of the compensatory habitat creation and enhancement measures in respect of the Thames Basin Heaths SPA that reflects the measures set out in the SPA MMP (8(1)(g)).
- The draft SPA MMP at Section 7.10 includes an initial summary timetable of 8.31 the proposed works, with a focus on the enhancement works, but also includes reference to the woodland pasture measures for the two SPA compensation land parcels. The SPA MMP states that the woodland pasture is a discreet piece of work that can be carried out independent of the construction programme and that at the time of drafting of the SPA MMP, it is a requirement of the draft DCO ("dDCO") that substantial progress should be made on the habitat creation measures in these areas (C1 and C2) prior to the main body of construction work associated with the Development. The final signed SoCG with NE confirms that the meaning of 'begun' is agreed as set out in the dDCO and requires, as a minimum, commencement of preparatory works within either of the SPA compensation land parcels (that is, ground preparation or fencing) prior to construction. Whilst the DCO does not, as mentioned in the SPA MMP, actually say that substantial progress should be made on the habitat creation measures, the details of the timetable for the completion of the environmental mitigation and enhancement works are a matter for approval by the Secretary of State.
- 8.32 In proposing appropriate timings for the SPA compensation and enhancement works, the Applicant has consulted and sought feedback from NE and key stakeholders such as FC, RSPB and SWT. The Secretary of State notes the agreement with NE that it is not necessary for the habitat enhancement works to be established prior to the commencement of the Development construction and agrees that this is not necessary. This is on the basis that the Development would not cause the direct loss of existing heathland nor would it cause the loss of the qualifying features.
- 8.33 The Applicant explains that following feedback from NE, FC, RSPB and SWT, it has been suggested that the process of clearing and thinning the SPA enhancement areas should be phased over a number of winters. Additionally, each location should also be cleared and/or thinned in one go, to minimise the period of disturbance. The Applicant also acknowledges that creation of open areas close to the DCO boundary prior to, or during the construction works could potentially cause ecological issues (eg encouraging woodlark to nest near construction works, which could result in them being at risk of disturbance or displacement). The Applicant confirms that whilst some of the SPA enhancement works would take place during construction, works would be staggered, and potentially sensitive areas close to the DCO boundary would be undertaken once construction is complete.
- 8.34 With respect to the temporary land take in the SPA to be restored, the Applicant's HRA Stage 3-5 report confirms that temporary land take will be reinstated once the construction of the Development has finished in that location. This is specified in the SPA MMP at Table 7.10.1. The Secretary of State also notes the provisions in article 33 of the DCO (temporary use of land for carrying out the authorised development) and Requirement 17, relating to restoration of land used temporarily.
- 8.35 As noted above at paragraph 8.5, SPA compensation land C1 is owned by SCC and C2 is owned by the RHS. Both areas are managed by SWT. SWT currently manages the wildlife conservation at Wisley and Ockham Commons, in which

the SPA land falls, under long leases and a long-term contractual arrangement with SCC.

- 8.36 The Secretary of State notes that the Applicant proposes that its principal contractor would undertake the initial works to, and maintenance of the SPA land under the construction contract, which would be for a period of up to five years. The Applicant indicated in the examination and in the SPA MMP that following this period, through side agreements²⁷ between the Applicant and SCC and SWT, it is possible that SWT would carry out (at the Applicant's cost) the long-term management and monitoring works for up to a further 20 year period on the SPA land, including the future maintenance and monitoring within the SPA. The principal terms of the side agreement with SCC, of which SWT would be party, are set out in the Applicant's document '9.138 Position statement with SCC on the Environmental and Highways Side Agreements'.
- 8.37 The Applicant has also subsequently agreed a land works agreement with the RHS, which includes reference to the SPA compensation land (as "the RHS Environmental Land", at land plots 11/2 and 11/3 (as shown on Sheet 11 of the Land Plans)). This land is also managed by SWT. However, as confirmed by the Applicant in the examination, including in the latest SPA MMP, it is not envisaged that the RHS would be responsible for carrying out any of the works required to create or manage the C2 SPA compensation land.
- 8.38 The Secretary of State sought an update on the side agreement with SCC as part of the further consultations. The Applicant confirmed in its response (document 9.150 Applicant's Response to Secretary of State's Consultation Letter 4 November 2020) that it is working towards this agreement being finalised. The Applicant also confirmed that such an agreement would have 'step-in rights' under the agreement (in addition to its powers in the DCO) in the event that the maintenance work is not done, or not done to the required standard, such that the Applicant can ensure that its obligations under the DCO are fulfilled in any event.
- 8.39 Notwithstanding that a side agreement(s) may be forthcoming, the Applicant has maintained throughout the examination that whether or not this side agreement is made, and whether or not SWT fulfils such obligations, the Applicant retains all of the necessary powers to carry out and maintain all of the environmental works under the DCO. This is reiterated in response to the Secretary of State's further consultations.
- 8.40 The Secretary of State is content with this position and is satisfied that the phased delivery and ongoing management of the compensatory measures, in both the SPA compensation land and SPA enhancement areas, together with restoration of land temporarily lost from the SPA, are secured through the DCO and that the Applicant will deliver these measures. The DCO provides that the Applicant would have the necessary rights to enter upon the relevant land to carry out the necessary works and maintain them.
- 8.41 The Secretary of State notes that the RHS submissions to the examination argued that the likely success of the compensation package was uncertain in the context of changes in air quality. This was explored by the ExA, along with the Applicant's response at Deadline 12 and comments from SWT that the compensation proposed under the DCO would realise benefits for the SPA bird species (based on SWT's experience managing the Ockham and Wisley

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²⁷ The Applicant intends to enter into two side agreements, one would be between Highways England, SCC and SWT. The other agreement, not involving SCC's land, will be between HE and SWT only

Common SSSI). The ExA concluded that there was sufficient evidence to suggest that the compensation package has been subject to robust consultation with NE and other key stakeholders and that the proposals under the SPA MMP have a high degree of certainty of success in achieving their aims. As such, the ExA was satisfied that the compensation package as proposed is feasible and appropriate. The RHS also raised the same concern in their responses to the Secretary of State's further consultations following the examination.

- 8.42 The Secretary of State notes the Applicant's response to RHS' Deadline 12 submission, provided in response to the Secretary of State's consultation of 4 November 2020. In response the Applicant reiterates that it has carefully designed the suite of compensatory measures in consultation with NE, SWT, FC, SCC, and the RSPB. The Applicant further clarifies the areas of clearance proposed within the SPA enhancement areas and expands on the consideration given and the reasons behind the selection of any areas proposed for clearance that lie within 150m of the A3, with reference to the discussions and agreements with the aforementioned key stakeholders. The Applicant also, with reference to submissions to the examination, identifies that mechanisms within the SPA MMP allow for adaptive management within the SPA enhancement areas and SPA compensation land where required.
- 8.43 The final SoCG between the Applicant and NE records agreement with the Applicant on this matter and confirms that the SPA MMP allows for adaptive management (where required) to ensure the viability of the newly-created heathland, through the long-term provision of works and monitoring targets and under discussion with the steering group. The SPA MMP includes information on the steering group to be set up to help inform decision making for the duration of the management plan and to discuss when major changes to the management plan are required, or when targets have been met.
- 8.44 The final SoCG between the Applicant and NE records agreement with the proposed suite of compensatory measures. Following discussions throughout the examination, the final SoCG submitted at Deadline 12 between SCC and the Applicant records agreement on the adequacy of the measures and that the submitted SPA MMP is a suitable framework for future management and monitoring. The RSPB also stated satisfaction with the nature and scale of the compensatory measures proposed in its response to ExQ1. However, it raised matters of concern around the proposed duration of the long-term SPA bird monitoring proposals and the details of management activities. Monitoring of the compensation measures is discussed below.
- 8.45 Having given due consideration to the information presented to him, the Secretary of State agrees with the position of the Applicant, the advice of NE and other key stakeholders and the recommendations of the ExA and concludes that sufficient legal and technical arrangements are in place to secure that the compensation package as proposed is appropriate and guaranteed to be implemented under the DCO and that that secure and binding plans are in place to deliver and manage the measures on an ongoing basis. The SPA MMP allows for adaptive management which will ensure the compensation package remains sustainable given natural changes. The Secretary of State acknowledges that the RHS disagrees with this conclusion but considers that there is no persuasive evidence that contradicts the conclusion reached that the compensatory measures proposed will ensure the coherence of the national site network. The Secretary of State is confident that

the suite of measures proposed will be positive and would not lead to negative effects on the Thames Basin Heaths SPA or other sites.

Efficacy of the compensation package and monitoring

- 8.46 The SPA MMP outlines the monitoring, including monitoring targets/ measures of success for each habitat type, with suggested monitoring methods, frequency, and duration. Proposed species monitoring (applicable to the three SPA qualifying features and invertebrates) including details of monitoring frequency is set out in Table 7.11.1 of the SPA MMP. As noted above, Requirement 8(g) of the DCO secures a scheme for the maintenance, management and monitoring of the compensatory habitat creation and enhancement measures in respect of the Thames Basin Heaths SPA that reflects the measures set out in the SPA MMP.
- 8.47 The ExA explored the mechanisms for monitoring success of the compensation measures and the plans for their long-term funding during the examination, as set out in ER 6.9.14 to 6.9.18 of the Recommendation Report. Views were sought from relevant stakeholders including NE and discussions continued throughout the examination.
- 8.48 NE confirmed in its response to ExQ2 2.4.3 that it was "...satisfied that the proposed monitoring programme [as set out in Table 7.11.1 of the SPA MMP] specifically assessing the success or otherwise of heathland creation in terms of numbers of Annex 1 birds utilising the enhancement areas is appropriate". This is also reflected in the final signed SoCG between the Applicant and NE (point 3.2.19). SCC, Guildford Borough Council, and Elmbridge Borough Council also stated their satisfaction with the monitoring proposals but deferred to the views of NE and the RSPB.
- 8.49 The RSPB raised outstanding concerns around the frequency of bird population monitoring, duration of habitat monitoring, the agreements post-consent, as well as the provisions of long-term funding and arrangements for the steering group, at Deadlines 5 and 7. The Applicant responded to the RSPB directly at Deadline 8, stating that the SPA MMP provides an adequate framework for agreement of the relevant details. It also referred to its responses to ExQ3 (3.3.4 and 3.4.5) which set out the anticipated agreements to be reached.
- 8.50 The RSPB continued to raise these concerns at Deadline 10, with the Applicant confirming its commitment to funding of the measures within the SPA MMP in its response to the RSPB at Deadline 11 and in its answer to ExQ4 (4.1.3). The Applicant also set out the mechanisms and the progress so far on agreements with SCC and SWT on the compensation and enhancement works, and confirmed that the dDCO provides for the rights to enter land owned by the RHS in order to undertake the compensation and enhancement measures (Works Nos. 57 and 58) and maintain them.
- 8.51 In light of the discussion and the responses from the RSPB, Applicant, and NE, the ExA was satisfied that the outline proposals secured by Requirement 8 of the dDCO would ensure an appropriate mechanism for agreement of the details of the SPA compensatory habitat creation and enhancement measures and will be subject to approval by the Secretary of State following consultation with NE, the relevant planning authority and SCC.
- 8.52 The Secretary of State has had regard to the measures secured through the DCO, the position of the Applicant, RSPB, and NE (as the appropriate nature conservation body), together with the recommendation of the ExA. On the basis of the information before him, the Secretary of State concludes that the

proposed compensation package is capable of being monitored and well managed including in the long-term. The monitoring proposed is considered sufficient to validate the efficacy of the compensatory measures.

Financially feasible

- 8.53 The Secretary of State is content with the funding position as set out in the Applicant's Funding Statement that while the period for RIS1 was originally intended to expire by the end of March 2020, funding for the Development will continue to be committed to it through to the end of March 2021. This was reconfirmed during in the Applicant's 'Written submission of Applicant's case put orally at the Compulsory Acquisition Hearings held on 16, 17 and 18 June' submitted at deadline 11 to the examination. The Secretary of State further notes that the Development has since been included in RIS2, funding for which lasts until 2025.
- 8.54 As confirmed in the SPA MMP, the Applicant has committed to fund the works described within that document, for the durations outlined in Table 7.2.1 of the plan. This commitment is reiterated in the Applicant's responses to ExQ1 1.4.26 and ExQ4 4.1.3, with the Applicant noting that the costs of undertaking the measures within the SPA MMP form part of the capital cost of the Development as set out in Section 2.1 of the Funding Statement. The Applicant states that should it fail to comply with the scheme to be approved by the Secretary of State under Requirement 8 of the DCO, this would be enforceable in the same manner as any other failure to comply with a provision of a DCO.
- As explained in the SPA MMP, the Development includes as an enhancement measure a "green bridge" extension to Cockcrow bridge. The green bridge is intended to provide an additional enhancement measure to address historic issues relating to the severance of ecological habitats by the existing A3, including habitats that form part of the Ockham and Wisley Commons SSSI (for which a separate designated funds application was being made by the Project team to National Highways, formerly Highways England). The Applicant's response to the Secretary or State's consultation of 16 November 2020 explains that funding has now been secured to construct a green bridge (Work No.35(b) in the DCO). Details of the proposed green bridge extension are set out in the Applicant's Report on Proposed Scheme Changes (Rev 1), submitted at Deadline 4a.
- 8.56 On the basis of the information before him, the Secretary of State is satisfied that the proposed compensation package will be funded by the Applicant and is financially feasible and affordable.

Agreement with the appropriate nature conservation body

8.57 NE has been consulted on and agrees with the package of compensatory measures as set out in the Applicant's HRA Stage 3-5 report, as evidenced in point 3.2.17 of the signed SoCG with the Applicant. This includes the appropriate ratios for the permanent and temporary land take, agreement on the SPA compensation land parcels and SPA enhancement areas, and their proposed management.

The Secretary of State's conclusion on compensatory measures

8.58 The subject of compensatory measures was given substantial consideration during the examination, with the Applicant's proposed compensation package

- examined in detail. The recommendation of the ExA is that the compensation package as proposed is feasible and appropriate and is adequately secured in the DCO.
- 8.59 The Secretary of State has considered the proposed compensation package and information provided by the Applicant and other IPs and is content that the proposed compensation measures will be effective and are appropriate, secured and agreed with NE as the appropriate nature conservation body. The Secretary of State concludes that they are legally, financially, and technically feasible and that monitoring is in place to ensure the compensatory measures are delivered and are in place for the timescales needed.
- 8.60 The Secretary of State has considered the provisions of Regulation 68 of the Habitats Regulations to secure the necessary compensatory measures are taken to ensure that the overall coherence of the national site network is protected and concludes that this would be satisfied with the compensatory measures in place.

Securing the designation of the SPA compensatory land as a **European site**

- 8.61 ER 6.9.2 of the Recommendation Report describes the process by which the Applicant and NE expect the SPA compensation land to become designated as part of the Thames Basin Heaths SPA. Paragraph 5.1.10 of the Applicant's HRA Stage 3-5 report and paragraph 7.2.3.5 of the SPA MMP explain that following an approval by the Secretary of State, the SPA compensation land would be recorded by the NE GIS database as SPA land and would be shown on the Multi-Agency Geographic Information for the Countryside ("MAGIC") system, to ensure that the SPA compensation land is given the same protection as SPA land with regards to future planning proposals.
- The appropriate authority²⁸ has a duty to classify SPAs as a European site; 8.62 however, the prior obligation on the appropriate authority to provide information to the European Commission about the site no longer applies²⁹.
- Regulation 16 of the Habitats Regulations will continue to provide that if the 8.63 appropriate authority proposes to classify a site as a SPA under Regulation 15, it must give to the appropriate nature conservation body³⁰: (a) notice of that proposal and (b) an accompanying statement of the reasons for that proposal. In turn, the appropriate nature conservation body must give notice of the proposal to various other parties and produce a report to the appropriate authority.
- 8.64 Until the point at which the compensatory land located outside of the existing SPA boundary becomes part of the European site, protection is provided by Government policy³¹.

²⁸ The Secretary of State for Defra

²⁹ The Conservation of Habitats and Species Regulations 2017 as amended by The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019

³⁰ In this case, Natural England

³¹ Paragraph 181 of the National Planning Policy Framework https://www.gov.uk/guidance/nationalplanning-policy-framework/15-conserving-and-enhancing-the-natural-environment (Accessed 07/02/2022)

9. SUMMARY OF CONCLUSIONS

- 9.1 The Secretary of State has carefully considered all the information presented within the application, during the Examination and the representations made by IPs, along with the Recommendation Report and the responses to the Secretary of State's further consultations.
- 9.2 The Development is not directly connected with, or necessary to, the management of a European site, and is likely to have a significant effect on the Thames Basin Heaths SPA. The Secretary of State therefore carried out an appropriate assessment to determine any adverse effects on the integrity of this European site.
- 9.3 The Secretary of State concludes that the Project alone would result in an adverse effect on the integrity of the Thames Basin Heaths SPA, and all three qualifying features Dartford warbler, woodlark, and nightjar.
- 9.4 The Secretary of State is satisfied that there are no alternative solutions to fulfilling the objectives of the Project and that the Project provides a benefit that is imperative to the public interest. The Secretary of State is also satisfied that the public benefits of the Project would over-ride the impacts to the Thames Basin Heaths SPA, subject to the securing of compensatory measures.
- 9.5 Having considered the package of compensatory measures proposed by the Applicant and secured through the DCO, the Secretary of State concludes that all legal, financial and technical arrangements are in place and that monitoring will be in place to ensure the compensatory measures are delivered and are in place in the timescales needed. The Secretary of State is satisfied that the overall coherence of the national site network would be protected by the implementation of the compensatory measures.
- 9.6 The Secretary of State has therefore concluded, as competent authority for the purposes of the Habitats Regulations, that taking into account the package of compensatory measures it is permissible for him to give consent for the Development in spite of the adverse effects which it would have on the integrity of the Thames Basin Heaths SPA.

Annex 1 Documents used to inform this HRA Report

Application Documents

- Document 5.3: Habitats Regulations Assessment: Stage 2: Statement to inform appropriate assessment [APP-043]
- Document 5.3: Habitats Regulations Assessment Stage 3-5: Assessment of alternatives, consideration of imperative reasons of overriding public interest (IROPI) and compensatory measures report [APP-044]
- Document 5.3: Habitats Regulations Assessment Figures [APP-039]
- Document 5.3: Habitats Regulations Assessment Annex A: Stage 1 Screening [APP-040]
- Document 5.3: Habitats Regulations Assessment Annex B: Consultation report [APP-041]
- Document 5.3: Habitats Regulations Assessment Annex C: Selection of the suite of compensatory measures [APP-042]
- Document 6.3 ES Chapters 1-4 [APP-049]
- Document 6.3 ES Chapter 5 Air Quality [APP-050]
- Document 6.3 ES Chapter 7 Biodiversity [APP-052]
- M25 junction 10/A3 Wisley interchange TR010030 6.5 ES Appendix 7.19
 SPA Management and Monitoring Plan (SPA MMP) [APP-105]
- M25 junction 10/A3 Wisley interchange TR010030 7.2 Outline Construction Environmental Management Plan (OCEMP) [APP-134]
- M25 junction 10/A3 Wisley interchange TR010030 7.3 Register of Environmental Actions and Commitments [APP-135]

Examination documents produced by Applicant

- Habitats Regulations Assessment Figures Revision 1 [AS-006]
- Habitats Regulations Assessment Figures Revision 2 [AS-012]
- Document 5.3 Habitats Regulations Assessment: Stage 2: Statement to Inform Appropriate Assessment (SIAA) Revision 1 [REP4-018]
- Document 5.3: Habitats Regulations Assessment: Stage 3-5: Assessment of alternatives, consideration of imperative reasons of overriding public interest (IROPI) and compensatory measures Revision 1 [REP4-014]
- Document 5.3: Habitats Regulations Assessment: Annex A: Stage 1 Screening Revision 1 [REP2-003] and Revision 2 [REP4-015]
- Document 5.3: Habitats Regulations Assessment: Annex B: Consultation report, Revision 1 [REP4-016]
- Document 9.29: Updated Screening Matrices 2 and 3 Habitat Regulations Assessment Appendix A [REP2-024]
- Document 5.3 Habitats Regulations Assessment: Annex C: Selection of the suite of compensatory measures, Revision 1 [REP4-017]
- Document 5.3 Habitats Regulations Assessment: Figures, Revision 1 [AS-012] and Revision 2 [REP4-043]
- Document 6.3 ES Chapters 1-4, Revision 1 [REP4-024]

- M25 junction 10/A3 Wisley interchange TR010030 6.5 ES Appendix 7.19 SPA Management and Monitoring Plan (SPA MMP), Revision 1 [AS-015] and Revision 2 [REP4-031]
- M25 junction 10/A3 Wisley interchange TR010030 7.2 Outline Construction Environmental Management Plan (OCEMP), Revision 1 [AS-016] Revision 2 [REP4-033] and Revision 3 [REP4a-003]
- Highways England Statement of Common Ground (SoCG) with NE [REP3-002] Revision 1, [REP5-003] Revision 2, and [REP8-022] Revision 3
- Highways England 9.35 SoCG with Elmbridge Borough Council (EBC) [REP3-010], [REP5-007] Revision 1, [REP8-028] Revision 2
- Highways England 9.36 SoCG with Guildford Borough Council (GBC) [REP3-011], [REP5-008] Revision 1, [REP8-029] Revision 2
- Highways England 9.37 SoCG with Surrey County Council (SCC) [REP3-012], [REP5-009] Revision 1, [REP8-030] Revision 2, [REP12-008] Revision 3
- Highways England SoCG with the Royal Horticultural Society (RHS) [REP3-013], [REP5-010], and [REP8-031]
- Highways England 8.3 (2) SoCG with the Environment Agency (EA)
 [APP-139], [REP3-003] Revision 1, [REP5-004] Revision 2, [REP8-023]
 Revision 3
- Highways England 9.18 Applicant's Response to Written Questions [REP2-013]
- Highways England 9.19 Applicant's Comments on Written Representations [REP2-014]
- Highways England 9.27 Response to RHS Comments on Air Quality [REP2-022]
- Highways England 9.33 Applicant's comments on IP responses to Examining Authority's First Written Questions [REP3-008]
- Highways England 9.34 Post-Hearing submissions including written summaries of oral case for Issue Specific Hearing 2 (ISH2) [REP3-009]
- Highways England 9.51 Applicant's comments on RHS's Deadline 3 submission [REP4-005]
- Highways England 9.53 Applicant's comments on RSPB's Deadline 3 submission [REP4-007]
- Highways England 9.58 Applicant's Response to Examining Authority's Second Written Questions [REP5-014]
- Highways England 9.59 Response to RHS Deadline 4 submission [REP5-015]
- Highways England 9.69 Revised Nitrogen deposition rates within the Thames Basin Heath SPA [REP5-024]
- Highways England 9.75 Comments on Royal Horticultural Society's Deadline 5 Submission [REP6-010]
- Highways England 9.78 Comments on Interested Party Responses to ExQ2 [REP6-013]

- Highways England 9.82 Applicants Response to Examining Authority Third Written Questions [REP7-004]
- Highways England 9.86 Applicants Comments on Royal Horticultural Society's Deadline 6 [REP7-008]
- Highways England Deadline 8 Submission 9.92 Applicant's comment to the Examining Authority's Report on the Implications for European Sites (RIES) Deadline 8 submission - Rev 0 [REP8-038]
- Highways England 9.100 Applicant's Response to Royal Horticultural Society's Deadline 7 Submission - Rev 0 [REP8-045]
- Highways England Deadline 8 Submission 9.101 Applicant's Comments on The Royal Society for the Protection of Birds' (RSPB) Deadline 7 Submission - Rev 0 [REP8-046]
- Highways England Deadline 8 Submission 9.102 Applicant's Response to Interested Parties Comments on the Examining Authority's Third Written Questions - Rev 0 [REP8-047]
- Highways England Deadline 9 Submission 9.107 Applicants' comments to Royal Horticultural Society's Deadline 8 Submissions - Rev 0 [REP9-003]
- Highways England Deadline 10 Submission 9.108 Applicant's comments to Deadline 9 Submissions - Rev 0 [REP10-003]
- Highways England Deadline 10 Submission 9.109 Applicant's comments to Examining Authority's fourth written questions and requests for information - Rev 0 [REP10-004]
- Highways England Deadline 10 Submission 9.112 Applicant's comments to Examining Authority's fourth written question 4.3.3 - Rev 0 [REP10-007]
- Highways England 9.117 Applicant's comments to Deadline 10 Submissions - Rev 0 [REP11-007]
- Highways England 9.126 Applicant's submission IAQM guidance (document accompanying Volume 9.117) - Rev 0 [REP11-015]
- Highways England 9.138 Position statement with SCC on the Environmental and Highways Side Agreements [REP12-018]
- Highways England 9.144 Applicant's Comments to RHS's Deadline 11 Submission [REP12-024]

Examination documents produced by Interested Parties

- Environment Agency (EA) relevant representation [RR-011]
- Natural England (NE) relevant representation [RR-020]
- The RHS relevant representation [RR-024]
- The Royal Society for the Protection of Birds (RSPB) relevant representation [RR-026]
- Surrey Wildlife Trust's (SWT) relevant representation [RR-027]
- SCC's written representation [REP1-018]
- RHS' written representation [REP1-038]
- RHS Deadline 1 Submission Air Quality Representation [REP1-041]

- RHS Deadline 1 Submission Summary of Air Quality Representation [REP1-042]
- RHS Deadline 1 Submission Ecology and Habitats Regulations Assessment Representation [REP1-043]
- The RSPB's written representation [REP1-045]
- EBC Response to Examining Authority's First Written Questions Annex A [REP2-028]
- GBC Response to Examining Authority's First Written Questions [REP2-032]
- NE response to the Examining Authority's First Written Questions and request for information [REP2-034]
- SCC Response to the Examining Authority's First Written Questions [REP2-045]
- The RSPB Response to the Examining Authority's First Written Questions [REP2-050]
- RHS Appendix 2 Ockham Roundabout Comparison between RHS Alternative and DCO Scheme [REP3-049]
- RHS Appendix 3 RHS Response to REP2-022 [REP3-050]
- RSPB Response to Applicant's comments on Written Representations [REP3-060]
- RHS Comments on any further information requested by the ExA for Deadline 3 [REP4-049]
- SCC Deadline 5 Submission Annex A Response to ExA's Written Questions (EXQ2) [REP5-029]
- NE Deadline 5 Submission Response to Examining Authority's Second Written Questions [REP5-032]
- NE Special Protection Area SPA2 Citation [REP5-033]
- NE European Site Conservation Objectives: Supplementary Advice [REP5-034]
- NE European Site Conservation Objectives for Thames Basin Heaths SPA [REP5-035]
- EBC Deadline 5 Submission Response to Examining Authority's Second Written Questions [REP5-037]
- GBC Deadline 5 Submission Response to Examining Authority's Second Written Questions [REP5-038]
- The RSPB Deadline 5 Submission Response to Examining Authority's Second Written Questions [REP5-043]
- RHS Deadline 5 Submission Appendix D Ammonia from Roads for Habitats Assessments [REP5-049]
- RHS Response to Examining Authority's Second Written Questions [REP5-054]
- SCC Deadline 6 Submission Comments on any further information requested by the ExA received by D5 and D5a [REP6-019]

- RHS Deadline 6 Submission Comments on any further information requested by the ExA received by D5 and D5a [REP6-024]
- SCC Deadline 7 Submission Response to Examining Authority's Third Written Questions (Annex A) [REP7-025]
- NE Deadline 7 Submission Response to Examining Authority's Third Written Questions and requests for Information [REP7-026]
- The RSPB Deadline 7 Submission [REP7-028]
- RHS Deadline 7 Submission Response to request for further information [REP7-038]
- RHS Deadline 7 Submission Response to Examining Authority's Third Written Questions [REP7-039]
- RHS Deadline 7 Submission Appendix 1 Response to Highways England's Deadline 6 Submissions and Figure 1 [REP7-040]
- RHS Deadline 7 Submission Appendix 2 Email from Royal Horticultural Society to Natural England [REP7-041]
- RHS Deadline 8 Submission Royal Horticultural Society's Response to Highways England REP7-004 [REP8-053]
- RHS Deadline 8 Submission Royal Horticultural Society's Response to Highways England REP7-008 [REP8-054]
- RHS Deadline 8 Submission Response to the Planning Inspectorate's Report on the Implications for European Sites dated 9 April 2020 (RIES) [REP8-055]
- RHS Deadline 9 Submission Royal Horticultural Society Deadline 9 Overview [REP9-011]
- RHS Deadline 9 Submission Appendix 1 Request for further information by the Royal Horticultural Society from Highways England in relation to REP8-040 (south facing slips modelling) [REP9-012]
- RHS Deadline 9 Submission Appendix 2 AQ/BIOD comments on REP8-022 [REP9-013]
- RHS Deadline 9 Submission Appendix 3 [REP9-014]
- NE Deadline 10 Submission Examining Authority's fourth written questions and requests for information [REP10-016]
- SWT Deadline 10 Submission Responses to Draft Development Consent Order [REP10-017]
- SWT Deadline 10 Submission SPA Bird Recording Wisley & Ockham [REP10-018]
- SWT Deadline 10 Submission Wisley and Ockham Management Plan [REP10-019]
- The RSPB Deadline 10 Submission [REP10-020]
- RHS Deadline 10 Submission Appendix 3 Response to Examining Authority's Fourth written questions and requests for information [REP10-025]
- RHS Deadline 10 Submission Appendix A to Appendix 3 Extracts from Habitat Regulation Assessments for Epping Forest DC and Havant BC [ExQ4.4.9] [REP10-026]

- RHS Deadline 10 Submission Response to Written Question Q4.4.7 -APIS Ammonia [REP10-027]
- RHS Deadline 10 Submission Response to Written Question Q4.4.7 -APIS Starter's Guide [REP10-028]
- RHS Deadline 10 Submission Response to Written Question Q4.4.7 -Natural England's guidance on assessment of road traffic emissions under the Habitats Regulation June 2018 [REP10-029]
- RHS Deadline 10 Submission Response to Written Question Q4.4.7 -Institute of Air Quality Management guidance - Air Quality impacts on nature conservation sites 2020 [REP10-030]
- RHS Deadline 10 Submission Response to Written Question Q4.4.18 -Alexander and Cresswell 1990 [REP10-031]
- RHS Deadline 11 Submission Table showing comparisons of REP10-032 with REP10-004 [REP11-036]
- RHS Deadline 11 Submission RHS Response to REP10-003 [REP11-037]
- RHS Deadline 11 Submission RHS Response to HE-NE-SWT responses to ExQ4 [REP11-038]
- RHS Deadline 11 Submission Appendix 1 DMRB guidance LA115 (Habitat Regulations Assessment) dated January 2020 (referenced at 4.3.2) [REP11-039]
- RHS Deadline 11 Submission Appendix 2 Table A In combination Impacts - HE REP10-007 corrected by RHS (referenced at 4.3.3) [REP11-040]
- RHS Deadline 11 Submission Appendix 3 AQC note (references at 4.3.3) [REP11-041]
- RHS Deadline 11 Submission Appendix 4 Baker Consultants Ltd's Figure 1 (referenced at 4.4.3, 4.4.5) [REP11-042]
- RHS Deadline 11 Submission Appendix 5 Baker Consultants Ltd's Figure 2 (referenced at 4.4.2, 4.4.3, 4.4.5) [REP11-043]
- RHS Deadline 11 Submission Appendix 6 Baker Consultants Ltd's Figure 3 (referenced at 4.4.3, 4.4.5) [REP11-044]
- RHS Deadline 11 Submission Appendix 7 Baker Consultants Ltd's Figure 4 (referenced at 4.4.3, 4.4.5) [REP11-045]
- RHS Deadline 11 Submission Appendix 8 Baker Consultants Ltd's Table 1 (referenced at 4.4.3, 4.4.5) [REP11-046]
- SWT Deadline 12 Submission Final Comments [REP12-043]
- SWT Deadline 12 Submission Response to Examining Authority's request for comments regarding possible Replacement Land options [REP12-044]
- RHS Deadline 12 Submission Response to Highways England's REP11-007 [REP12-052]
- RHS Deadline 12 Submission Appendix A to RHS responses to REP11-007 - ACQ Report April 2008 [para 6.1.55] [REP12-053]
- RHS Deadline 12 Submission Land and Works Agreement Heads of Terms [REP12-054]

- RHS Deadline 12 Submission Submissions on the DCO Scheme in relation to Regulations 63, 64 and 68 of the Conservation of Habitats and Species Regulations 2017 [REP12-056]
- RHS Deadline 12 Submission Closing Submission [REP12-057]

ExA Procedural Decisions

- The ExA's Written Questions (WQ) [PD-006]
- The ExA's Second Written Questions (ExQ2) [PD-010]
- The ExA's third written questions and requests for information (ExQ3)
 [PD-016]
- The Examining Authority's fourth written questions and requests for information (ExQ4) [PD-021]
- Report on the Implications for European Sites Proposed M25 Junction Wisley Improvement [PD-013]
- ExA's Requests for Further Information under Rule 17 of The Infrastructure Planning (Examination Procedure) Rules 2010
- ExA's Notification of Procedural Decision Rule 9 [PD-013]
- ExA's request for further information Rule 17 [PD-023] and [PD-024]

Submissions after close of examination

- SWT response to the Secretary of State's consultation of 4 November 2020
- SCC response to the Secretary of State's consultation of 4 November 2020
- The RSPB response to the Secretary of State's consultation of 4 November 2020
- Ockham Parish Council's response to the Secretary of State's consultation of 4 November 2020
- NE response to the Secretary of State's consultation of 4 November 2020
- Highways England 9.151 Applicant's Comments on the Royal Horticultural Society D12 Submission [REP12-056] – Response by counsel – Michael Humphries QC and Caroline Daly
- Highways England 9.150 Applicant's Response to Secretary of State's Consultation Letter - 4 November 2020
- Highways England Response to the Secretary of State's consultation of 16 November 2020 - 9.152 Applicant's response to SoS letter dated 16 Nov 2020
- RHS response to the Secretary of State's consultation of 4 November 2020
- The RSPB response to the Secretary of State's consultation of 27 November 2020
- SWT response to the Secretary of State's consultation of 27 November 2020
- SCC response to the Secretary of State's consultation of 27 November 2020

- RHS response to the Secretary of State's consultation of 27 November 2020
- Highways England 9.153 Response to Secretary of State's letter of 27 November 2020
- Highways England 9.155 Other information in respect of environmental effects requested by the Secretary of State in relation to his Replacement Land proposals
- Highways England 9.158 Figure showing Highways England's interpretation of the Secretary of State's Replacement Land proposals
- Highways England 9.154 Applicant's comments in response to the submissions of the Royal Horticultural Society on Habitats Regulations Assessment matters
- Highways England 9.156 Other environmental information requested by the Secretary of State in respect of his Replacement Land proposals to inform the Appropriate Assessment
- Highways England 9.157 Applicant's Response to Secretary of State's Letter - 20 January 2021 - legal opinion written by Michael Humphries QC and Caroline Daly
- SWT response to Secretary of State Consultation 5
- SCC response to Secretary of State Consultation 5
- The RHS response to Secretary of State Consultation 5
- NE response to Secretary of State Consultation 5
- Highways England 7.3 Register of environmental actions and commitments Revision 5
- Highways England Response to Secretary of State Consultation 5 Cover Letter
- Highways England Scheme Layout Plans Revision 2
- Highways England Works Plans Revision 3
- Highways England Temporary Works Plans Revision 2
- GBC response to Secretary of State Consultation 5
- EBC response to Secretary of State Consultation 5
- Highways England response to Secretary of State Consultation 6
- EBC response to Secretary of State Consultation 6
- Highways England response to Secretary of State Consultation 7
- NE response to Secretary of State Consultation 7
- EBC response to Secretary of State Consultation 7
- Ockham Parish Council response to Secretary of State Consultation 7
- RHS response to Secretary of State Consultation 7
- Regena Coult response to Secretary of State Consultation 7
- Ripley Parish Council response to Secretary of State Consultation 7
- National Highways (formerly Highways England) response to Secretary of State Consultation 8

NB. This list is not exhaustive. The HRA Report is informed by the application and submissions to the examination, together with submissions after the close of examination.

Annex 2 Conservation Objectives

Available from:

http://publications.naturalengland.org.uk/category/649006889408921632

NB. In the case of all European sites identified below, the Conservation Objectives are to be read in conjunction with the accompanying Supplementary Advice documents, which provides more detailed advice and information to enable the application and achievement of the Objectives set out.

Thames Basin Heaths SPA (UK9012141)

With regard to the SPA and the individual species and/or assemblage of species for which the site has been classified (the 'Qualifying Features' listed below), and subject to natural change:

Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring:

- The extent and distribution of the habitats of the qualifying features;
- The structure and function of the habitats of the qualifying features;
- The supporting processes on which the habitats of the qualifying features rely;
- The population of each of the qualifying features; and
- The distribution of the qualifying features within the site.

Qualifying Features:

A224 Caprimulgus europaeus; European nightjar (Breeding)

A246 Lullula arborea; Woodlark (Breeding)

A302 Sylvia undata; Dartford warbler (Breeding)

Mole Gap to Reigate Escarpment SAC (UK0012804)

With regard to the SAC and the natural habitats and/or species for which the site has been designated (the 'Qualifying Features' listed below), and subject to natural change:

Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring:

- The extent and distribution of qualifying natural habitats and habitats of qualifying species;
- The structure and function (including typical species) of qualifying natural habitats;
- The structure and function of the habitats of qualifying species;

³² Accessed 07/02/2022

- The supporting processes on which qualifying natural habitats and the habitats of qualifying species rely;
- The populations of qualifying species; and
- The distribution of qualifying species within the site.

Qualifying Features:

- H4030. European dry heaths
- H5110. Stable xerothermophilous formations with *Buxus sempervirens* on rock slopes (Berberidion p.p.); Natural box scrub
- H6210. Semi-natural dry grasslands and scrubland facies: on calcareous substrates (FestucoBrometalia) (important orchid sites); Dry grasslands and scrublands on chalk or limestone (important orchid sites)*
- H9130. Asperulo-Fagetum beech forests; Beech forests on neutral to rich soils
- H91J0. Taxus baccata woods of the British Isles; Yew-dominated woodland*
- S1166. Triturus cristatus; Great crested newt
- S1323. Myotis bechsteinii; Bechstein`s bat

Ebernoe Common SAC (UK0012715)

With regard to the SAC and the natural habitats and/or species for which the site has been designated (the 'Qualifying Features' listed below), and subject to natural change:

Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring:

- The extent and distribution of qualifying natural habitats and habitats of qualifying species;
- The structure and function (including typical species) of qualifying natural habitats;
- The structure and function of the habitats of qualifying species;
- The supporting processes on which qualifying natural habitats and the habitats of qualifying species rely;
- The populations of qualifying species; and
- The distribution of qualifying species within the site.

Qualifying Features:

- H9120. Atlantic acidophilous beech forests with *Ilex* and sometimes also *Taxus* in the shrublayer (*Quercion robori-petraeae* or *Ilici-Fagenion*);
 Beech forests on acid soils
- S1308. Barbastella barbastellus; Barbastelle bat
- S1323. Myotis bechsteinii; Bechstein`s bat

^{*}priority natural habitat or species

Annex 3 SPA Compensation and Enhancement Proposals

Reproduced from Applicant's Document 5.3 Habitats Assessment Regulations Figures – "Figure 13: SPA Compensation, SPA Enhancement and Replacement Land Proposals"

