

M25 junction 10/A3 Wisley interchange TR010030

9.155 Other information in respect of environmental effects requested by the Secretary of State in relation to his Replacement Land proposals

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M25 junction 10/A3 Wisley interchange

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1. Introduction

- 1.1.1 This document sets out Highways England's response to the request in the Secretary of State's (SoS) letter dated 20 January 2021 for other information in respect of the Secretary of State's consideration of replacement land.
- 1.1.2 In accordance with the Secretary of State's request, Highways England has considered whether any new or different significant environmental effects of any nature would be likely as a consequence of the reduction in relation to replacement land being considered by the Secretary of State and has set out its consideration in the following documents, which should be read alongside this document:
 - 9.154 Applicant's comments in response to the submissions of the Royal Horticultural Society on Habitats Regulations Assessment matters;
 - 9.156 Other environmental information requested by the Secretary of State in respect of his Replacement Land proposals to inform the Appropriate Assessment;
 - 9.157 the legal opinion written by Michael Humphries QC and Caroline Daly, both of Francis Taylor Building; and
 - 9.158 Figure showing Highways England's interpretation of the Secretary of State's Replacement Land proposals.
- 1.1.3 The figure in document 9.158 is Highways England's interpretation of the reduction in Replacement Land being considered by the Secretary of State in the context of special category land and public rights of way around M25 junction 10 and includes an indicative boundary reflecting the Secretary of State's statement that his considerations include "*part of the southern end of land plot 11/17h*".



2. Secretary of State's consideration of replacement land

- 2.1.1 In paragraph 3 of his consultation letter of 4 November 2020, the Secretary of State sought comments on a reduction on the provision of replacement land ("RL") to be provided in exchange for Special Category Land ("SCL").
- 2.1.2 In its response of 19 November 2020, Highways England expressed disagreement with any reduction on the provision of replacement land but commented on RL to be omitted from the Order should the Secretary of State be minded to reduce the provision of RL. In paragraph 4 of the same consultation letter, the Secretary of State sought comments from the Applicant and other interested parties, as regards the reduction in the RL provision, in relation to biodiversity mitigation and/or enhancement measures proposed by the Applicant as part of the Development. The Secretary of State sought further comment from the Applicant regarding the significance of effects on species for which the Applicant intends that RL would contribute to the mitigation of habitat loss. The Secretary of State also requested clarification from the Applicant as to whether the conclusions of the Applicant's HRA rely in any way on the RL.
- 2.1.3 In his letter dated 20 January 2021 the Secretary of State has identified a reduced RL provision and invited Highways England to provide information, to supplement the information provided in its response of 19 November 2020. The reduction in RL being considered is the same amount of RL as suggested in the Secretary of State's letter of 4 November 2020 but with one addition, namely the inclusion of plot 28/2, although as Highways England has noted, whilst this parcel should be included within the Scheme to avoid severance, it cannot form part of the RL.
- 2.1.4 The Secretary of State has requested that Highways England provide other information including consideration of whether any new or different significant environmental effects of any nature would be likely as a consequence of the proposed amount of RL to be provided.
- 2.1.5 The reduced Replacement Land amounts being considered by the Secretary of State are as follows:
 - A reduction in the provision of RL for SCL proposed for outright acquisition to approximately 13.77 ha.
 - A reduction in the provision of RL to compensate for the permanent acquisition of rights to approximately 2.63 ha.
- 2.1.6 The reduced RL provision being considered by the Secretary of State comprises the following land parcels:
 - the whole of the sites identified by the Applicant as PBF1 and PBF2 on Figure B.1 in Statement of Reasons - Appendix C: Common Land and Open Space Report (Revision 3) [REP12-004] (together 13.45 ha) and 2.95 ha



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 [REP8-006].

 land plot 28/2, to avoid severing a small parcel of the landowner's land from the remainder of this retained land. RL sites CF1 to CF4, HF1 and HF2, i.e. land plots 13/9, 13/9b, 13/12, 13/12a, 14/1,14/1a, 14/3, 26/4, 26/4a, 26/5, 26/5a and 26/6 Special Category Land Plans - Rev 2 [REP8-006] to be excluded from the compulsory acquisition powers.

Highways England's understanding of the reduced replacement land provision being considered by the Secretary of State

- 2.1.7 This response is based on the following understanding of the reduced replacement land provision being considered by the Secretary of State:
 - 1) That all of replacement land areas PBF1 and PBF2 should be provided, as stated in the Secretary of State's letter received on 20 January 2021. These two areas comprise ten plots with a total area of 135,692 sq m:
 - 11/16 4,481 sq m
 - 11/17 34,961 sq m
 - 11/17a 11,125 sq m
 - 11/17b 3,000 sq m
 - 11/17c 973 sq m
 - 11/17d 18,992 sq m
 - 11/17e 15,644 sq m
 - 11/17f 36,699 sq m
 - 11/17g 9,049 sq m
 - 27/1 768 sq m
 - 2) That 2.95 ha should be provided from replacement land area PBF3, by providing the following plots, as stated in the Secretary of State's letter received on 20 January 2021:
 - 11/17h 3,983 sq m from the southern edge of the plot
 - 11/17i 25,417 sq m
 - 11/17j 100 sq m
 - 3) This would provide a total of 165,192 sq m, or approximately 16.52 ha, of replacement land.

Land parcel 28/2

2.1.8 For completeness, Highways England notes that the Secretary of State has identified a proposal to include parcel 28/2 within the replacement land package. As set out in Highways England's response to question 3 of the Secretary of



State's consultation letter on 4 November 2020 [9.150 Applicant's Response to Secretary of State's Consultation Letter, dated 19 November 2020], if the Secretary of State is minded to reduce the proposed replacement land in the manner indicated in his 4 November 2020 letter, then land parcel 28/2 should still be included within the Scheme to avoid severing a small parcel of the landowner's land from the remainder of his retained land. However, as indicated on sheet 28 of the Special Category Land Plans – Rev 2 [REP8-006] land parcel 28/2 is already common land and cannot therefore be included within the replacement land package.

Replacement land apportioned by Common Land registration and Open Space resulting from the Secretary of State's proposed Replacement Land proposals

- 2.1.9 In accordance with the requirements of the Planning Act, the replacement land would need to provide, on a pro-rata basis, the same status as that of the special category land that has given rise to the need to provide replacement land as set out in the Secretary of State's letter received on 20 January 2021. This would, therefore, entail the provision of the following:
 - Common land CL350 43.91%; 72,534 sq m
 - Common Land CL446 9.80%; 16,196 sq m
 - Common land CL447 0.57%; 935 sq m
 - Open space 45.72%; 75,526 sq m.

Breach Hill Wood Construction Compound

- 2.1.10 In respect of the proposal to omit parcel CF2, Highways England wishes to emphasise its previous response (Document 9.150 - Applicant's Response to Secretary of State's Consultation Letter – 4 November 2020 at 3.1.14) that the western part of area CF2 (part of plot 13/9) will be cleared to provide for a temporary construction compound (see sheets 3 and 7 of the temporary works plans [REP8-012]), which will mean that much of the work needed to create a mostly broadleaved woodland suitable for public access on this land is expected to be undertaken anyway in the process of restoring the land.
- 2.1.11 The reason the land was chosen for a construction compound was because it is outside the boundary of the SPA and SSSI and the existing common land. Accordingly, part of the plot should be retained within the Order limits (for the purposes of temporary possession) so that the land can be used as a construction compound, whether or not the Secretary of State includes CF2 in the replacement land package.



3. Assessment of Environmental Effects

- 3.1.1 The Secretary of State is considering a reduction in replacement land provision for the Scheme. The works proposed in the areas that would be removed from the Scheme include new fencing, new planting, woodland management and measures to enhance a small waterbody. These are low impact works that would typically take place over short periods of time. A review of the likely impacts of such works by appropriate technical experts indicates that for the majority of topics in the Environmental Statement (ES) the works would have negligible effect on the assessment of those topics. This document does not, therefore, consider the effect of the reduction being considered by the Secretary of State on the following topics:
 - Air Quality
 - Noise and Vibration
 - Geology and Soils
 - Cultural Heritage
 - Materials and Waste
 - Health
 - Climate
- 3.1.2 The following topics are therefore considered in this document:
 - Biodiversity
 - Landscape
 - Road Drainage and the Water Environment
 - People and Communities

3.2 Biodiversity

Baseline

3.2.1 The baseline conditions, as set out in section 7.8 on pages 38-66 of the biodiversity chapter of the ES [REP4-023], remain unchanged as a result of the Secretary of State's proposed reduction in replacement land.

Direct Impacts

3.2.2 The reduction in replacement land being considered by the Secretary of State, as set out in the Secretary of State's consultation letter on the 20 January 2021, will not alter the construction footprint nor the construction proposals of the Scheme. Therefore, the Ecological Zone of Influence (EZoI), as described in



section 7.9 on pages 67-70 of the biodiversity chapter of the ES [REP4-023] will not change.

- 3.2.3 However, the assessment of potential impacts on the receptors, as set out in Table 7.7 on pages 74-103 of the biodiversity chapter of the ES [REP4-023] has regard to all embedded biodiversity mitigation measures, and thus takes into account the full replacement land package within the DCO boundary where relevant (i.e. PBF1-3, CF1-4, HE1 and HE2), as set out in the Scheme layout plans submitted by the Applicant in the DCO submission [REP11-003]).
- 3.2.4 The receptors for which the embedded biodiversity enhancement measures included as part of the RL package replacement land have been taken into account when considering potential impacts (as set out in Table 7.7 on pages 74-103 of the biodiversity chapter of the ES [REP4-023]) are:
 - Thames Basin Heaths SPA
 - Ockham and Wisley Commons SSSI
 - Ockham and Wisley LNR
 - Ancient woodland (Elm Corner and Heyswood)
 - Habitats of Principal Importance (HPIs)
 - Ephemeral ditches
 - Chatley Wood pond
 - Bats
 - Breeding birds (not including SPA qualifying species)
 - Spotted flycatcher
 - Notable invertebrates (terrestrial)
- 3.2.5 Document reference 9.156, submitted on the 3rd February 2021, considers the implications of the RL proposal being considered by the Secretary of State on the Statement to Inform Appropriate Assessment(SiAA) submitted with the application in respect of the Thames Basin Heaths Special Protection Area.

Mitigation and Residual Impacts

- 3.2.6 As listed above, there are eleven receptors that take the replacement land into account when considering the embedded mitigation for the Scheme, and therefore when identifying the residual impacts of the Scheme.
- 3.2.7 These residual impacts have already been considered in response to question 4 of the applicant's response to the Secretary of State's consultation letter on 4 November 2020 [9.150 Applicant's Response to Secretary of State's Consultation Letter, dated 19 November 2020], which considered a reduction in the replacement land to PBF1, PBF2 and the southern part of PBF3 (namely all of land plots 11/17i and 11/17j and part of the southern end of land plots 11/17h). These areas total approximately 16.40 ha in size.



- 3.2.8 The replacement land, as set out in the Secretary of State's consultation letter on 20 January 2021, includes the exact same land parcels as set out in the Secretary of State's consultation letter on 4 November 2020. However, there is an additional parcel of land (28/2), which adjoins PBF3 and that is 0.05 ha in size which has been included to avoid severance. The Secretary of State is considering including this in the Order but, as set out in section 2 above, parcel 28/2 is already part of the designated common land and therefore cannot be counted as replacement land.
- 3.2.9 Therefore, the applicant's response to the Secretary of State's consultation letter on 4 November 2020 [9.150 Applicant's Response to Secretary of State's Consultation Letter, dated 19 November 2020] in relation to impacts on biodiversity remains unchanged. However, in order to assist the Secretary of State, the assessment of residual impacts, as set out in Table 7.8 of the biodiversity chapter of the ES [REP4-023], has also been provided below, based on the reduction in replacement land being considered by the Secretary of State as set out in the Secretary of State's consultation letter on 20 January 2021. The summary below only includes the eleven receptors which take the replacement land into account when considering potential impacts.



Updated summary of assessment of impacts and effects from construction and operation of the Scheme: for the receptors for which the replacement land was taken into account when considering potential impacts, and based on the reduction in replacement land being considered by the Secretary of State, as set out in the Secretary of State's consultation letter on 20 January 2021

Nature conservati on resource	Value	Summary of impacts	Impact characteris ation	Summary of mitigation	Residual effect (any change from Table 7.8 of the biodiversity chapter of the ES [REP4- 023]?)	Significance category (any change from Table 7.8 of the biodiversity chapter of the ES [REP4-023]?)	
Thames Basin Heaths SPA	ı '	Construction Short term: Temporary loss of 8.7 ha within SPA (3.9 % of the Ockham and Wisley Commons SSSI component of the SPA). Potential temporary reduction in invertebrate resource for qualifying species due to loss of woodland buffering habitat. Potential temporary disturbance to qualifying species (noise).	Habitat loss: negative, certain, direct, reversible, temporary. Reduction in invertebrate resource: negative, unlikely, indirect, reversible, temporary. Potential disturbance to species: negative, probable, reversible, temporary.	Habitat reinstatement of 8.7 ha of in temporary clearance areas/woodland buffer area. The site will be subject to protection from incursion and pollution prevention measures will be implemented during construction of the Scheme.	Permanent positive effect (no change)	positive effect	Large (no change)
		Long term: Permanent loss of 5.9 ha within SPA (2.7 % of this component of the SPA). SPA suite of compensatory measures will lead to enhancement of 47.4 ha of the SPA (21.3 % of this component of the SPA) to include 22.5 ha of newly created heathland habitat and 24.9 ha of enhanced woodland habitats. Along with the permanent provision of 8.1 ha of wood pasture within the SPA compensation land. These measures will enhance the habitats present for invertebrates and nesting habitat for the qualifying species.	Habitat loss: negative, certain, direct, irreversible, permanent. SPA suite of compensato ry measures: positive, certain, direct and indirect, permanent.				
		Operation No impacts identified.	n/a	n/a	n/a (no change)	n/a (no change)	
Ockham and Wisley Commons SSSI	National	Construction Short term: Temporary loss of 16.1 ha within SSSI (6.0 % of SSSI) Loss of notable invertebrates (reason for SSSI designation) within the Scheme during clearance.	Negative, certain, direct, reversible, temporary	Habitat reinstatement of 16.1 ha in temporary clearance areas (trees, shrub, grassland and sandy banks). The site will be	Permanent positive effect (no change)	Moderate (reduced from large)	



Nature conservati on resource	Value	Summary of impacts	Impact characteris ation	Summary of mitigation	Residual effect (any change from Table 7.8 of the biodiversity chapter of the ES [REP4- 023]?)	Significance category (any change from Table 7.8 of the biodiversity chapter of the ES [REP4-023]?)
				subject to protection from incursion and pollution prevention measures will be implemented during construction of the Scheme.		
		Long term: Permanent loss of 11.5 ha within SSSI (4.3 % of SSSI). The SPA suite of compensatory measures will lead to 22.5 ha of newly created heathland habitat and 24.9 ha of woodland enhancement and enhancement of Bolder Mere within the SSSI. With further measures adjacent to the SSSI to include creation of 2.3 ha of wood pasture, planting of 9.8 ha of woodland, enhancement of 2.95 ha of woodland and enhancement of 5.8 ha of acid grassland/heathland. Although the SSSI will be reduced by 11.5 ha, the suite of compensatory measures provided will result in the retained habitats being in better condition to compensate for this loss, with an increase of 22.5 ha of heathland which is the main habitat for which the SSSI is designated.	Habitat loss: negative, certain, direct, irreversible, permanent. Compensato ry measures: positive, certain, direct and indirect, permanent.	Embedded ecological design (listed in impacts)		
		<u>Operation</u> No impacts identified.	n/a	n/a	n/a (no change)	n/a (no change)
Ockham and Wisley LNR	County	<u>Construction</u> Short term: Temporary loss of 19.4 ha within LNR (5.8 % of LNR).	Negative, certain, direct, reversible, temporary	Habitat reinstatement of 19.43 ha in temporary clearance areas (trees, shrub, grassland and sandy banks) The site will be subject to protection from incursion and pollution prevention measures will be implemented during construction of	Permanent positive effect (no change)	Moderate (no change)

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Nature conservati on resource	Value	Summary of impacts	Impact characteris ation	Summary of mitigation	Residual effect (any change from Table 7.8 of the biodiversity chapter of the ES [REP4- 023]?)	Significance category (any change from Table 7.8 of the biodiversity chapter of the ES [REP4-023]?)
				the Scheme.		
		Long term: Permanent loss of 12.7 ha within LNR (3.8 % of LNR). Resultant overall loss of land within LNR will be 12.7 ha, but embedded compensation measures provided as part of the Scheme will result in habitats of better condition to compensate for this loss.	Habitat loss: negative, certain, direct, irreversible, permanent. Compensato ry measures: positive, certain, direct and indirect, permanent.	Embedded ecological design (listed in impacts)		
		<u>Operation</u> No impacts identified.	n/a	n/a	n/a (no change)	n/a (no change)
Ancient woodland (Elm Corner and Heyswood)	County	Construction Long term: Permanent loss of 0.4 ha of ancient woodland at Elm Corner and Heyswood. 8.6 ha of woodland planting and improved woodland linkages, soil translocation from ancient woodlands lost to provide seed bank for ancient woodland ground flora to establish in newly created areas. Enhancement of ancient woodland at Elm Corner. Due to irreplaceable nature of ancient woodland, despite the increases in woodland area and enhancement of retained ancient woodland, there still remains a permanent loss of 0.4 ha of ancient woodland at Elm Corner and Heyswood.	Negative, certain, direct, irreversible, permanent	Embedded ecological design (enhancement measures). The site will be subject to protection from incursion and pollution prevention measures will be implemented during construction of the Scheme.	Permanent negative effect (no change)	Moderate (no change)
		Operation No impacts identified.	n/a	n/a	n/a (no change)	n/a (no change)
Habitats of Principal Importance (HPI) (outside of designated sites)	Local	<u>Construction</u> Short term: Temporary loss of 19.8 ha of wood pasture and parkland, of which 9.0 ha is also classified as lowland mixed deciduous woodland. Minor habitat fragmentation caused by construction of new access roads.	Negative, certain, direct, reversible, temporary.	Habitat reinstatement of 16.6 ha with a mixture of grassland, scrub and some trees. HPI's will be subject to protection from incursion and pollution prevention measures will be implemented during	Temporary negative effect Permanent positive effect (no change)	Neutral (no change)



Nature conservati on resource	Value	Summary of impacts	Impact characteris ation	Summary of mitigation	Residual effect (any change from Table 7.8 of the biodiversity chapter of the ES [REP4- 023]?)	Significance category (any change from Table 7.8 of the biodiversity chapter of the ES [REP4-023]?)
				construction of the Scheme.		
		Long term: Permanent loss of 21.6 ha of wood pasture and parkland, of which 10.3 ha is also classified as lowland mixed deciduous woodland. Minor habitat fragmentation caused by construction of new access roads. Embedded mitigation measures will create 22.5 ha of new heathland, 22.8 ha of woodland, 10.4 ha of wood pasture and enhancement of 35.2 ha of woodland.	Habitat loss and fragmentatio n: negative, certain, direct, irreversible, permanent. Habitat reinstateme nt/ enhanceme nt: positive, probable, direct and indirect, permanent.	Embedded ecological design (habitat creation and enhancement measures listed in impacts).		
		Operation No impacts identified.	n/a	n/a	n/a (no change)	n/a (no change)
Ephemeral ditches	Local	Construction Short term: Temporary loss of riparian habitat due to vegetation clearance associated with construction works for culvert extensions, culvert replacements and ditch realignments. Temporary losses and/or temporary disturbance to aquatic macrophytes and macroinvertebrates associated with construction activities.	Negative, certain, direct and indirect, temporary.	The site will be subject to protection from incursion and pollution prevention measures will be implemented during construction of the Scheme.	Temporary negative effect (no change)	(no change)
		Long Term: There will be permanent habitat fragmentation and loss of connectivity resulting from the placement of new culverts, extension of existing culverts and loss of ditch extents. In summary around 820 m of ephemeral headwater ditches will be lost or transposed by the Scheme in the Wey catchment. At the same time around 2260 m of pre- embankment drain will be created. Approximately 820 m of ephemeral headwater ditch will be lost or transposed by the Scheme within the River Wey catchment, and approximately 420 m within the River Mole catchment.	Negative, certain, direct and indirect, permanent.	Where practicable the pre-embankment drains will be designed in accordance with the generic guidance on the principles of WFD compliant design set out in Chapter 5 of WFD Assessment report TR010030/APP/ 5.4. Pond Farm South and Pond Farm West ditches. This will create improved habitat conditions for a	Permanent positive effect (no change)	Slight (no change)



Nature conservati on resource	Value	Summary of impacts	Impact characteris ation	Summary of mitigation	Residual effect (any change from Table 7.8 of the biodiversity chapter of the ES [REP4- 023]?)	Significance category (any change from Table 7.8 of the biodiversity chapter of the ES [REP4-023]?)
				variety of aquatic species including Odonata. An improved drainage system is to be implemented as part of the Scheme, that will, wherever possible keep runoff from highway and non-highway surfaces separate. While approximately 1240 m of ephemeral headwater ditch will be lost or transposed as part of the Scheme (within both the River Mole and River Wey catchments), overall 2160 m of pre-earthwork drain conveying water solely from non-highway surfaces are included in the Scheme design for both the River Wey and River Mole catchments.		
		Operation Provision of flow attenuation and subsequent treatment of run-off as part of the drainage strategy will improve water quality and habitat conditions.	Neutral, certain, direct and indirect, permanent	n/a	Permanent neutral effect (no change)	Neutral (no change)
Chatley Wood pond	Local	No impacts, CF1 is no longer in the Scheme	n/a	n/a	n/a (no longer a receptor)	n/a (no longer a receptor)
Bats	County	Construction Short term: Loss of two roost sites, loss of foraging habitat. Loss of trees with roosting potential. Temporary reduction in foraging resource. Temporary disturbance (noise/light) during construction	Negative, certain, direct, reversible, temporary.	Habitat reinstatement. Embedded ecological design (replacement roosts, replacement potential roost features, habitat enhancement and creation).	Temporary negative effect Permanent positive effect (no change)	Neutral (no change)



Nature conservati on resource	Value	Summary of impacts	Impact characteris ation	Summary of mitigation	Residual effect (any change from Table 7.8 of the biodiversity chapter of the ES [REP4- 023]?)	Significance category (any change from Table 7.8 of the biodiversity chapter of the ES [REP4-023]?)
				Trees with potential to support roosting bats will be felled under PMW. Felling activities within enhancement/re placement land will avoid loss of trees with roosting potential where appropriate. One Schwegler bat box will be provided for each felled tree with moderate/high roosting potential. The existing Clearmount overbridge will not be demolished until the replacement bridge is constructed. Night working will be avoided where possible. Any lighting required for construction will be designed sensitively.		
		Long term: Provision of mitigation roost sites. Enhancement of habitats as a result of compensation measures, leading to increased food resource.	Positive, probable, direct, permanent.	Implementation of a Landscape and Ecology Management and Monitoring Plan (Appendix 7.20) for the maintenance/ management of newly created habitats for use by foraging and commuting bats.		
		Operation Creation of dark corridors adjacent to NMU bridges as a result of lighting design.	Positive, probable, direct, permanent.	n/a	Permanent positive effect (no change)	Slight (no change)

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Nature conservati on resource	Value	Summary of impacts	Impact characteris ation	Summary of mitigation	Residual effect (any change from Table 7.8 of the biodiversity chapter of the ES [REP4- 023]?)	Significance category (any change from Table 7.8 of the biodiversity chapter of the ES [REP4-023]?)
		These dark corridors will allow bats and other nocturnal animals to utilise these bridges for commuting.				
Breeding bird assemblage (notable bird species not including SPA qualifying species)	Local	Construction Short term: Breeding bird assemblage will be displaced and there is the potential for loss of nest sites. Damage or destruction of nests during clearance. Temporary disturbance during construction.	Negative, likely, direct and indirect reversible, temporary	Clearance of habitat under a PMW for nesting birds.	Temporary negative effect Permanent positive effect (no change)	Neutral (no change)
		Long term: Creation and enhancement of habitats provided as part of the Scheme including the provision of nest boxes.	Negative, likely, direct and indirect, permanent	Habitat enhancement works carried out under a PMW for nesting birds.		
		Operation Potential to damage individual nests during on- going management activities in habitats.	Negative, unlikely, direct, permanent	Protection of species to be included in management and maintenance plans.	Neutral effect (no change)	Neutral (no change)
Spotted flycatcher	County	<u>Construction</u> Short term: Vegetation clearance of 24.9 ha of Scots pine plantation is likely to result in the loss of up to three spotted flycatcher territories.	Negative, likely, direct and indirect reversible, temporary	Habitat clearance and enhancement works carried out under a PMW for nesting birds. Embedded environmental design (habitat	Temporary negative effect Permanent neutral effect (no change)	Neutral (no change)
		Long term: Creation and enhancement of habitats provided as part of the Scheme including enhancement of retained woodland and planting of new woodland and open nest boxes to be provided for spotted flycatcher.	Positive, likely, direct and indirect, permanent.	enhancement)		
		Operation Potential to damage individual nests during on- going management activities in habitats.	Negative, unlikely, direct, permanent	Protection of species to be included in management and maintenance plans.	Permanent neutral effect (no change)	Neutral (no change)
Terrestrial invertebrate s	Local	Construction Short term: Loss of notable invertebrates due to clearance of vegetation for the highways proposals and in areas	Negative, probable, direct, reversible, temporary.	Embedded ecological design measures (habitat enhancement).	Temporary adverse effect but overall a permanent positive effect (no change)	Neutral (no change)



Nature conservati on resource	Value	Summary of impacts	Impact characteris ation	Summary of mitigation	Residual effect (any change from Table 7.8 of the biodiversity chapter of the ES [REP4- 023]?)	Significance category (any change from Table 7.8 of the biodiversity chapter of the ES [REP4-023]?)
		targeted for enhancement.				
		Long term: Creation and enhancement of habitats provided as part of the Scheme.	Positive, probable, direct, permanent.	Embedded ecological design measures (habitat creation and enhancement).		
		Operation No impacts anticipated.	n/a	n/a	n/a (no change)	n/a (no change)

Thames Basin Heaths Special Protection Area (SPA)

- 3.2.10 As explained in paragraph 8.1.5 of the Applicant's note for Action points 1, 2, 4 and 5 of the CAH [REP11-011], the replacement land does not form part of the compensatory measures for the SPA. Instead, the necessary compensation for the SPA is fully provided by the suite of compensatory measures, as set out in the HRA stages 3-5 [REP4-014].
- 3.2.11 Therefore, the changes to the replacement land proposed by the Secretary of State would have no effect on the Scheme impacts on the SPA. As set out in the table above, the residual impact determined in the biodiversity chapter of the ES [REP4-023] would remain unchanged, and there would still be a large permanent positive residual significance of effect on the SPA.
- 3.2.12 Therefore, further mitigation or compensation measures would not be required with respect to the SPA if the proposed changes to replacement land were made.
- 3.2.13 Document reference 9.156, submitted on the 3rd February 2021, considers the implications of the RL proposal being considered by the Secretary of State on the Statement to Inform Appropriate Assessment(SiAA) submitted with the application in respect of the Thames Basin Heaths Special Protection Area.

Ockham and Wisley Commons Site of Special Scientific Interest (SSSI)

- 3.2.14 The suite of compensatory measures for the SPA, as set out in the HRA stages 3-5 [REP4-014], will also provide compensation for the Scheme impacts on the SSSI. However, the residual impact assessment for the SSSI in the biodiversity chapter of the ES [REP4-023] also takes into account the habitat enhancement measures within the replacement land, in order to conclude a large permanent positive residual significance of effect on the SSSI (as set out in Table 7.8, on pages 134-135 of the biodiversity chapter of the ES [REP4-023]).
- 3.2.15 The suite of compensatory measures for the SPA will be of greater benefit for the SSSI compartments to the south of the M25.The northeast quadrant of junction



10 would have particularly benefitted from the woodland enhancements in the adjacent Chatley Farm replacement land plots CF1-4. In the absence of this replacement land, the SSSI will still be connected to adjacent woodland, as it currently is, but the quality of the adjacent woodland is not enhanced.

- 3.2.16 The reduction in replacement land being considered by the Secretary of State would reduce some of the compensation for the Scheme impacts on the SSSI, as set out in the biodiversity chapter of the ES [REP4-023]. However, as can be seen in the table above, there would still be a moderate permanent positive residual significance of effect on the SSSI, due to the compensation measures proposed for the SSSI compartments to the south of the M25 and the enhancements of adjacent habitats within PBF1-3.
- 3.2.17 Therefore, further mitigation or compensation measures would not be required with respect to the SSSI if the reduction in replacement land being considered by the Secretary of State was made.

Ockham and Wisley Local Nature Reserve (LNR)

- 3.2.18 As with the SSSI above, the residual impact assessment for the LNR in the biodiversity chapter of the ES [REP4-023] takes into account the suite of SPA compensatory measures and the habitat enhancement measures within the replacement land, in order to conclude a moderate permanent positive residual significance of effect on the LNR (as set out in Table 7.8, on pages 135-136 of the biodiversity chapter of the ES [REP4-023]).
- 3.2.19 The reduction in replacement land being considered by the Secretary of State would reduce some of the compensation for the Scheme impacts on the LNR. However, as can be seen in the table above, there would still be a moderate permanent positive residual significance of effect on the LNR, resulting from the SPA compensation measures proposed for the LNR compartments to the south of the M25 and the enhancements of adjacent habitats within PBF1-3.
- 3.2.20 Therefore, further mitigation or compensation measures would not be required with respect to the LNR if the reduction in replacement land being considered by the Secretary of State was made.

Ancient woodland (Elm Corner and Heyswood)

- 3.2.21 The reduction in replacement land being considered by the Secretary of State would remove the proposed ancient woodland enhancement at PBF3 (northern end of land parcel 11/17h) and CF3 (The Bogs) from the compensatory measures associated with the loss of ancient woodland.
- 3.2.22 However, compensatory measures will still include 22.8 ha of woodland planting (this takes into account the proposed removal of HE1 and HE2 from the replacement land package), improved woodland linkages, woodland enhancement (including Elm Corner ancient woodland) plus the translocation of ancient woodland soils.



- 3.2.23 The assessment of residual impacts in Table 7.8, on page 139 of the biodiversity chapter of the ES [REP4-023] determined the loss of ancient woodland as a moderate permanent negative impact. This is based on the loss of irreplaceable habitat, and does not take the compensatory measures into account.
- 3.2.24 As can be seen in the table above, the reduction in replacement land being considered by the Secretary of State would not alter the residual impact assessment. Whilst the residual impact would not change, it must be acknowledged that some of the compensatory measures (namely the ancient woodland enhancement measures in PBF3 and at CF3 (The Bogs)) would be lost. However, Highways England will be undertaking enhancement works within Elm Corner ancient woodland.
- 3.2.25 Due to the residual impact remaining the same, further mitigation or compensation measures would not be required with respect to ancient woodland if the reduction in replacement land being considered by the Secretary of State was made.

Habitats of Principal Importance (HPIs)

- 3.2.26 A range of mitigation and compensatory measures were taken into account in the biodiversity chapter of the ES [REP4-023] in order to conclude a neutral residual significance of effect on HPIs (outside of designated sites); as set out in Table 7.8, on pages 140-141 of the biodiversity chapter of the ES [REP4-023]. The HPIs affected by the Scheme are limited to woodland habitats (wood pasture and parkland, some of which is also classified as lowland mixed deciduous woodland).
- 3.2.27 The replacement land change proposed by the Secretary of State would result in a reduction in the amount of woodland planting for the Scheme (due to loss of HE1 and HE2) from 24.5 ha to 22.8 ha. A total loss of 21.6 ha of woodland will occur as a result of the construction of the Scheme. Therefore, the amount of proposed woodland planting will still exceed the loss.
- 3.2.28 The reduction in replacement land being considered by the Secretary of State would result in a reduction in woodland enhancement for the Scheme (due to loss of CF1-4 and reduction in size of PBF3) from 44.0 ha to 23.8 ha. The 23.8 ha will include woodland enhancement within the SPA, PBF3 and Elm Corner SNCI (including the area of ancient woodland).
- 3.2.29 The amount of proposed woodland planting will still exceed the total loss of woodland that will occur as a result of the construction of the Scheme. Therefore, as set out in the table above, there would still be a would still be a long-term neutral residual significance of effect on the HPIs once the woodland planting has established.
- 3.2.30 Due to the residual impact remaining the same, further mitigation or compensation measures would not be required with respect to HPIs if the reduction in replacement land being considered by the Secretary of State was made.



Ephemeral ditches/ Chatley Wood pond

- 3.2.31 Chatley Wood pond falls within CF1. The changes to the replacement land proposed by the Secretary of State would remove this pond from the Scheme.
- 3.2.32 Environmental enhancement works at Chatley Wood pond are proposed as a small part of a package of measures to mitigate the adverse effects of the Scheme on ephemeral dich habitat. This package of measures is presented in the Biodiversity Chapter of the ES (see REP4-023 para 7.4.43). Removal of Chatley Wood Pond from the Scheme would mean that these environmental enhancements could no longer be undertaken.
- 3.2.33 The removal of the environmental enhancement works at Chatley Wood Pond from the Scheme reduces the extent and quality of wet habitat being delivered to mitigate the effect of the Scheme on ephemeral ditch habitat. However, this effect is not so great as to materially change the assessment reported in the Biodiversity Chapter of the ES [REP4-023].

Notable and legally protected species: Bats, breeding birds (not including SPA qualifying species), spotted flycatchers and notable invertebrates (terrestrial)

- 3.2.34 The proposed habitat enhancements within CF1-4, HE1 and HE2 would potentially benefit terrestrial invertebrates (due to increases in woodland species and structural diversity), which in turn may benefit foraging bats and breeding birds which feed on invertebrates.
- 3.2.35 However, the residual impact assessments of the protected species listed in in Table 7.8, on pages 150-157 of the biodiversity chapter of the ES [REP4-023] do not rely on the replacement land at CF1-4, HE1 or HE2, nor were any of the enhancement measures proposed for the replacement land designed with any particular protected species in mind.
- 3.2.36 The assessment of residual impacts in Table 7.8 of the biodiversity chapter of the ES [REP4-023] determined a slight permanent positive impact on bats (as a result of lighting design to provide dark commuting corridors across bridges), and a permanent neutral impact on breeding birds (including spotted flycatcher) and terrestrial invertebrates.
- 3.2.37 Bats, breeding birds (including spotted flycatcher) and invertebrates will still benefit from the range of additional measures proposed (woodland planting, woodland enhancement, heathland restoration, Bolder Mere shoreline enhancements, provision of bird boxes). Therefore, as can be seen in the table above, the changes to the replacement land as proposed by the Secretary of State would not change the residual impact for bats, breeding birds (including spotted flycatcher) or notable invertebrates (terrestrial).
- 3.2.38 Due to the residual impacts remaining the same, further mitigation or compensation measures with respect to bats, breeding birds (including spotted flycatcher) and/or terrestrial invertebrates would not be required if the reduction in replacement land being considered by the Secretary of State was made.



Cumulative effects

- 3.2.39 The cumulative effect assessment in the biodiversity chapter of the ES [REP4-023] included replacement land in the consideration for six of the developments, as set out in Table 7.9 on pages 159-166 of the biodiversity chapter of the ES [REP4-023]:
 - The former Wisley Airfield
 - Land at Garlick's Arch, Send Marsh Burnt Common and Ripley Site Allocation Policy A4
 - Enfin, Painshill Farm, Portsmouth Road, Cobham Surrey KT11 1DN
 - Land surrounding West Hall, Parvis Road, West Byfleet Site allocation GB15
 - Broadoaks, Parvis Road, West Byfleet PLAN/2016/1003
 - Byfleet Road, New Haw IE1 Site 51 / HO6/7
- 3.2.40 For all of these developments, the cumulative effects assessment in the biodiversity chapter of the ES [REP4-023] considered that "*it is possible that the development could lead to increased visitors to the SPA/SSSI/LNR. However, the Scheme will not improve user access to the SPA/SSSI/LNR and will provide new NMU routes and replacement land outside*".
- 3.2.41 Although replacement land was included in this consideration as embedded mitigation, it was not key to the conclusion being drawn. The Scheme will not improve access or parking options for recreational users of the SPA/SSSI/LNR. Therefore, the operation of the Scheme will not result in changes to the numbers of visitors to the Thames Basin Heaths SPA, Ockham and Wisley Commons SSSI and/or the Ockham and Wisley LNR, nor the way in which visitors gain access to these sites.
- 3.2.42 As a result, there will be no cumulative increase in visitors as a result of the Scheme in combination with any other development, when taking into account the reduction in replacement land being considered by the Secretary of State in the consultation letter on the 20 January 2021.

Conclusion

- 3.2.43 The reduction in replacement land being considered by the Secretary of State, as set out by the Secretary of State in the consultation letter on the 20 January 2021 would reduce some of the compensation for the Scheme impacts on the Ockham and Wisley Commons SSSI and Ockham and Wisley LNR, but there would still be an overall moderate permanent positive residual significance of effect on both the SSSI and LNR, due to the compensation measures proposed for the SSSI compartments to the south of the M25.
- 3.2.44 Due to the SPA having its own suite of compensatory measures, the residual impact assessment places no reliance on the replacement land, and there would still be an overall large permanent positive residual significance of effect. Please refer to the document 9.156 Other environmental information requested by the



Secretary of State in respect of his Replacement Land proposals to inform the Appropriate Assessment for a separate consideration of potential impacts on the Thames Basin Heaths Special Protection Area with regards to the SiAA.

- 3.2.45 Due to ancient woodland being an irreplaceable habitat, the residual impact assessment does not take the compensatory measures into account, and the reduction in replacement land being considered by the Secretary of State would not alter the residual impact assessment. However, whilst the residual impact would not change, it must be acknowledged that some of the compensatory measures (namely the ancient woodland enhancement measures in PBF3 and at CF3 (The Bogs)) would be lost.
- 3.2.46 The removal of the environmental enhancement works at Chatley Wood Pond will not materially change the assessment of the effect of the Scheme on ephemeral ditches.
- 3.2.47 In addition, the reduction in replacement land being considered by the Secretary of State would not change the residual impact for HPIs and/or notable and legally protected species.
- 3.2.48 Due to the residual impacts remaining the same, or still remaining positive albeit at a slightly lower magnitude (for the SSSI), to those identified in the biodiversity chapter of the ES [REP4-023], further mitigation or compensation measures would not be required if the proposed changes to replacement land were made.
- 3.2.49 In addition, there would be no change to the cumulative effects assessment as set out in the biodiversity chapter of the ES [REP4-023], as the Scheme will not result in changes to the numbers of visitors to the Thames Basin Heaths SPA, Ockham and Wisley Commons SSSI and/or the Ockham and Wisley LNR, nor the way in which visitors gain access to these sites. Therefore, there will be no increase in visitors as a result of the Scheme in combination with any other development, when taking into account the reduction in replacement land being considered by the Secretary of State in the consultation letter on the 20 January 2021.
- 3.2.50 The findings of the Summary in section 7.16 on pages 169-170 of the biodiversity chapter of the ES [REP4-023] remains wholly unchanged in light of the reduction in replacement land being considered by the Secretary of State.

3.3 Road drainage and the water environment

Baseline

3.3.1 The baseline conditions, as set out in section 8.7 on pages 21-34 of the road drainage and the water environment chapter of the ES [REP4-024], remain unchanged as a result of the reduction in replacement land being considered by the Secretary of State.



Direct Impacts

3.3.2 The changes to the Scheme set out in Section 2 above do not change the Applicant's assessment of the direct impact of the Scheme on surface water, ground water and flood risk or Water Framework Directive (WFD) compliance.

Mitigation and Residual Impacts

- 3.3.3 The changes to the Scheme set out in Section 2 above do not change our assessment of the mitigations and residual impacts of the Scheme on surface water, ground water and flood risk. Slight, but non-material, effects on the assessment of WFD compliance are set out below.
- 3.3.4 Environmental enhancement works at Chatley Wood pond are proposed as a small part of a package of measures to mitigate the adverse effects of the Scheme on ephemeral dich habitat. This package of measures is presented in the WFD Compliance Assessment (see REP4-019, table F-4 in Appendix F). Removal of Chatley Wood Pond from the Scheme would mean that these environmental enhancements could no longer be undertaken.
- 3.3.5 The removal of the environmental enhancement works at Chatley Wood Pond from the Scheme reduces the extent and quality of wet habitat being delivered to mitigate the effect of the Scheme on ephemeral ditch habitat. However, due to the relative size of the pond in comparison to other affected water bodies, this effect is not so great as to materially change the outcome of the Water Framework Directive (WFD) Compliance Assessment (REP4-019).

3.4 Landscape

Baseline

3.4.1 The baseline conditions, as set out in section 9.7 on pages 17-22 of the landscape chapter of the ES [REP4-025], remain unchanged as a result of the reduction in replacement land being considered by the Secretary of State.

Direct Impacts

3.4.2 The changes to the Scheme are set out in Section 2 above and entail a reduction in the provision of replacement land of 23.28 ha¹. The replacement land was not included in the Scheme as mitigation for landscape impacts but its inclusion gave rise to localised landscape and visual effects. The removal of the areas of replacement land from the Scheme will therefore alter the effects of the Scheme on the landscape and visual receptors.

Construction Phase Visual Impact

3.4.3 During the construction phase there would be a reduction in the visual impacts of the Scheme if the reduction in replacement land being considered by the

¹ This number is derived from the sum of all areas to be omitted as per the Secretary of State's letter of 20 January 2021. The actual reduction is 232,767sqm based on areas in Table C.5 of the SoR Appendix C [REP12-004]. If calculated only using rounded data the figure is 23.25ha.



Secretary of State was adopted. The woodland management operations originally proposed for the Chatley Farm and part of the Park Barn Farm 3 areas would have entailed the use of large, mechanised machinery to rapidly fell and remove the many mature trees and other vegetation in these plots. This would have had a noticeable visual impact on people using the adjacent common land and rights of way as well as the residents of the very few nearby properties. These impacts would have occurred over a period of 1-2 months in late 2021. Subsequent less extensive woodland management operations may have been implemented in 2023/2024.

- 3.4.4 The removal of the Chatley Farm and part of the PBF3 plots from the Scheme will eliminate these temporary adverse visual effects during the construction phase. Similarly the inevitable, temporary adverse visual effects associated with the tree felling operations and appearance of the woodlands in the period after the works had been carried out would not occur.
- 3.4.5 At Hatchford End the works consisted of new planting and fencing rather than woodland management so the adverse visual effects were considered to be minimal. Their omission from the Scheme would have negligible effect on the impact of the Scheme.
- 3.4.6 Overall, the omission of these replacement land plots would reduce the adverse visual effects of the Scheme during the construction phase.

Operational Phase Visual Impact

- 3.4.7 In the operational phase the adverse visual impacts of the originally proposed works would diminish over time as a more diverse and natural woodland developed in the Chatley Farm and Park Barn Farm 3 plots. This would have been of benefit to local residents and users of the adjacent commons and rights of way in the longer term. If these replacement land plots were removed from the Scheme these benefits would not accrue and this could be seen as an adverse visual effect of the proposed changes.
- 3.4.8 At Hatchford End replacement land plots the omission of new planting and its development over time would mean that the visual impact of the Scheme here would be different but not necessarily better or worse than the original Scheme.

Construction Phase Landscape Impacts

3.4.9 At Chatley Farm and Park Barn Farm the construction phase impacts on the landscape would have been quite noticeable with a large quantity of the existing stock of trees and other vegetation being managed as part of the proposals. However, much of this vegetation is over mature, too closely spaced pine and western hemlock as well as rhododendron which resulted from many years of poor or absent management. Although the initial impacts of the Scheme on the landscape would have been significant it was essential to enable the woodland to develop more appropriately.



3.4.10 At Hatchford End the landscape effects of the original Scheme during the construction phase would be minimal with new planting of small trees and shrubs having limited effect on the landscape.

Operational Phase Landscape Impacts

- 3.4.11 The benefits of the works in the replacement land areas would have been seen during the operational phase and would develop in the medium and long term. The woodlands at Chatley Farm and Park Barn Farm 3 would have been managed by the Scheme over a period of 20 years for ecological and amenity purposes providing an important benefit to the local landscape. After the initial 20 year management duration it is expected that woodland operations would have been continued by Surrey County Council as owners. By removing the replacement land areas from the Scheme these benefits would not be realised and the existing poorly managed woodlands would continue to decline.
- 3.4.12 At Hatchford End the new planting that was proposed as part of the original Scheme would develop and form an additional small area of woodland for the benefit of the local landscape. Again, without this replacement land area this benefit would not be realised.

Mitigation and Residual Impacts

- 3.4.13 The Secretary of State's alternative proposal would lead to the loss of 1.73 ha of new woodland planting from the Scheme at Hatchford End. Without compromising other mitigation proposals it would not be possible to provide the same quantum of planting elsewhere within the Scheme boundary. This would be a permanent, residual effect of the alternative proposal and would increase the adverse effect of the Scheme but not the overall impact of the Scheme on the landscape.
- 3.4.14 Similarly the omission of the Chatley Farm and the northern part of the Park Barn Farm 3 replacement land parcels would reduce the area of woodland enhancement that would be provided by the Scheme by 19.8 ha out of the total area to be enhanced of 67.2 ha. It would not be possible to re-provide this mitigation elsewhere within the Scheme boundary leading to an increase in the adverse effects of the Scheme. This change would not however be of sufficient magnitude to alter the overall impact of the Scheme on landscape as these areas would continue to be woodland albeit with less biodiversity or amenity value.



3.5 **People and communities**

- 3.5.1 Under the Planning Act 2008, any order granting development consent involving the compulsory acquisition of land forming part of a common or open space (otherwise referred to as special category land), must provide for replacement land to be given in exchange for that which would be lost, if the order is not to be subject to special parliamentary procedure.
- 3.5.2 As regards special category land acquired permanently, replacement land given in exchange must be at least equivalent in area to that which would be permanently taken and no less advantageous to the public or to persons entitled to rights of common. As regards special category land subject to the compulsory acquisition of rights, replacement land to be given in exchange must be adequate to compensate for the disadvantages which will result from the acquisition of the right(s) in question.
- 3.5.3 Much of the land surrounding M25 junction 10 comprises special category land, including approximately 13.7 ha² of land that is permanently required to construct and operate the Scheme. The Scheme would also require the acquisition of permanent rights in a further 8.5 ha of special category land in the vicinity of junction 10. In accordance with the requirements of the Planning Act 2008, Highways England's Development Consent Order (DCO) application seeks powers to compulsorily acquire approximately 39.8 ha of land as replacement land for the Scheme. The rationale underpinning the replacement land proposals is set out in Appendix C of the Statement of Reasons (SoR), Common land and open space report [REP12-004].
- 3.5.4 This section has been prepared to consider whether the reduction in replacement land being considered by the Secretary of State would give rise to any new or different significant environmental effects on people and communities compared with those that were assessed and reported in the Environmental Statement (ES) [REP4-028].

Baseline

- 3.5.5 The baseline conditions for the purposes of this assessment are as set out in section 13.7 of the ES [REP4-028]. No further updating of the baseline conditions has been carried out for the purposes of this assessment.
- 3.5.6 The special category land affected by the Scheme comprises a mix of registered common land notably at Wisley Common and Chatley Heath and open space at Ockham Common, Hut Hill and Redhill Bottom. Wisley Common is an area of registered common land that lies to the west of the A3, comprising approximately 161.89 ha of woodland, heathland and grassland on both sides of the M25. Chatley Heath is a registered common that lies to the east of the A3, comprising 28.11 ha of woodland on both sides of the M25. Ockham Common is an area of open space situated to the south-east of M25 junction 10, comprising a mix of woodland heathland and grassland extending to approximately 32.57 ha in area.

² Actual area is 13.71 ha as stated in paragraph 3.5.2 of the Statement of Reasons Appendix C Common land and open space report [REP12-004].



There are further areas of open space at Hut Hill, to the south-west of M25 junction 10 and at Redhill Bottom to the north-east of the junction. The location and extent of these areas of common land and open space are shown on Figure B.1 of Appendix C of the Statement of Reasons (SoR), Common land and open space report [REP12-004]. Figure B.1 shows that virtually all of the land adjoining the M25 and A3 in the vicinity of Junction 10 is either registered common land or open space.

Direct Impacts

Background

- 3.5.7 As shown in Table 3.1 of the Statement of Reasons (SoR) Common land and open space report [REP12-004], the construction of the Scheme requires the permanent acquisition of 6.97 ha of common land and 6.74 ha of open space, a combined total of 13.71 ha of special category land. In addition, the construction and operation of the Scheme would require the acquisition of permanent rights in 5.48 ha of common land and 3.02 ha of open space, amounting to a further 8.5 ha of special category land in total.
- 3.5.8 By way of compensation for these effects, Highways England's DCO application seeks powers to compulsorily acquire approximately 39.8 ha of land for the purposes of creating replacement common land and open space. The replacement land areas proposed in the application are shown on the Special Category Land Plans [REP8-006] and summarised in Table 6.2 of the SoR Appendix C Common land and open space report [REP12-004]. Of the 39.8 ha of replacement land proposed, 31.35 ha are intended to compensate for the permanent loss of special category land and 8.42 ha are intended to compensate for the acquisition of permanent rights in special category land.
- 3.5.9 The reduction in replacement land being considered by the Secretary of State would reduce the total area of replacement land to be provided as part of the Scheme by 23.28 ha¹ (a 58% reduction), from approximately 39.8 ha as proposed in Highways England's application to a total of 16.52 ha³. The retained replacement land would be located entirely at Park Barn Farm, which is situated to the north-west of M25 junction 10 rather than distributed across three separate areas as is proposed in Highways England's application. The replacement land would comprise the following areas:
 - An area of land between Buxton Wood and the River Wey, comprising approximately 5.08 ha of pasture and an area of woodland and which is referred to as PBF1 in Appendix C of the Statement of Reasons (SoR) Common land and open space report [REP12-004]. This area will remain unchanged from the application Scheme and consists of land plots 11/17, 11/17a, 11/17b, 11/17c and 27/1 as shown on the Land Plans [REP8-003];

³ Note: the 16.52ha area corresponds with the measurements for the relevant land plots as stated in the Book of Reference [REP11-005] whereas the Secretary of State's letter of consultation indicates a total replacement land provision of 16.4ha. The difference of 0.12ha could be attributable to rounding when summing the areas of PBF1 and PBF2 for the purposes of the Secretary of State's letter.



- A field southeast of Park Barn Farm, comprising approximately 8.49 ha of open parkland that is referred to as PBF2 in the SoR Common land and open space report [REP12-004]. This area will also remain unchanged from the application Scheme and consists of land plots 11/16, 11/17d, 11/17e, 11/17f and 11/17g as shown on the Land Plans [REP8-003]; and
- An area of land east of Area PBF2, comprising approximately 2.95 ha of woodland, from a larger area proposed in the application Scheme and referred to as PBF3 in the SoR Common land and open space report [REP12-004]. The replacement land area will comprise the entirety of land plots 11/17i and 11/17/j (which together add to approximately 2.55 ha in area) along with approximately 0.4 ha of land from the southern part of plot 11/17/h. The remaining 5.33 ha of land in plot 11/17 h of the application Scheme and which forms part of PBF3 would no longer be provided under the reduction in replacement land being considered by the Secretary of State and would not be subject to any compulsory acquisition powers.
- 3.5.10 The Secretary of State's letter of 20 January 2021 also makes reference to an area of land, identified as plot 28/2 on the Land Plans [REP8-003] as being retained to comprise part of the proposed replacement land at Park Barn Farm. However, plot 28/2, which has an area of approximately 495sqm, is already registered as common land, as indicated on page 928 of the Book of Reference [REP11-005] and cannot therefore be regarded as replacement land for the Scheme. The position as regards plot 28/2 is that it should be taken to avoid it becoming severed from the rest of the holding, although its status will remain unchanged as a result of the Scheme, as no works are proposed to be carried out on it.
- 3.5.11 All other replacement land areas proposed in Highways England's DCO application totalling some 23.28 ha would be omitted from the Scheme under the reduction in replacement land being considered by the Secretary of State, as follows:
 - Approximately 5.33 ha of woodland and fields at Park Barn Farm situated to the north-west of M25 junction 10 and forming part of an area referred to as PBF3 in the SoR Common land and open space report [REP12-004];
 - The eastern part of Chatley Wood, a 6.98 ha area of plantation woodland adjoining common land at Chatley Heath and situated to the north-east of M25 junction 10 and to the north of Pointers Road, referred to as CF1 in the SoR Common land and open space report [REP12-004];
 - Wood south of Pointers Road and west of Chatley Cottage, a 3.12 ha area of plantation woodland remnant adjoining common land at Chatley Heath situated to the north-east of M25 junction 10 and to the south of Pointers Road, referred to as CF2 in the SoR Common land and open space report [REP12-004];
 - Wood north of Pointers Road (The Bogs), a 4.23 ha area of mixed woodland situated to the north-east of M25 junction 10 and north of Pointers Road, referred to as CF3 in the SoR Common land and open space report [REP12-004];



- Wood south of Pointers Road near Hatchford Park bridge, a 1.89 ha area of mixed woodland remnant, situated to the north-east of M25 junction 10 and south of Pointers Road, referred to as CF4 in the SoR Common land and open space report [REP12-004];
- An enclosed field near Hatchford End, a 1.18 ha area of pasture adjacent to the open space at Ockham Common and situated to the south-east of M25 junction 10 and east of Old Lane at Hatchford End, referred to as HE1 in the SoR Common land and open space report [REP12-004]; and
- An open field near Hatchford End, comprising 0.55 ha area of pasture situated to the south-east of M25 junction 10 and east of Old Lane at Hatchford End, referred to as HE2 in the SoR Common land and open space report [REP12-004].
- 3.5.12 The reduction in replacement land being considered by the Secretary of State relates only to the amount of replacement land to be provided as part of the Scheme. This assessment therefore focuses specifically on whether the removal of any or all of the relevant replacement land plots described above would change any of the permanent effects assessed in the ES [REP4-028]. In particular the assessment considers whether the changes in replacement land:
 - reduce or avoid any significant permanent environmental effects (beneficial or adverse) associated with the acquisition of land from private property, businesses, farms or community resource/facility for replacement land purposes, as reported in the ES [REP4-028];
 - result in a change in the assessment conclusions reported in the ES [REP4-028] as they relate to the permanent effects of the Scheme on special category land and its users as a consequence of the reduction in the areas of replacement land being provided as part of the Scheme and hence the level of mitigation for any of the Scheme's predicted significant adverse effects on users; and
 - result in any other new or different permanent environmental effect on nonmotorised users and/or the accessibility of the rights of way network, compared with those reported in the ES [REP4-028], whether intended or not.

Permanent effects of proposed changes on Park Barn Farm as a potential agricultural holding

- 3.5.13 The land at Park Barn Farm comprises a mixture of parkland laid to grass, pasture, woodland and ponds. Whilst none of the grassland or pasture at Park Barn Farm is currently used for agricultural purposes, some of the land has the potential to return to agricultural use and the effect of the Scheme on the viability of Park Barn Farm as a potential agricultural holding is therefore assessed in section 13 of the ES [REP4-028].
- 3.5.14 As the reduction in replacement land being considered by the Secretary of State only relates to the provision of replacement land for the Scheme, the effects on Park Barn Farm due to the construction and operation of the Scheme in all other respects, including the requirement for the temporary use of land during



construction or the acquisition of permanent rights over land would not materially change from those reported in the ES. The focus of this assessment is therefore to consider whether the reduction in the amount of land required from Park Barn Farm for the purposes of replacement land will materially change the assessment of effects on the holding.

- 3.5.15 Paragraph 13.8.67 of the ES [REP4-028] states that the Park Barn Farm holding comprises an area of 40 ha and that the replacement land proposals in the application Scheme would result in the loss of 25.4 ha from the holding. Whilst the actual extent of proposed replacement land affecting the holding stated in the ES should have read 21.3 ha (as derived from the measurements of land plots belonging to Park Barn Farm and set out in the Book of Reference [REP11-005]), the replacement land proposals in the application Scheme would nonetheless affect 53% of the holding, which is a significant proportion. Under the Secretary of State's revised proposals, the area required from Park Barn Farm for replacement land purposes would reduce by 5.33 ha to 16 ha. Although the proportion of Park Barn Farm affected by replacement land proposals would reduce to 40%, this would continue to represent a significant proportion of the holding.
- 3.5.16 In accordance with the ES methodology, the People and Communities chapter of the ES [REP4-028] considers the effects on Park Barn Farm resulting specifically from the loss of grassland/pasture capable of viable agricultural use. Paragraph 13.8.67 of the ES [REP4-028] states that approximately 14.58 ha of the land required from Park Barn Farm for replacement land (in the application Scheme), is grassland or pasture which has the potential for viable agricultural use. Due to the scale of this loss, paragraph 13.14.8 of the ES [REP4-028] reports that the Scheme is likely to give rise to a significant adverse effect on Park Barn Farm. This large adverse and significant effect is confirmed in Table 13.39 and Table 13.45 of the ES [REP4-028], based on Park Barn Farm being a medium sensitivity resource and the magnitude of impact considered as major.
- 3.5.17 For the reduction in replacement land being considered by the Secretary of State, the amount of replacement land required from Park Barn Farm would reduce from 21.32 ha to approximately 16 ha. All of the 5.33 ha reduction would be made from the PBF3 parcel, whilst parcels PBF1 and PBF2 would remain as per the application Scheme. The area of land required from parcel PBF3 would reduce by approximately 64% compared with the application Scheme to a total of 2.95 ha as stated in the Secretary of State's letter of 20 January 2021. However, it is not expected that this would lead to a commensurate reduction in the Scheme's effect on the agricultural holding.
- 3.5.18 PBF3 consists of three land parcels: 11/17h, 11/17i and 11/17j, as shown on the Land Plans [REP8-003]. The Secretary of State has confirmed that the parcels 11/17i and 11/17j should remain as replacement land for the Scheme in PBF3. Plots 1/17i and 11/17j add to 2.55 ha. This leaves a requirement for a further 0.4 ha to be taken from plot 11/17h to achieve the 2.95 ha figure for PBF3 as referred to in the Secretary of State consultation letter. The area of land required from Plot 11/17h will therefore reduce by 5.33 ha, with only the southernmost part of the plot continuing to be required for replacement land purposes.



- 3.5.19 Land parcel 11/17h, consists mostly of woodland with some areas of pasture in the northern most section of the land. As is evident from the information contained in Table 13.9 of Appendix 13.3 of the ES [APP-126], most of PBF3 is not considered to be capable of agricultural use and is classed as non-agricultural, with only 0.93 ha of pasture land identified as falling within the scope of the assessment.
- 3.5.20 For the reduction in replacement land being considered by the Secretary of State, this 0.93 ha area of pasture would fall within that part of plot 11/17h no longer required for replacement land purposes. Based on the information contained in Appendix 13.3 of the ES [APP-126] it therefore follows that the Secretary of State's proposed amendments would reduce the amount of agricultural land required from Park Barn Farm for replacement land purposes by only 0.93 ha. Overall, the total area of agricultural grassland required from Park Barn Farm would reduce from 14.58 ha as assessed in the ES (for the application Scheme) to 13.65 ha, a reduction of approximately 6% compared with that reported for the application Scheme. This change is unlikely to materially change the original assessment conclusion set out in Tables 13.39 and 13.45 of the ES [REP4-028]. On this basis, the effect on Park Barn Farm as a potential agricultural holding under the reduction in replacement land being considered by the Secretary of State will continue to be significant despite the reduction in land take. Even if the magnitude of impact were reduced from major to moderate on account of this change, given the medium sensitivity rating for this resource, the effect would still be moderate. According to paragraph 13.5.11 of the ES [REP4-028] a moderate adverse effect is considered to be a significant environmental effect for the purposes of the people and communities topic assessment.

Permanent effects on land adjacent to Chatley Heath and Pointers Road

3.5.21 The proposed replacement land parcels in the vicinity of Pointers Road to the north-east of M25 junction 10, are not included within the scope of the assessment for the people and communities topic of the ES [REP4-028]. The replacement land sites, referred to as plots CF1, CF2, CF3 and CF4 in the SoR Appendix C Common land and open space report [REP12-004], predominantly comprise plantation woodland or woodland remnants. None of the plots are reported in the ES section 13 [REP4-028] as being in use for agricultural, business or recreational open space purposes and no effects associated with their proposed use as replacement land have been identified. On this basis, their omission from the Scheme would not result in any predicted significant effects being avoided or give rise to any new or different environmental effects specifically as regards any change in their use for replacement land purposes.

Permanent effects on land at Hatchford End

3.5.22 The Scheme includes two adjoining areas of pasture near Old Lane at Hatchford End for use as replacement land, giving a combined area of 1.73 ha. Table 13.5 of the ES [REP4-028] establishes that most of this land currently forms part of a 17 ha equestrian unit and paragraph 13.10.60 assesses its sensitivity as medium. As reported in Table 13.39 of the ES [REP4-028] the application



Scheme is assessed as giving rise to a slight adverse effect on the holding, on account of this land being taken for replacement land purposes. The reduction in replacement land being considered by the Secretary of State would enable this slight adverse environmental effect to be avoided.

Permanent effects on agriculture and soils/agricultural land quality

- 3.5.23 Chapter 13 of the ES [REP4-028] assesses the effects of the Scheme on agricultural land, soils and agricultural land quality. The ES states at paragraph 13.8.72 that the permanent loss of best and most versatile land due to the Scheme would be approximately 3.58 ha, which is well below Natural England's 20 ha threshold of significance. This loss is reported in Table 13.45 of the ES [REP4-028] as a slight adverse effect, which is not significant.
- 3.5.24 The reduction in replacement land being considered by the Secretary of State will not materially change the ES conclusions as they relate to effects on agricultural land quality. The 0.93 ha of agricultural land at Park Barn Farm that would now be omitted from PBF3 does not include any best and most versatile (BMV) land, as clarified in Table 13.9 of the ES Appendix 13.3 [APP-126]. The Secretary of State's proposed changes to replacement land areas at Park Barn Farm will not therefore have any effect on the BMV assessment in the ES. At Hatchford End, Table 13.26 of the ES [REP4-028] assesses that 0.5 ha of the proposed replacement land area would comprise agricultural land. This 0.5 ha area of land is considered to fall within Grade 3a. Accordingly, the removal of the proposed replacement land parcels at Hatchford End from the Scheme would reduce the total area of BMV lost to the Scheme from 3.58 ha reported in the ES to 3.08 ha. This would not materially change the assessment conclusions in the ES as regards the Scheme's slight adverse effects on agricultural land quality.

Permanent effects on users of special category land

- 3.5.25 The construction of the Scheme would result in the permanent loss of approximately 13.71 ha of special category land in the vicinity of M25 junction 10, as well as requiring the acquisition of permanent rights in a further 8.5 ha of adjacent special category land for operational purposes. The assessment of effects on this special category land and its users falls within the scope of the people and communities topic of the ES, as reported in section 13 [REP4-028]. Paragraph 13.10.33 of the ES addresses the effects of temporary land take, whilst paragraph 13.10.34 addresses the effects of permanent land take. The latter is of particular relevance to this supplementary assessment given the requirement under the Planning Act 2008 to provide replacement land for any special category land subject to permanent compulsory acquisition powers if special parliamentary procedure is to be avoided.
- 3.5.26 Table 13.31 of the ES [REP4-028] presents a summary of the assessments relating to temporary and permanent effects on special category land. As can be seen from Table 13.31, the effects are considered for each distinct area of special category land along the route of the Scheme. Significant effects are predicted in relation to the temporary use of special category land at Ockham Common during the construction phase of the project. However, no significant



effects are predicted on account of the permanent loss of special category land.

- 3.5.27 Paragraph 13.10.34 of the ES states that "whilst extensive land take is anticipated at Sandpit Hill and Redhill Bottom, these receptors are not of high community value and alternatives are available for outdoor recreation and leisure. Therefore, no significant effects are anticipated in the construction phase due to permanent land take." The references to extensive land take at Sandpit Hill and Redhill Bottom in paragraph 13.10.34 relate to the loss of open space from Ockham Common to the south-east of M25 junction 10 and to the loss of open space located adjacent to the north-east side of the junction. All other effects on special category land are summarised in Table 13.31 as slight adverse. It is noted in paragraph 13.10.29 of the ES that these assessments make no allowance for any potential mitigation in the form of replacement land.
- 3.5.28 Based on these ES assessments, it follows that if no significant adverse effects are predicted regardless of whether any replacement land is provided as mitigation, then reducing the amount of replacement land for the Scheme, as per the reduction in replacement land being considered by the Secretary of State, will not materially change the conclusions reported in section 13 of the ES [REP4-028].
- 3.5.29 As explained in paragraph 13.7.13 of the ES [REP4-028] most people using the common land and open space in the vicinity of M25 junction 10, travel to the area by car. The parcels of proposed replacement land are less accessible from the main visitor car parks at Ockham Bites, Old Lane and Wisley Lane than the areas of special category land that would be lost to the Scheme. However, the reduction in replacement land being considered by the Secretary of State will not alter this.

Permanent effects on non-motorised users and the accessibility of the rights of way network

- 3.5.30 The Secretary of State's letter of 20 January 2021 did not raise any potential modifications to the Scheme proposals as regards the provision of new bridleways or footpaths. It has therefore been assumed for the purposes of this assessment that all new and improved routes would remain as proposed in the application Scheme. On this basis, no changes to the assessment conclusions in the ES, as they relate to non-motorised users or the accessibility of routes and rights of way would arise.
- 3.5.31 However, it is noted that the application Scheme includes proposals to create new rights of way through some of the proposed replacement land areas that the reduction in replacement land being considered by the Secretary of State would omit from the Scheme, notably:
 - A new bridleway linking the proposed new Red Hill Bridleway Overbridge with Pointers Road. This is shown as Work No.39 on the Works Plans [REP8-004] and is routed through land proposed as replacement land in the application Scheme and identified as parcel CF1 in the SoR Appendix C Common land and open space report; and



- A new footpath connecting footpath 71 and bridleway 18 at Hatchford End, together with a short section of footpath connecting with Old Lane. These are shown as Work No.s 51 and 51a on the Works Plans [REP8-004] and are routed through land proposed as replacement land in the application Scheme and identified as parcels HE1 and HE2 in the SoR Appendix C Common land and open space report.
- 3.5.32 The omission of these routes would change some of the assessment conclusions in the ES. Table 13.43 of the ES [REP4-028] presents the assessment conclusions as regards effects on non-motorised users (NMUs). It assesses that the creation of the new bridleway between the proposed Red Hill Bridleway Overbridge and Pointers Road (Work No. 39) would give rise to a large beneficial effect on NMUs, which is a significant benefit of the Scheme. Similarly it assesses the creation of a new footpath at Hatchford End to link FP71 with BW18 (Work Nos. 51 and 51a) as a large beneficial effect of the Scheme, which again is significant.

Residual Effects

- 3.5.33 The reduction in replacement land being considered by the Secretary of State as set out in the Secretary of State's letter of 20 January 2021 would not materially change the effects reported in the ES [REP4-028].
- 3.5.34 The acquisition of land from Park Barn Farm, despite the Secretary of State's proposal to reduce the area of PBF3, is still likely to give rise to a significant adverse effect on the viability of the land as a potential agricultural holding (although it is currently in residential use).
- 3.5.35 No other significant adverse effects associated with the creation of replacement land are identified in the people and communities topic of the ES [REP4-028]. The acquisition of land for replacement land purposes from a predominantly equestrian holding at Hatchford End is assessed as a slight adverse effect, which is not significant. This minor effect would be avoided by the Secretary of State's proposed changes. The reduction in replacement land being considered by the Secretary of State would reduce the total amount of BMV agricultural land that would be lost to the Scheme by approximately 0.5 ha. However, the Scheme would continue to result in the loss of approximately 3 ha of BMV land, which would remain a slight adverse effect as assessed and reported in the ES.
- 3.5.36 The permanent loss of special category land due to the construction of the Scheme is assessed in the ES [REP4-028] as a slight adverse effect, without any allowance being made for the provision of replacement land. The extent of special category land required to construct the Scheme is unchanged by the reduction in replacement land being considered by the Secretary of State. It therefore follows that if the effect is slight adverse without taking into account the mitigation benefit that would be provided by replacement land, then the effects on special category and its users will continue to be as assessed in the ES, notably a slight adverse effect, which is not significant.
- 3.5.37 In respect of the two rights of way across the replacement land if suitable powers are not included within the made DCO to facilitate the creation of these routes,



then the reduction in replacement land being considered by the Secretary of State would have the effect of reducing the beneficial effects of the Scheme.



4. Summary

- 4.1.1 The areas of replacement land affected by the reduction in replacement land being considered by the Secretary of State are intended to provide alternative areas of common land and open space for those areas taken to build the Scheme. Their principal function is to provide recreational areas for members of the public but they also provide the opportunity for environmental enhancement for the Scheme as a whole. A series of interventions is proposed to do this including woodland management, new planting and waterbody restoration. The removal of the replacement land areas from the Scheme by the reduction in replacement land being considered by the Secretary of State removes the opportunity to carry out these works. This removal could change the assessment of effects on four topics covered by the ES.
- 4.1.2 For the **Biodiversity** topic the Secretary of State's proposal would reduce the compensation measures proposed for the SSSI, LNR, ancient woodland and Habitats of Principal Importance but these would not alter the residual impact assessment of effects on them arising from them, with the exception of the residual impact on the SSSI which would reduce from a large positive impact to a moderate positive impact. There would be no impact on the Thames Basin Heaths Special Protection Area or protected species from the proposed change. However no additional mitigation is required as a result of these changes. Overall, the findings of the Biodiversity chapter of the ES would be unchanged by the reduction in replacement land being considered by the Secretary of State.
- 4.1.3 Although the Secretary of State's proposal would lead to a decrease in adverse visual effects in the construction phase there would be negligible difference in the longer term. The omission of the work in the replacement land parcels would have benefits in landscape impact in the construction phase but in the long term there would be a marginal worsening in landscape impact. For the **Landscape** topic overall, there would be no change in the assessment reported in the ES if the reduction in replacement land being considered by the Secretary of State was adopted.
- 4.1.4 For the **Road Drainage and Water Quality** topic the Scheme proposed enhancements to the Chatley Wood pond within the CF1 land parcel of the Chatley Farm replacement land as part of the mitigation identified in the Water Framework Directive (WFD) Compliance Assessment. If the reduction in replacement land being considered by the Secretary of State is adopted, it would not be possible to carry out these works. The removal of the environmental enhancement works at Chatley Wood Pond from the Scheme reduces the extent and quality of wet habitat being delivered to mitigate the effect of the Scheme on ephemeral ditch habitat. However, this effect is not so great as to materially change the outcome of the Water Framework Directive (WFD) Compliance Assessment (REP4-019).
- 4.1.5 The reduction in replacement land being considered by the Secretary of State would lead to a reduction of 0.5 ha in the amount of best and most versatile (BMV) agricultural land taken by the Scheme but this would not alter the



assessment of effect on agricultural land in the **People and Communities** chapter of the ES.

- 4.1.6 The permanent loss of special category land due to the construction of the Scheme is assessed in the ES [REP4-028] as a slight adverse effect, without any allowance being made for the provision of replacement land. The extent of special category land required to construct the Scheme is unchanged by the reduction in replacement land being considered by the Secretary of State. It therefore follows that if the effect is slight adverse without taking into account the mitigation benefit that would be provided by replacement land, then the effects on special category and its users will continue to be as assessed in the ES, notably a slight adverse effect, which is not significant.
- 4.1.7 The reduction in replacement land being considered by the Secretary of State would mean that two rights of way across the replacement land could not be implemented without an alteration of the DCO preventing two significant beneficial effects of the Scheme from being realised.
- 4.1.8 Overall there are no new or different significant environmental effects of any nature likely as a consequence of the reduction in replacement land being considered by the Secretary of State.

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