M25 junction 10/A3 Wisley interchange

TR010030

Written submission of Applicant's Case put orally at the Second Issue Specific Hearing on transportation, environmental and socio-economic matters held on Wednesday 15 January 2020 and continuing on Thursday 16 January 2020

Planning Act 2008

Rule 8(1)(k)

The Infrastructure Planning (Examination Procedure) Rules 2010

Volume 9

January 2020

Infrastructure Planning

Planning Act 2008

The Infrastructure Planning (Examination Procedure) Rules 2010

M25 junction 10/A3 Wisley Interchange

Development Consent Order 202[ ]

9.34 Written submission of Applicant's case put orally at the Issue Specific Hearing on the transportation, environmental and socio-economic matters held on Wednesday 15 January 2020 and continuing on Thursday 16 January 2020

Regulation Number	Rule 8(1)(k)
Planning Inspectorate Scheme Reference	TR010030
Document Reference	9.34
Author	M25 Junction 10 / A3 Wisley Interchange Development Consent Order Team and Highways England

Version	Date	Status of Version
0	28 January 2020	Deadline 3

Table of contents

Chapter Pages

1. Introduction 4
2. Alternative scheme options considered by the Applicant and alternative means of access suggested by Interested Parties (IP) (Agenda Items 3(a) to 3(g)) 5
3. Levels of service – strategic and local road network capacity and safety and effects on non-motorised users (Agenda Items 3(h) to (l)) 15
4. Air Quality (Agenda Item 4) 21
5. Habitats Regulations and Biodiversity (Agenda Item 5) 24
6. Noise (Agenda Item 6) 30
7. Historic environment (Agenda Item 7) 31
8. Tree and landscape considerations (Agenda Item 8) 33
9. Socio-economic matters (Agenda Item 9) 35
10. Discussion of the Applicant's proposed changes to the submitted application (Agenda Item 10) 37

1. Introduction

1.1 This document summarises the case put forward by Highways England (**the Applicant**), at the second Issue Specific Hearing (**ISH 2**) on transportation, environmental and socio-economic matters which took place at the Mandolay Hotel, 36-40 London Road, Guildford, Surrey GU1 2AE on 15 January 2020 and continuing on 16 January 2020.

1.2 Michael Humphries QC (MHQC) of Francis Taylor Building represented the Applicant and was assisted by experts at Atkins and BDB Pitmans LLP in providing submissions in light of the technical nature of the agenda for the hearing.

2. Alternative scheme options considered by the Applicant and alternative means of access suggested by Interested Parties (IP) (Agenda Items 3(a) to 3(g))

The ExA asked the Applicant to provide a summary of the details of the 21 options considered prior to Option 14 being selected as its preferred option. The ExA also invited the Applicant to provide an explanation of the process for assessing and discounting the various options.

2.1.1 Graham Bown (**GB**) summarised the Habitats Regulations Assessment Stage 3-5 (**HRA**) [APP-044] and explained that the need for the Scheme is driven by high traffic volumes causing delay, unreliable journey times and accidents at this strategically important interchange. GB added that as consultants on the project, Atkins were originally tasked with delivering a fully free flowing solution within a budget of £100 to £250 million.

2.1.2 GB elaborated on section 3.3 of the HRA [APP-044] and explained that the M25 junction 10 is situated on one of the busiest parts of the strategic road networks (**SRN**), with many of the 270,000 journeys that pass through or around the junction everyday experiencing unreliable journey times and delays. GB noted that these delays resulted in a high number of accidents, with junction 10 having the highest number of causalities of all junctions on the M25.

2.1.3 GB explained that whilst the strategy solutions noted at table 3.4 of the HRA [APP-044] all contributed towards the Scheme's objective, they did not do so to a sufficient degree. The strategic solution most able to solve the problem was a junction improvement scheme rather than public transport or traffic demand management. GB added that road charging and parking Schemes would both require a large amount of support and work over a wide ranging area making the option of a junction solution the clear choice.

2.1.4 GB further explained that 21 options were considered all based around three concepts:

- keeping the existing roundabout;
- modifying the roundabout by changing its shape to increase capacity and improve safety; and
- removing the roundabout to provide a fully free flowing solution.

2.1.5 In assessing these options at an early stage, GB explained that a single junction modelling tool was developed and a forecast traffic flow was derived to test and determine whether the options were feasible on capacity grounds. Consideration was also given to the deliverability of the options in terms of the Scheme budget. GB noted that as result of this exercise the Applicant rejected 11 options.

2.1.6 In response to the ExA's query as to whether the Applicant placed more weight on cost as a factor in this consideration process vis-à-vis capacity, GB explained that the aim of the modelling at this early stage was to find an option that would deliver capacity whilst remaining affordable. As such, GB confirmed that the Applicant gave equal weight to cost and capacity at this early stage of the investigation.

2.1.7 In response to the ExA's query as to whether the Applicant would have considered more options should its budget have been higher, GB explained that the Applicant did reject some options on a costs basis, such as large schemes delivering a fully free flowing solution. Nevertheless, GB emphasised that a key feature of the investigation at this stage was to locate a feasible option which had the least impact on the Special Protection Area (**SPA**). GB noted that budget was not a fundamental consideration for the Applicant when narrowing the options, and particular attention was given to whether the option would be feasible from a capacity perspective with minimum impact on the SPA.

2.1.8 GB explained that the remaining ten feasible options were then assessed by the Applicant using a multi-criteria assessment framework based loosely around the Department for Transport's Early Appraisal and Sifting Tool. GB referred to paragraph 3.4.12 of the HRA [APP-044] and noted that the three options taken forward at this stage were option 9, 14 and 16, the latter of which was a fully free flowing solution.

2.1.9 GB explained that common to these three options was the widening of the A3 from a dual three-lane all-purpose road (**D3AP**) to a dual four-lane all-purpose road (**D4AP**) to accommodate traffic figures which indicated that an extra lane would be required for safe weaving and merging on approach to the junctions based on DMRB TD22/06. GB noted that such widening had led the Applicant to need to find alternative solutions for those properties/establishments with direct access to the A3 between Ockham Park and Painshill junction, including Wisley Lane and Elm Lane. Also common to the options were improvements at Painshill and A254 in order to reduce congestion and improve safety.

2.1.10 GB explained that the Applicant had rejected option 16 because it would have the largest impact on the SPA out of the three options, would require the largest land take and exceed the Scheme budget. GB added that following statutory consultation in 2018, responses indicated that consultees supported the decision to reject option 16. It was removed from the consideration process and this change to the Scheme's aim was accepted by the DfT.

2.1.11 GB referred to paragraph 3.4.16 of the HRA [APP-044] and explained that the Applicant's next focus in Stage 2 was to refine Option 9 to reduce its land take and consequential environmental impacts, whilst at the same time improving the performance of Option 14. Whilst refining Option 9 and 14, the Applicant also considered the alternative access and side roads to be developed and consulted with stakeholders on this issue. This process is described firstly in the Scheme Assessment Report (Nov 2017) and then the Side Roads Addendum (Nov 2017) which can be submitted to the examination.

Post hearing note: The Applicant to submit the Scheme Investment Report and Side Road Addendum to the examination by Deadline 3.

2.1.12 GB continued that after having refined the remaining two options, the Applicant began the final selection process to work towards a preferred solution following the process outlined in Figure 3.1 of the Scheme Assessment Report which reflected the unique environmental of conditions around the scheme i.e. to relieve congestion, improve safety and support planned growth. GB noted that the selection of options was taken in attendance of other professionals from Highways England, Surrey County Council (**SCC**), Connect Plus Services, Atkins, Surrey Wildlife Trust and Natural England as part of a wide ranging audience participation workshop. GB noted that the Environment Agency and Historic England were invited but were unable to attend.

2.1.13 In testing both Option 9 and 14 to determine which would be most appropriate to meet the Scheme's objectives, GB referred to paragraph 3.4.25 of the HRA [APP-039] and explained that both Option 9 and 14 were feasible alternatives for the purposes of the assessment process and the degree to which Option 9 offered benefits over Option 14 was not significant. GB noted that Table 3.8 of Scheme Assessment Report indicated that Option 14 would have the smallest impact in terms of Protected Species and Special Areas of Conservation.

2.1.14 In response to the comment that the RHS alternative option was not considered by the Applicant [made by Richard Max of RHS Wisley], MHQC explained that the alternative solution was in fact considered by the Applicant throughout the option selection process and referred Mr Max to the Consultation Report [APP-026].

2.1.15 In response to the query as to why the Applicant sought to proceed with Option 14 despite the public consultation held showed greater favour for Option 9 [made by Councillor Collin Cross], MHQC explained that a public consultation was simply a means by which the Applicant could understand the public's view on the proposed scheme; it was not a vote to choose the most popular option. MHQC re-emphasised that Option 9 had a greater effect on the SPA and clearly the Applicant had to have regard to the legal implications of such impact and balance that against the views of some consultees.

2.1.16 As such, GB concluded that the Applicant chose to promote Option 14 as it would have the smallest impact in terms of Protected Species and Special Area of Conservation. There was no other feasible alternative option that could be pursued, and which would have a less damaging effect on the SPA than Option 14 which is being promoted in the DCO application.

The ExA invited the Applicant to explain the access and associated security arrangements for Heyswood Campsite and Court Close Farm.

2.1.17 GB explained that the applicant requires an alternative access arrangement to serve Heyswood campsite and Court Close Farm because the existing access to the A3 is to be closed during the widening of the A3 from a D3AP to a D4AP. GB noted that future forecast traffic flows on the A3 were such that DMRB TD22/06 required the A3 to be widened from the D3AR to a D4AR to accommodate the predicted traffic volume.

2.1.18 GB explained that retaining the existing direct accesses to the A3 would not be possible as DMRB TD41.95 required the number of direct access to be strictly limited on trunk roads to ensure that the trunk road can provide a safe movement for high-speed long distance through traffic.

2.1.19 GB also noted that CD 123 (Geometric design of at-grade priority and signal-controlled junctions) stated that direct accesses shall not be used on D3AP and therefore the Applicant is unable to re-provide the existing access to the A3. GB explained that whilst no such guidance is provided for D4AP, the Applicant had assumed the same principal applied [that direct accesses shall not be used] and therefore looked at alternative solutions. GB noted that the Applicant had found it difficult to find solutions given the various constraints such as unique features of Painshill Park i.e. the registered park and garden, ancient woodland and Gothic Tower as well as overhead powerlines and residential properties.

2.1.20 GB continued that in addition to these constraints, there were additional challenges associated with minimising the impact on landowners, especially those not otherwise affected by the Scheme. GB noted that the Applicant was conscious to ensure the chosen solution also met the needs of users.

2.1.21 By reference to the Summary Plan of the Proposed Development [REP1-007] GB explained the Applicant's proposed access route for Heyswood Campsite and Court Close Farm. GB added that the Applicant planned to provide gates on this single carriageway both in the proximity of the A3 turn off and at the Heyswood / New Farm boundary and would consider adding at Court Close Farm too. The Scheme had made allowances for fencing through Heyswood.

2.1.22 GB explained that, the Applicant intended there to be one corridor along which the gas main would be situated, in the vicinity of the park, which ensured any maintenance could take place above this area.

The ExA asked whether the Applicant had considered the alternative access route put forward by the Girlguiding Greater London West (GGLW) to determine whether it was a technically feasible option.

2.1.23 GB explained that in an earlier stage of the project the Applicant did route in the option proposed by GGLW until it discovered and fully recognised the extent and value of ancient woodland on the GG' site along the A3.

2.1.24 GB explained that the Applicant's original options included:

- a route via Redhill Bridge (PAIN04C) that accessed the network along Seven Hills Road South; and
- a route that went through Painshill Park, over the River Mole and connected to the 'Sainsbury's' roundabout on the A245 (PAIN5d).

2.1.25 GB noted that there was no clear winner between these options as one impacted the Gothic Tower whilst the other impacted the other residents and parts of Painshill Park. GB added that both of these options went through ancient woodland.

2.1.26 GB explained that the Applicant considered further options during Stage 2 as reported in the Side Roads Addendum and included:

- PAIN04C, which involved a shifting Redhill Bridge further south away from the Gothic Tower;
- PAIN-10, which involved a new bridge crossing further north near San Domenico. GB noted that the key difficulties here were the effect on ancient woodland, gas compound and electricity cables between pylons; and

- an option of acquiring the properties and thus not re-providing any access.

2.1.27 GB noted that the Applicant's final decision was made to proceed with PAIN-04C on the grounds that it would enable a single solution for non-motorised user (**NMU**) crossings and the local access road.

2.1.28 The Applicant made changes prior to target consultation in November 2018 which focused access to the A3 southbound on-slip. This change of access was also accompanied with a change to the NMU route, meaning that it would now follow a route from Cockcrow Bridge to the Painshill roundabout along this revised route. Following a consultation response from GGLW regarding safeguarding, the Applicant further revised this solution by terminating private means of access at Court Close Farm and instead rerouting NMU over Red Hill Bridge and along a private means of access leading to Seven Hills Road South.

2.1.29 In response to whether PAIN-10 was rejected by the Applicant solely due to cost, MHQC explained that the Applicant rejected PAIN-10 because of its impact on ancient woodland and not cost.

2.1.30 In response to ExA's query as to whether the Applicant was aware of the safeguarding issues raised by GGLW, GB explained that a number of discussions had taken place between the Applicant and GGLW to discuss this issue and that the Applicant had tried to consider this within the design of the Scheme by including gates, fencing, and meetings with a master planner to consider opportunities for the site.

2.1.31 MHQC explained that the Applicant was very sensitive to the issues that GGLW had raised and was optimistic that a compromise could be achieved. MHQC noted that the suggestion of an alternative access route to Court Close Farm along the south side of the A3 would push the Applicant outside of the current Order Limits. MHQC referred to the Works Plans and noted that the Girl Guide's alignment is outside the limits of deviation and to incorporate their suggested access route would require a change to the Order and it is the Applicant's position that this would not happen unless a strong steer from the ExA was provided.

2.1.32 MHQC also noted that the GGLW alternative alignment arrangement would require an additional ancient woodland land take, adjacent to the A3. The loss of such an extent of ancient woodland may not be acceptable in planning terms and therefore the Applicant runs the risk of the DCO application later being refused in its entirety by the Secretary of State on this point. As such, MHQC re-emphasised that the Applicant would require a strong steer from the ExA that they would support the Scheme if it was to make this change.

2.1.33 With regard to the point that the width of the access road to enter Court Close Farm needed only to be 3m and not 4.8m [noted by SCC in response to ExA's question], MHQC explained that the Applicant did not accept a narrower track would go within the red line boundary and that in any event would need to make what might be a material amendment to the application in order to accommodate these views which require the permission of the ExA in any event.

2.1.34 In response to Robert Brown's query regarding the safeguarding and security of children on the Painshill residential estate, GB referred to Applicant's Comments on Relevant Representation [REP1-009] and explained that the Applicant would provide fencing around the edge of the track on top of earth works and existing trees will be seen behind the fence.

The ExA invited the Applicant to explain the access arrangements for Painshill Park.

2.1.35 Acknowledging Mr Griffith's comments that direct access to the A3 was not being sought, GB explained that a meeting between the Applicant, the Fire Service and the Painshill Park Trust (**PPT**) was scheduled for 23 January 2020 to discuss matters of access further.

2.1.36 Further to the comments of Louise Russell of the PPT, GB confirmed that the possibility of a wider consultation by the fire and ambulance service would form the basis of the agenda for the meeting on the 23 January 2020.

The ExA queried whether the Applicant could include access to the Gothic Tower, purely in terms of emergency, within the Scheme's design.

2.1.37 MHQC explained that the Applicant was unlikely to contemplate further access in or across Painshill Park for the reason of getting emergency services to the Gothic Tower as it would require the Applicant to extend the access road across land not owned by the PTT. In any event, MHQC noted that there would not be a compelling case in the public interest for the Applicant to compulsorily purchase such land in accordance with the relevant legislation.

2.1.38 GB added that the fire services could access Painshill Park by using the service road and therefore the Applicant saw no reason to amend the Scheme's design in this respect.

The ExA invited the Applicant to explain the access arrangements for the former San Domenico Hotel site, including the consideration of any implications for complying with highway design standards stated in the Design Manual for Roads and Bridges (DMRB).

2.1.39 MHQC explained that the Applicant appreciated that the Starbucks situated at the Domenico Hotel site depended on passing trade and, once the Order is approved and the land returned, the Starbucks would struggle to return to its previous trade as there would be little passing trade.

2.1.40 The ExA noted that there was an outstanding appeal relating to this site and requested Elmbridge Borough Council to advise whether the appeal was likely to be determined before the Examination closed.

The ExA invited the Applicant to discuss the access arrangements at Elm Corner.

2.1.41 In response to the suggestion that the wide central reservation between Ockham roundabout and the M25 be used as a road/over-route [raised by Elm Corner Residents Group], MHQC explained that the Applicant's position was that it would not be possible, even if the carriageway was moved and extended into the central reservation, to get all four lanes and a separate Wisley lane diversion into the space.

2.1.42 MHQC noted that the Applicant did give consideration to this option, but the necessary space simply does not extend all the way back to Ockham Park Junction and the Applicant made the judgement that it was better to have an alignment of the diverted Wisley Lane to the South of the A3.

2.1.43 In response to the ExA's query as to the width of the access proposed for the upgrade to Elm Lane, Rob Marks (**RM**) explained that the access road between Old Lane and Elm Corner is 4.2m wide in accordance with DMRB and noted that the Applicant had including removing some vegetation to allow for greater visibility. RM added that the safety audits carried out at Stage 1 did not raise any issues concerning visibility, and that another audit was to be carried out at Stage 2 of the Design stage.

2.1.44 RM explained that the Applicant is confident it has sufficient land secured within the red line boundary to achieve the appropriate visibility space and confirmed that these have been designed to the most recent DMRB standards.

2.1.45 In response to the ExA's query as to whether there is anything physically about the Scheme which would preclude an access route into Wisley Airfield, GB confirmed that nothing would preclude such inclusion.

The ExA asked the Applicant for its view on the compatibility of traffic routing via Old Lane from Wisley Airfield given that the lane passes through an SPA.

2.1.46 GB explained that the Applicant had carried out an assessment and was content with the traffic routing and of the view that it was not a problem.

The ExA referred to REP1-048 Appendix 7(a) (Inspector's Report) and invited the Applicant to explain the reasoning behind Proposed Planning Condition 35.

2.1.47 Paul Harwood (**PH**) explained that Proposed Planning Condition 35 acknowledged an existing permitted use of the Wisley Airfield site, which entitled the Applicant to a certain number of trips without having to implement mitigation. The condition permitted the occupation of 200 dwellings on the basis that the M25 Junction 10 scheme would be under construction and once road works start, it would be normal practice to impose a temporary speed limit for the duration of those works. PH noted that once the Scheme was completed, the temporary speed limit would be removed and the speed limit of the A3 would return to 70 mph.

The ExA queried what allowance the Applicant made for the planned growth at RHS Wisley when assessing traffic flow.

2.1.48 GB explained that the Applicant's modelling assumed a busy day and used a figure well in excess of the typical average number of visitors. As such, the Applicant was confident that there is sufficient allowance for the planned growth at RHS Wisley.

The ExA asked the Applicant to explain the RHS alternative scheme - i.e. retention of left turn out of Wisley Lane and provision of south facing slips at the Oakham Park junction/roundabout – and including any consideration of any implications for complying with highway design standards stated in the DMRB and any other relevant guidance.

2.1.49 MHQC explained that there was still some discussions to be had by the Applicant and RHS on this point and that the Applicant was optimistic that a high level statement of common ground (**SOCG**) would be agreed by Deadline 3. MHQC added that a discussion between the Applicant and the traffic modellers had taken place on 14 January 2020 with a view to agree distances and journey times which would feature in the SOCG.

2.1.50 MHQC confirmed that the Applicant was happy with the figures used in relation to distance and journey times in the Supplementary Report to the Transport Assessment [REP2-011] (**TASIR**) and that the parties are moving towards a position where it ought to be possible to agree the distances if not necessarily the journey times.

2.1.51 When asked what mitigation would be in place to counter the additional traffic associated with the growth at RHS Gardens, PH explained that the Applicant was not consulted on this application and was therefore not aware of any proposed mitigation measures. PH noted that had the Applicant been consulted, they would have responded to the consultation with regards to its concern over safety and capacity in equal measure.

2.1.52 RM noted that the Applicant did not include south facing slips at Ockham Park junction, as proposed by RHS, in its DCO for the following reasons:

- the Ockham Park roundabout would need to be enlarged and connecting roads on both sides would need to be re-aligned;
- the roundabout is located within the Stratford Brook flood zone (Zone 3) and adjacent to both a Site of National Conservation Importance (**SNCI**) and a historic landfill site, so these factors would need to be taken into account in any provision of new slips;
- the Ripley services on the A3 are located only 1.5 kms south of Ockham Park junction. Consequently, there is insufficient distance between the junctions to provide a design with a standard compliant weaving length between the merge and diverge sections of the respective on and off slip roads;
- a minimum weaving length of 1000m is required for a compliant design where only approximately 650m northbound and 690m southbound can be achieved. Therefore, the accesses off the A3 to the Ripley services would have to be relocated to accommodate south facing slips at the Ockham Park junction to achieve a compliant design; and
- third party land outside of the boundaries of both the public highway and the DCO would be required to construct the enlarged roundabout and to realign the side road connections and the slip roads.

2.1.53 As such, RM explained that the standard merging and diverging on the A3 as either a D3AP or a D4AP would increase the potential for accidents and referred to the Applicant's Deadline 2 Submission – 9.20 Schedule of Change to the Book of Reference [REP2-015] which indicated an increase of 20 accidents over a 5 year period and RHS's Deadline 1 Submission – Highways and Traffic Representation with Appendices [REP1-044] which indicated that the Applicant's proposed alternative is low risk whilst the RHS's alternative is medium risk.

2.1.54 GB explained that the Applicant considers that there is a better solution, particularly with regards to safety in light of the greater access out onto the Ockham roundabout and utilising the existing slips in the north facing direction for RHS traffic.

2.1.55 MHQC explained that RHS should not draw conclusions from historic accidents records as this does not take into account the increase in visitors emerging from the gardens into the D4AP A3 lanes that are intended to be free flowing. As such, if RHS Wisley was to have more visitors, MHQC noted that the issue of safety becomes even more important.

2.1.56 With regard to journey times, MHQC referred to table 2.7 in the TASIR [REP2-011] and explained that whether there are greater distances depends on which route vehicles take to and from the south. MHQC confirmed that the Applicant's modelling had taken into account whether visitors would take the sign posted route or the route through Ripley. MHQC noted that RHS's modelling had not taken both of these options into consideration and the longer distances RHS referred to assumed vehicles will come on the sign posted routes.

2.1.57 Table 2.8 of the TASIR [REP2-011] showed relative journey times for different routes. MHQC noted that RHS was not correct in its suggestion that there would always be greater journey times. MCQH specifically referred to entries at the top of table 2.8 which indicated journey times had become quicker for visitors to RHS Gardens from the north and that approximately half RHS Wisley Garden visitors come from the north.

2.1.58 Without allowing for the provision of the Burntcommon slips, it is predicted that daily traffic flows through Ripley by 2037 will increase by 66% compared with the 2015 base flow (see Table 4.1 in the TASIR [REP2-011]). Much of this increase would be attributable to general background traffic growth and traffic generated by the development of sites allocated in the Guildford Local Plan, most notably the former Wisley Airfield site. The Scheme itself would add just 5% to daily traffic flows through Ripley. As such, MHQC explained that table 4.1 in TASIR [REP2-011] represented a worst case scenario without any mitigation and the Applicant therefore expects the impact of the Scheme on Ripley High Street to be better than identified in the table.

2.1.59 The ExA queried the scope for traffic leaving RHS Wisley to potentially go through the airfield development to access the A3 southbound, assuming a route through the Wisley Airfield development, as an alternative to routing through Ripley. MCQH explained that this feature was outside the detailed design of the Scheme and the Applicant was therefore unable to give comment.

The ExA queried whether if the airfield development was not to proceed but the Applicant's scheme was, what would be the implications for the ability of Ripley High Street to accommodate the traffic that would be using that route.

2.1.60 The Transport Assessment [APP-136] and TASIR [REP2-011] noted the impact of the Scheme in terms of traffic increase without Burntcommon slips as 5%. GB referred to the figures for 2022, prior to the development coming in, which noted a similar 5% increase in traffic to be expected as a result of the Scheme. As such, GB confirmed that the Applicant would still expect a 5% change in traffic flow even if the airfield development was refused.

The ExA asked the Applicant where the historic landfill site could be found in relation to the interchange and, in terms of where the south facing slips would need to go, whether they fall in any part of flood zone 3.

2.1.61 GB explained that the Applicant was unable to confirm the location of the historic landfill site, but would do so if a written question was asked. The Application noted that there was a possibility that whilst the south facing slips may not fall within flood zone 3 (work would be required to determine this) it is highly likely that re-provision of Portsmouth Road to the northern side of the Ockham Park junction would fall within flood zone 3.

2.1.62 MHQC noted that the south facing slips proposed by RHS necessitate reconfiguration of the surrounding roads, which would require the Applicant to compulsory purchase additional land. MHQC explained that there would be no funding available to the Applicant to acquire this additional land and no compelling case in the public interest for use of compulsory acquisition powers.

2.1.63 In response to Richard Max's suggestion that the Applicant had failed to consider the RHS alternative simply due to funding, MHQC explained that the Applicant rejected the RHS alternative for a number of reasons, only one of which related to funding. MCQH explained that this is not a residential or commercial scheme where the Applicant can simply go back to the developer and request further funds; there are certain funds available for projects such as this and the ministerial statement is very clear that this is not a scheme which includes these south facing slips. MCQH confirmed that this is why the Applicant had refused the RHS option.

Post hearing note: The ExA requested the Applicant submit the ministerial statement to the examination by deadline 3.

3. Levels of service – strategic and local road network capacity and safety and effects on non-motorised users (Agenda Items 3(h) to (l))

The ExA asked the Applicant to explain the basis for establishing the 'Do-minimum' against which any benefits/dis-benefits of the 'Do-something' scenario have been assessed.

3.1.1 Steve Katesmark (**SK**) explained that the Applicant had developed the do-minimum scenario in compliance with the Department for transport's best practice guidance (**WebTAG**) to create reference case travel demand which reflected forecast changes in population, employment, car ownership and other demographic and economic factors.

3.1.2 The starting point for developing the Do-minimum scenario was Highways England's 2015 South East Regional Traffic Model (**SERTM**), which was enhanced in vicinity of J10 so that it was more detailed in this area. [Section 3.5 p24 to p26 of TFR [REP1-010]

3.1.3 Enhancements to the 2015 SERTM was calibrated and validated in accordance with best practice.

- To provide Do-minimum scenarios for future assessment years, 2022 and 2037, the following changes to the 2015 SERTM model were made:
- The model was adjusted to reflect planned improvements to the SRN as listed in Table 3-6 on p25 of the TFR.
- Growth factors from the National Trip End Model (NTEM 7.2) were applied to the model matrices and DfT Road Traffic Forecasts (2015 RTF) were used for the growth of freight traffic. [TFR p22 & p23]
- Traffic growth associated with major development site allocations in the Elmbridge, Guildford and Woking Local Plans were added to the model matrices, as listed in Table 3-3 on p19 & p20 of the TFR, where these were not already accounted for in NTEM.
- Traffic growth associated with other specific development proposals, e.g. RHS Wisely Garden and Wisley Airfield, were also added to the model matrices. [Para 3.4.11 on p23, para 3.6.19 & Table 3-10 on p31 of TFR]

3.1.4 Forecast travel demand has be subject to Variable Demand Modelling (VDM) in accordance with WebTAG guidance to capture likely response to changes in generalised costs associated with traffic congestion and vehicle running costs etc. [Paras 3.1.1, 3.1.3 & 3.14 on p15 and Section 3.6 on p26 to p30 of TFR]

3.1.5 Traffic surveys were undertaken in 2017 covering the core study area and a microsimulation (**S-Paramics**) traffic model was built, calibrated and validated to accurately replicate the operation of the existing road network in the vicinity of J10. [TA Section 3.4, p33 & p34]

3.1.6 The S-Paramics model outputs were compared and cross-checked with SERTM and were necessary SERTM was adjusted to reflect the S-Paramics model within the core study area to improve its accuracy.

3.1.7 The do-minimum scenario therefore reflected the central or core traffic forecast, with both high and low traffic growth forecasts also modelled as sensitivity test to confirm the benefits of the scheme.

The ExA queried whether the M25 Smart Motorway works could be expected at M25 junction 10 if the Applicant was not proposing a scheme, and whether this would affect the Applicant's assessment of the do-minimum.

3.1.8 GB confirmed that there would be some sort of works at junction 10 even if the current scheme was not proposed. GB explained that if the current scheme did not exist, the junction 10 to junction 16 scheme would still include the junction 10 smart motorway running elements. GB added that the Scheme was proposed as part of the larger junction 10 to junction 16 scheme as part of an optimisation process to reduce the impact on customers by doing work at the same time at the same place.

3.1.9 As to whether this would affect the Applicant's assessment of the do-minimum assessment, MHQC explained that the Applicant would discuss this with senior members of its team and reply in writing.

The ExA asked the Applicant to explain the predicted peak hour traffic volumes joining the A3 under the following scenarios:

(a) Do-minimum in 2022;

(b) NSIP as proposed in 2022 inclusive of RHS Wisley traffic, based on an anticipated visor number of 1.35 million (figure taken from Table 1 of REP1-039]; and

(c) NSIP as proposed in 2037 inclusive of RHS Wisley and anticipated Wisley airfield redevelopment traffic.

3.1.10 MHQC referred to a table produced by the Applicant which summarised the peak hour traffic volumes for the requested scenarios and explained that these figures had been obtained from Appendix A of the TASIR [REP2-011].

3.1.11 RM explained that the figures in the table included the WIPL development and the RHS 10-year investment plan, both of which were also included in the Applicant's model. RM noted that the WPIL development generated traffic was not included in 2022 figures, as the development would not have been built at this point, but are included in the 2037 figures.

Post hearing note: the Applicant is to submit this table as an examination document.

The ExA asked the Applicant to explain the adequacy of the traffic modelling for the effects of the Scheme on the Local Road Network, including:

(a) The status of the validation for the junction modelling that has been undertaken by the Applicant; and

(b) The extent that the modelling that has been undertaken is subject to any omissions and errors.

3.1.12 RM explained that the model used by the Applicant had been developed, calibrated and validated in accordance with Department for Transport guidance and the Applicant therefore considered it fit for purpose. RM added that the strategic model included a greater level of detail and refined the approach to key junctions in the SRN. RM noted that the Applicant's modelling has comprised of strategic, operational micro-simulation and local junction specific models that inform one another and provide consist outputs that demonstrate the robustness of the modelling RM also noted that all the traffic modelling has been subject to internal and Highways England quality control and a good level of model validation has been achieved.

3.1.13 RM explained that there will inevitably be a lower level of confidence in predicted changes in traffic flows on the smaller country lanes predicted by the traffic model compared to the rest of the network, where there is a high level of confidence. This is due to it being a strategic model covering a large geographical area and focused on the SRN, A-roads and B-roads. Nonetheless, the observed flows and forecast absolute changes in traffic flows on the smaller country lanes are generally very small compared to the traffic flows on the rest of the network in all time periods, even if the proportional changes can be notable. The smaller lanes would also typically carry a high proportion of local trips which are short distance and not subject to strategic routeing decisions. As flows on the small lanes will generally be low, the relatively small forecast changes in absolute flows are likely to be within the current daily variations in flow even if the proportional changes seem relatively large.

3.1.14 RM confirmed that any variation or uncertainty in the modelled changes in traffic flows on these lanes does not materially undermine the confidence in the modelled changes in traffic flows on the SRN, A-roads and B-roads, including Ripley High Street and that the Applicant is confident in the scheme's forecast to reduce demand on the local road network in aggregate.

3.1.15 SK explained that the Applicant's strategic model is formulated from an average of 3 hours from each peak period. SK noted that the Applicant's S-Paramics traffic model was built covering a smaller area of interest in the vicinity of junction 10 and represented a peak hour model, i.e. the peak hour within the 3-hour peak periods, and that all information on the operational performance of the road network presented in the Transport Assessment [APP-136] is based on the S-Paramics model.

3.1.16 Regarding TEMPRO and deriving traffic growth forecasts , SK explained that there is always the potential for double counting in forecasts, as the National Trip End Model (NTEM) takes account of growth in the form of economic development, population growth and other demographic factors, some of which cannot happen without developments identified in Local Plans coming forward. SK explained that the Applicant's adopted approach avoids this double counting and is fully compliant with Department for Transport (WebTAG) guidance.

3.1.17 SK noted that the Applicant had not included the Heathrow expansion in the forecasts as it did not meet DfT criteria regarding level of certainty that it will proceed as stated in the uncertainty log in the TFR [REP1-010]. SK also noted that according to publicly available documents, the Heathrow expansion is expected to lead to no net gains in vehicle trips based on the currently proposed Surface Access Strategy and will therefore have no traffic impact.

3.1.18 In terms of lower and higher growth, SK explained that the modelling included variable demand modelling, which considers the demand matrices within the model and changes in demand in response to varying external factors that impact the generalised costs of car travel. SK confirmed that the models have been tested in accordance with best practice and that the do-minimum scenario reflects a central or core traffic forecast, with both high and low traffic growth forecasts also modelled as sensitivity tests to confirm the benefits of the Scheme.

The ExA asked the Applicant whether it thought there was any errors or omissions in the traffic modelling and whether, at a local level, the modelling represented what if would expect to be happening on the ground.

3.1.19 SK explained that the Applicant's traffic modelling has been developed, calibrated and validated in compliance with best practice and DfT (WebTAG) requirements and has been subject to internal and Highways England quality control, with a good level of validation achieved.

3.1.20 SK explained that the Applicant was confident that the traffic modelling did not contain any notable omissions or errors that undermine the confidence in the outputs and the assessment of the Scheme based on the traffic modelling.

3.1.21 SK added that the model cannot accurately reflect very congested conditions and the unreliability of the network, especially intermittent flow breakdown (i.e. it represents a median rather than average delay). Therefore, it is likely to underestimate the aggregate annualised journey time savings delivered by the Scheme, from reduced congestion and improved network reliability.

The ExA queried whether, vis-à-vis Newark Lane and with respect to long term effect, it should treat the Applicant's position as one being that no mitigation is required because ultimately the level of demand on Newark Lane will become self-policing and will be rerouted by alternative routes.

3.1.22 SK confirmed this was correct and that the Applicant's primary reason for this was that the section of Newark Lane vis-à-vis north of Ripley High Street was a narrow single track between a line of buildings which limits the flow of traffic along Newark Lane. SK added that rerouting by way of junction 11 is but one of a variety of alternative rerouting options available to traffic using Ripley High Street.

3.1.23 In response to SCC's concerns as to where they consider mitigation to the local road network to be required, MHQC explained that mitigation should only be imposed where it is required as a consequence of an impact of the Scheme, and not simply due to generally growth in the LRN or increased traffic resulting from other developments the local authority may or may not approve in the future. MHQC confirmed that the Applicant is here to only mitigate any significant effects directly due to its proposals.

3.1.24 MCQH drew attention to table 4.1 in TASIR [REP2-011] which indicated that the impacts of the Applicant's scheme on the LRN are dominated by other traffic which is not caused by the junction 10 improvement. In those instances where increased traffic is generated as a result of anything save for the Applicant's scheme, MHQC suggested that this should be the responsibility of SCC to mitigate against. MHQC noted that some increase in traffic is attributable to general growth and the Applicant should not be responsible for mitigating against this as SCC receive funding to carry out works on its roads to deal with this in conjunction with their local plan.

The ExA asked the Applicant to explain the effect of the Proposed Development on public transport.

3.1.25 SK explained that the scheme would replace the existing 715 bus stops on the A3 with a bus stop very close to the entrance of RHS Wisley Green because the existing bus stops are poorly located and remote from both RHS Wisely Green and residential areas. SK noted that the bus services directly affected by the Applicant's scheme are routes 715, C1 and C2 services.

3.1.26 SK explained that the scheme would considerably improve accessibility to RHS Wisley Garden by bus by providing a bus stop for route 715 very close to the Garden's entrance in replacement for the existing bus stops on the A3 that are approximately 400m or over a 5 minute walk away.

3.1.27 SK added that the Applicant's traffic modelling has indicated that in 2022 the scheme would result in small increases in return journey times for the 715 bus service of up to approximately 2 minutes during morning peak period and up to 3.5 minutes during the evening peak period. SK continued that in 2037 the morning peak period return journey times are substantially reduced by the Scheme, with a small increase during the evening peak period.

3.1.28 SK explained that the Applicant believes the benefits of providing a bus stop very close to RHS Wisley Garden entrance is likely to outweigh the dis-benefit from additional bus journey times and distances due to the proposed diversion.

3.1.29 SK outlined that the C1 and C2 services will both travel along the A245 through Seven Hills junction and across the A3 via Painshill junction. SK explained that the Applicant considers these services will benefit from reductions in traffic congestion and reduced journey times as a result of its proposed scheme.

3.1.30 SK noted that the Applicant had made provision to enhance facilities at the replacement bus stop at RHS Wisley Garden and life-for-like replacement facilities at other bus stops where they need to be altered or replaced as part of the scheme.

The ExA invited the Applicant to outline the bus route in and out of RHS Wisley as proposed.

3.1.31 SK indicated the route of the bus route on the projector, stating that the 715 bus route between Kingston and Guildford and joins the A3 at Painshill roundabout and uses the A3 to Ockham Park where it then routes through Ripley to go back onto the A3 and back to Guildford.

3.1.32 With regard to the bus stop which serves RHS, SK explained that instead of going along the A3, the bus would come off the Ockham Park junction and travel along the new Wisley Lane extension, cross the new overbridge, up Wisley Lane to RHS and stop at the proposed bus stop within RHS Wisley Garden. The bus would then continue through the car park of RHS Wisley onto the exit which is further up and return to the Ockham Park junction via Wisley Lane.

3.1.33 SK added that the Applicant had been in discussions with RHS and SCC and understood that both parties agree in principal that this is an appropriate way to provide bus services to RHS. SK explained that by implication SCC and RHS agreed that the proposed relocation of the bus stop would outweigh any dis-benefits from additional journey distances and times due to the diversion by increasing potential patronage as a result of being closer to RHS Wisley Garden.

3.1.34 SK noted that the Applicant had not yet started negotiations with the relevant bus operators but that it planned to do so.

The ExA queried the capacity of the laybys and the levels of usage the Applicant intended to put them to.

3.1.35 MHQC suggested that the Applicant was happy to deal with this matter by way of written question.

4. Air Quality (Agenda Item 4)

The ExA invited the Applicant to explain its position in terms of negotiating SOCGs dealing with air quality with the relevant third parties.

The Applicant and Elmbridge Borough Council (EBC)

4.1.1 MHQC explained that the Applicant had been in a number of discussions with EBC concerning traffic flows and traffic modelling rather than air quality modelling as the air quality models are well-known and understood.

4.1.2 Victoria Sykes (**VS**) confirmed that there had been no dispute between the Applicant and EBC with regard to air quality models the Applicant had used to date.

4.1.3 EBC noted that they were expecting further information in early 2020 as a result of the modelling undertaken for their local plan which would be shared with the Applicant.

4.1.4 VS noted that she would review this when it was ready.

The Applicant and RHS

4.1.5 MHQC appreciated that there are areas of disagreement between the Applicant and RHS, and noted that the Applicant was willing to meet with RHS to discuss a SOCG whenever convenient.

The ExA invited Professor Laxon, on behalf of RHS, to put forward his comments on the air quality assessment undertaken by the Applicant.

4.1.6 VS responded to each point as follows:

- with regard to the inclusion of ammonia in the air quality assessment, VS explained that it is Highways England's position that ammonia is not considered a component to be included in an air quality assessment, in accordance with DMRB Guidance and the National Policy statement for the National Network. VS added that this approach is also consistent with the Department of Food, Rural and Agriculture's **(Defra)** published projections and noted that Defra's emission factors toolkit does not contain emissions data for ammonia. VS concluded therefore that there is no requirement for the Applicant to include ammonia within its air quality assessment. Section 2.7 of the Applicant's Response to RHS Comments on Air Quality [REP2-022] noted that the Applicant considered that even if the changes in nitrogen deposition rates were doubled, to account for ammonia, the inclusion would not materially affect the conclusion to the **SiAA**. This is because adjacent to the A3 is a stretch of woodland which acts as a buffer for the habitats of the qualifying features of the SPA.
- with regard nitrogen deposition rates, VS explained that the Applicant had revised the velocities and did not dispute that the deposition rates are now higher than original stated. VS noted that, nevertheless, the Applicant did not believe this affected the qualifying features of the SPA because of the adjacent woodland buffer.
- with regard to whether the Applicant's air quality assessment took into account RHS Wisley traffic going through Ripley or following the sign posted route, VS explained that in the ES, the Applicant had assessed traffic

travelling through Ripley, as this was the data output from the traffic model. An assessment of the traffic travelling to RHS Wisley using the signposted route had been undertaken in the Applicant's Response to RHS Comments on Air Quality [REP2-022]. VS confirmed that the Applicant did not believe that any change would materially affect the impact on the SPA due to the woodland buffer.

- with regard to the data for the worst case scenario in Ripley High Street, VS explained that of the measurements in Ripley High Street between 2016 to date, the annual mean concentrations of nitrogen dioxide were between 29 and 34 micrograms per metre cubed. VS confirmed that given the change with the Scheme was only expected to be change over 1000 AADT, the Applicant did not expect there to be any exceedances of air quality criteria in Ripley. VS also noted that the air quality assessment in the Environmental Statement represented a worst case scenario, using data from an earlier design fix (DF2), and even with this the Applicant was confident that the changes would not be large enough to cause a breach of the nitrogen dioxide annual mean air quality objective.
- with regard the in-combinations effects assessment carried out by the Applicant on the SPA, VS explained that Natural England had produced guidance (NEA001) to advise on the assessment of road traffic emissions under the Habitats Regulations. The guidance outlines the process of carrying out a screening assessment to determine whether an appropriate assessment should be carried out. VS noted that one of the steps to be carried out was to look at the changes to the Scheme to determine if any of the thresholds have been exceeded (Step 4a in NEA-001) and, if not, apply that threshold in combination with other road traffic plans and projects. VS confirmed that the Applicant did not apply the in-combination threshold at the screening stage, as changes with the scheme alone meant that an appropriate assessment would need to be undertaken. An in-combination assessment was carried out correctly at appropriate assessment stage.
- with regard to whether the Applicant had applied the correct projections data for NOx using IAN 170/12v3 VS confirmed that the Applicant had applied the data correctly using IAN 170/12v3. LA105 now incorporates the guidance issued within IAN 170/12, at the section in LA105 "Addressing uncertainty in predicted future roadside nitrogen dioxide concentrations" (page 18). The methodology remains the same.
- with regard to improving air quality, VS confirmed that the Applicant does not anticipate the Scheme to have an overall significant adverse effect on air quality and expects it would in fact improve air quality in one of the air quality management areas in the area of the scheme. VS added that of the receptors considered by the Applicant, two within the air quality management area are expected to decrease due to decrease in traffic in A244. VS confirmed therefore, in light of the outcome of the air quality assessment, that the Applicant was confident there would not be a significant adverse effect.
- with regard to the six transects and the habitats regulation assessment conducted by the Applicant, VS explained that the calculation of NOx concentrations were included in the air quality assessment in the

Environmental Statement. Natural England had only requested information on nitrogen deposition rates to be given within the appropriate assessment.

- with regard to CO2 emissions, MHQC drew attention to the Applicant's Response to RHS Comments on Air Quality [REP2-022] table 3.1 which indicated that CO2 emissions with both the do-minimum situation and with the scheme, were just over 1.8m tonnes. The additional traffic travelling to and from RHS Wisley would be an additional 639 tonnes. VS confirmed that the difference can be seen as very small in the context of the total emissions.

The ExA invited the Applicant to explain its review of policy and compliance maters raised in the written representations and responses.

4.1.7 The National Networks NPS sets out Government policy on the development of the SRN and it is Highways England's case that the proposed project is in accordance with the NPS. Section 1(1) of the Climate Change Act (as amended) has set out the duty on the Secretary of State to achieve 'net zero' for the UK carbon account by the year 2050. It is not for the examination to question the merits of Government policy in the NPS.

4.1.8 In response to a point raised by a member of the public that the project would result in a loss of trees, which would have an impact on carbon, PW explained that the Scheme would result in the loss of 34 hectares of vegetation (including woodland) as a result of the highway proposals. The Applicant proposes to plant 38 hectares of woodland (as well as enhancing a further 44 ha of woodland) to compensate for this loss. The Applicant is confident the carbon emissions resulting from such tree removal would amount to a very small contribution to the overall carbon emissions produced by the Scheme.

5. Habitats Regulations and Biodiversity (Agenda Item 5)

The ExA invited the Applicant to explain the differing effects of air quality emissions on woodland and heathland with regards to the Air Pollution Information System (APIS).

5.1.1 MHQC explained that the woodland within the SPA acts as a buffer, protecting the heathland habitats within which the SPA qualifying species occur.

5.1.2 MHQC explained that SACs are designated for their habitats and SPAs are designated for the bird species and the habitats that support them. As the Scheme affected an SPA, the Applicant had considered whether air quality emissions would affect those parts of the SPA within which the qualifying SPA species occur. This does not include the woodland buffer which separates the heathland areas from the A3 and M25.

5.1.3 MHQC referred to the opinion of Advocate General Kokott (Cooperatie Mobilisation for the Environment and others v College van gedeputeerde staten van Limburg C293/17, C294/17, 'The Dutch Nitrogen Case'), upon which the Ecology and HRA Written Representation on behalf of RHS [REP1-043] is founded, and explained that this case focuses on nitrogen sensitive ecological features, whereas the Applicant's case refers to an SPA where the bird species for which it qualifies are only present in certain habitats and locations within the overall SPA. MCQH confirmed therefore, that the most recent and relevant ruling on this air quality issue is the Judicial Review case of *Compton Parish Council v Guildford Borough Council* (CO/2173,2174,2175/2019 **the Compton Case**) from 4th December 2019. This case reviewed the existing law, including European cases such as the Dutch Nitrogen Case. This case related to the Thames Basin Heaths SPA and proposed development at the nearby Wisley Airfield and set out its position on the air quality assessment that was undertaken as part of the Habitats Regulations Assessment. The Compton Case concluded that when undertaking an air quality assessment within an SPA, it is necessary to assess whether there is an effect on the protected species and their habitats. The Compton Case sets out an approach that is entirely consistent with the air quality assessment undertaken in the SIAA by the Applicant.

5.1.4 MHQC referred to paragraph 207 of the Compton Case which made clear that the assessment of air quality impacts should focus on the protected species (i.e. the birds) and their habitats, and use a survey-based understanding of how significant areas were for foraging and nesting by SPA birds. This is the correct approach to consider whether changes in air quality confined to within the woodland buffer would have an effect on the integrity of the SPA species or the habitats within which they occur.

5.1.5 MHQC also referred to paragraph 191 of the judgement which noted the distance of the habitats from the M25 and A3 and the presence of heathland are important factors to consider.

5.1.6 MHQC explained that in paragraph 207 of the Compton Case, Judge Ouseley concluded *'It is perfectly clear, in my judgment, that Guildford Borough Council, whose task it was to undertake the HRA, did consider whether significant adverse effects were likely from the development proposed in the Local Plan; it then undertook an appropriate assessment to see whether there would be no adverse effect on the SPA. That could not be answered, one way or the other, by simply considering whether there were exceedances of critical loads or levels, albeit rather lower than currently. What was required was an assessment of the significance of the exceedances for the SPA birds and their habitats'.' The absence of adverse effect was established by reference to where the exceedances of NOx and nitrogen deposition would occur, albeit reduced, and a survey based understanding of how significant those areas were for foraging and nesting by the SPA birds. The approach and conclusion show no error by reference to the Regulations or CJEU jurisprudence'.*

5.1.7 MHQC explained that as Mr Baker's ecology report for RHS Wisley [REP1-043] pre-dated the Compton judgement, the judgement is now to be preferred to Mr Baker's assertions that any exceedance, regardless of where it occurs within the SPA, must lead to an adverse effect on the integrity of the SPA. By contrast, the Applicant's approach is entirely consistent with the ruling of the Compton Case, with regards to focusing on the protected species and their habitats when assessing adverse effects as a result of air quality impacts during the SIAA.

5.1.8 Nitrogen deposition critical load limits, as taken from the APIS website, were given for coniferous woodland and dry heaths for the Thames Basin SPA. The critical load for coniferous woodland ranges between 5 kg nitrogen per hectare per year and 15 kg per hectare per year. The critical load for dry heaths ranges between 10 kg per hectare per year and 20 kg per hectare per year.

5.1.9 PW noted that these figures are taken from the APIS website and that the same table also confirms that nightjar and Dartford warbler are not sensitive to nitrogen impacts on coniferous woodland[1]. PW explained that these species are not sensitive to nitrogen impacts on coniferous woodland because they do not occur in coniferous woodland. PW also explained that whilst APIS states that woodlark are potentially sensitive to impacts on coniferous woodland, this is due to their preference for recently felled areas of woodland, not established woodland..

5.1.10 PW added that in the four years he had surveyed the site (2016-2019), he had never recorded any territory of any of the three qualifying species within 200m of the A3.

[1] http://www.apis.ac.uk/srcl/select-a-feature?site=UK9012141&SiteType=SPA&submit=Next

5.1.11 PW added that the three qualifying species of birds are only found in heathland, and that heathland is over 150 m from the road at the closest point, with much of the heathland occurring over 200 m from the road. PW referred to the updated calculations (which can be found on page 83 of the Applicant's comments on written representations [REP2-014]) and explained that the Applicant's modelling shows that at the distance that the heathland occurs (i.e. the habitat within which the SPA qualifying species occur) there is no perceptible difference in nitrogen deposition rates between the 'with Scheme' and 'without Scheme' calculations, even when taking into account updated nitrogen deposition velocities and RHS Wisley traffic along the A3. Therefore, the Scheme will have no adverse effect on the SPA qualifying species or the habitats upon which they rely.

The ExA queried whether there are any areas of heathland that are or would be created that would be closer than 200m.

5.1.12 PW confirmed that there are no existing areas of heathland closer than the distances given for the transects, as described on page 83 of the Applicant's comments on written representations [REP2-014] i.e. no existing heathland is closer than 150m from the A3 or M25. Therefore, the selected transects accurately represent the distribution of woodland and heathland within the Ockham and Wisley Commons SSSI component of the SPA.

5.1.13 PW added that as part of the suite of compensatory measures, the Applicant planned to fell 22 hectares of woodland to allow heathland restoration, which would benefit all three species of qualifying bird. PW noted that some of this additional heathland would be closer than 150m to the A3. PW concluded that, at present, no areas of heathland are closer to the road than 150m and the transects accurately reflect the current distribution of heathland within the site.

5.1.14 The ExA referred to the report to the Secretary of State for Wisley Airfield and asked RHS Wisley if they agreed that beyond a distance of 200m, nitrogen oxide dispersion falls to a background level. Professor Laxen confirmed that this is generally correct and effectively it would fall to background levels.

5.1.15 MHQC confirmed that an in combination assessment has been undertaken for air quality impacts in the SIAA.

5.1.16 MHQC referred to a further part of paragraph 207 of the Compton Case, as follows: *'The judgment is one for the decision-maker, as to whether it is satisfied that the plan would not adversely affect the integrity of the site concerned; the assessment must be appropriate to the task. Its conclusions had to be based on "complete precise and definitive findings and conclusions capable of removing all reasonable scientific doubt as to the effect of the proposed works on the protected site concerned"; People Over Wind. But absolute certainty that there would be no adverse effects was not required; a competent authority could be certain that there would be no adverse effects even though, objectively, absolute certainty was not proved; R (Champion) v North Norfolk District Council [2015] UKSC 52 at [41], and Smyth v Secretary of State for Communities and Local Government [2015] EWCA Civ 174 at [78]. The same approach applies, following the Dutch Nitrogen case, to taking account of the expected benefits of measures not directly related to the plan being appropriately assessed'.*

5.1.17 MHQC explained that the Applicant's approach to the SIAA considers where the protected species are and where their habitats are, and then considers whether there is an adverse effect on the integrity of the SPA in those areas. MHQC explained that this is an appropriate approach, and is fully supported by case law both in the UK and in Europe.

5.1.18 MHQC explained that the Applicant, as far as adverse effect on the integrity of the SPA from emissions are concerned, considered there to be no adverse effect on the integrity of the SPA. However, the SIAA has identified an adverse effect on the integrity of the SPA as a result of land take. MHQC added that the Applicant is confident that it has properly applied the domestic habitats regulations and that its assessment is appropriate.

5.1.19 PW added that the Applicant had already agreed a SOCG with Natural England [APP-138] in which Natural England confirmed they had been involved with and agreed with the methodology for the Applicant's Habitats Regulations Assessment and its findings. This includes the HRA screening, SIAA, assessment of alternative solutions, IROPI and suite of compensatory measures. PW noted that the assessment identified adverse effects on the SPA from the Applicant's land take but not from air quality. PW added that the Applicant was to meet with Natural England on 24 January 2020 and will discuss these points in light of their SOCG.

5.1.20 With regard to the distribution of qualifying species, PW explained that the Applicant worked closely with the RSPB and Natural England, who agreed with the methodology and findings of the SIAA carried out by the Applicant. PW noted that the RSPB and Natural England had requested that the applicant determined the habitat requirements of the SPA species, and that the habitat requirements were reported in section 4.7 of the SIAA [APP-043] and were agreed with the RSPB and Natural England (as recorded in HRA Annex B [APP-041].

5.1.21 PW explained that although woodlark are associated with coniferous woodland, this only relates to clear felled areas of woodland, and not established woodland, such as the woodland buffer separating the A3 and M25 from the heathland areas. PW confirmed that Natural England's conservation objectives for the SPA[2] state that woodlark require vegetation that is predominantly short (<5 cm) or medium (10-20cm) in height, with frequent patches of bare or sparsely-vegetated ground. Therefore, as agreed with Natural England, RSPB and the Surrey Wildlife Trust, although woodlarks can be found in cleared areas of woodland, they will not occur within the established woodland buffer that separates the A3 and M25 from the heathland. This is supported by the survey data collected by the applicant over the past four years, which only recorded woodlark in open heathland areas.

[2] Thames Basin Heaths SPA supplementary advice (http://publications.naturalengland.org.uk/publication/4952859267301376)

5.1.22 PW confirmed that nightjars do associate with the outer edge of woodlands, but as explained in paragraph 4.7.11 of the SIAA [APP-043], existing studies of nightjar habitat requirements (Sharps *et al.*, and Verstraten *et al.*) have demonstrated that nightjars will actively avoid established woodland, instead selecting open areas, woodland edge and young (less than 10 years age) woodland for foraging. This is supported by the survey data collected by the applicant over the past four years, which only recorded nightjars in open heathland areas.

5.1.23 Therefore, the qualifying species only occur within the heathland habitats, and these are 150m from the road at their closest point. At these distances there is no perceptible difference in nitrogen deposition rates between the 'with Scheme' and 'without Scheme' calculations. PW concluded that, therefore, the SIAA was correct to determine that there was no adverse effect as a result of air quality impacts, not only on the Ockham and Wisley Commons SSSI component of the SPA, but also on the integrity of the Thames Basin Heaths SPA, which is made up of a total of 13 component SSSIs.

5.1.24 PW explained that DTA Ecology Ltd were procured by the Applicant in an advisory role primarily to advise on compliance with the Habitats Regulations, in light of relevant case law. DTA Ecology Ltd are a leading consultancy in the interpretation and application of the Habitats Regulations. Dr. Caroline Chapman is the Director of DTA Ecology and also the co-Director of DTA Publications which publishes and maintains the Habitats Regulations Assessment Handbook of which she is co-author. DTA Ecology advice informed the methodologies and findings of the HRA screening and SIAA, including the in combination assessment and the air quality assessment. DTA Ecology Ltd also provided detailed advice and guidance on the suite of compensatory measures.

The ExA invited the Applicant to explain any future monitoring and management of the SPA compensation land and enhancement areas, and the replacement land.

The ExA queried whether there are to be any biodiversity enhancements on the replacement land and, if so, have these been accounted for in the Environmental Statement and other submitted documents, and how will these be secured in the dDCO.

5.1.25 Mark Challis (**MC**) explained that any biodiversity enhancements to the replacement land would be secured by the Applicant through the requirements in the dDCO. As regards replacement land, MC referred to Requirement 7 which required a scheme to be approved by the Secretary of State and adhere to a plan relating to the future management and monitoring of any replacement land.

5.1.26 PW explained that whilst the driver for the replacement land is not an ecological driver, the Applicant intends for it to provide ecological benefits which were taken account of in its assessment. PW noted that enhancement would take place to the existing woodland at Park Barn Farm, where the Applicant planned measures including thinning dense stands of birch to create new rides and glades. PW added that there will also be woodland creation, the translocation of ancient woodland soils and the enhancement of existing grassland.

The ExA asked the Applicant to expand upon the recreational use of routes through the SPA and also the area near Ockham Bites which is understood to be potential heathland, but is also a common area for dog walkers.

5.1.27 PW explained that there will be no increased access to the SPA as a result of the Scheme, but the Scheme will provide additional routes through the SPA and will provide additional replacement land. Therefore, the SIAA concluded that there would be no additional recreational disturbance as a result of the Scheme, and PW explained that in reality it may even reduce due to the provision of additional walking route choices.

5.1.28 PW confirmed that some of the heathland restoration SPA enhancement areas are close to Ockham Bites. However, these will be in addition to the existing areas of heathland, so any walkers that choose to walk within heathland habitats will be dispersed over a larger area, diluting the disturbance in any one area of heathland and not leading to an increased risk of recreational disturbance on the qualifying SPA bird species.

The ExA queried, with regard to compensation land C1 and C2, why the Applicant considered the planting of native trees would have an immediate effect on compensating on the loss to the SPA, despite the fact these trees would take several years to reach full potential.

5.1.29 PW explained that the suite of compensatory measures includes the compensation land C1, C2 (totalling 8.1 hectares) and 8 parcels of SPA enhancement areas (totalling 47.4 hectares). The combination of the SPA compensation land and SPA enhancement areas will compensate for the impacts of the Scheme on the SPA. However, as the wood pasture planting within SPA compensation land will take time to establish, the SPA enhancement areas will provide immediate benefits in the form of woodland enhancement and heathland restoration (for example, the cleared areas of woodland will immediately provide suitable nesting habitat for woodlark). PW added that the Applicant is providing the SPA enhancement areas at a ratio of 3:1 for all temporary and permanent land take within the SPA. This ratio has been agreed with Natural England, RSPB, SCC, Forestry Commission and Surrey Wildlife Trust and gives stakeholders confidence that there will be immediate and effective compensatory measures to ensure that the integrity of the Natura 2000 Network is maintained.

5.1.30 In response to the ExA's query relating to the differing recommendations of the Applicant and SCC as to the monitoring period of translocated ancient woodland. PW explained that the ancient soil translocation area at Park Barn Farm will be given to SCC and managed by Surrey Wildlife Trust. Therefore, the proposed management and monitoring times are designed to ensure that the habitats being created have established. PW explained that the Applicant considered 25 years to be sufficient time for the canopy of the woodland planting and the ground flora to establish. PW added that this timeframe was in line with the translocation best practice guide[3] and has also been agreed with Natural England.

[3] Anderson, P. (2003) Habitat translocation: a best practice guide. CIRIA, London.

6. Noise (Agenda Item 6)

The ExA invited the Applicant to explain the measures to mitigate construction and operations noise.

6.1.1 Louise Morris (**LM**) explained that the Applicant intended to install noise barriers during the operational phase and additional noise barriers along the A3 to the north and south of new Redhill and Cockcrow Bridge. LM added that lower noise road surfacing and new slip roads of Ockham Interchange would mitigate noise impacts.

6.1.2 LM noted that the figures produced in the Environmental Statement indicated the changes in noise levels within and around the Scheme. LM explained that noise mitigation would primarily be effected by way of road resurfacing, whilst tree loss would have a negligible effect on the noise impact in the Painshill area.

6.1.3 In response to the ExA's query as to whether acoustic fencing could be used to reduce the impact of noise in the Painshill area, LM explained that acoustic fencing would not affect the 'observed effect' level in this area.

The ExA asked the Applicant to comment on its review of policy compliance matters raised in the written representations and responses

6.1.4 In response to the ExA's query as to whether moving this access road would have significant effects on the noise climate, LM explained that it would depend where the access is moved to but, in any event, the road is low trafficked and would produce low noise levels.

7. Historic environment (Agenda Item 7)

The ExA asked the Applicant to explain the impact of the Proposed Development on designated heritage assets and their settings, including a review of any policy compliance matters raised in the written representations and responses.

7.1.1 Kae Neustadt (**KN**) noted that the National Planning Policy Framework (**NNPF**) did not define 'substantial harm' for heritage assets and explained that the Applicant's methodology operated on a basis that substantial harm requires a high level of negative impact.

7.1.2 KN explained that the Applicant assessed the residual effects on the designated heritage assets in terms of the impact on the 'significance' of the assets. KN noted that the way in which the Applicant identified the significance of an asset could be found at paragraph 11.10 of Chapter 11: Cultural heritage of the ES [APP-056]. KN explained that following the assessments, the Applicant found that the Scheme did not have a level of effect on heritage assets above 'less than substantial harm'.

7.1.3 KN referred to section 11.5.10 of Chapter 11 of the ES [APP-056] which described how the effect on the significance of an asset is determined. KN explained that the Applicant assessed this on an individual asset basis and that substantial harm requires a large adverse effect on the significance of that asset. KN explained that since none of the Applicant's assessments identified a large impact, it was felt none of the issues resulted in the level of harm being substantial. KN also noted that in the Applicant and Historic England had agreed in their SOCG [APP-140] that the level of harm to heritage assets was not substantial.

The ExA queried whether the proposed scheme would have any impact on the setting of any designated heritage assets.

7.1.4 KN explained that the scheduled monument at Cockcrow Hill had already been degraded by the construction of the M25. KN noted that Historic England stated that the setting contributed a nominal amount to the significance of this scheduled monument. KN explained that the Applicant anticipated no physical impact to the scheduled monument at Cockcrow Hill to occur, and it would be fenced off during activities including a buffer to allow for preservation, which is part of the REAC (CH1.1)[REP2-005].

7.1.5 In response to the ExA's query as to whether there is anything the Applicant could do to enhance protection of this scheduled monument during construction, KN explained that the scheduled monument could possibly be enhanced to a certain extent but not back to its prehistoric setting. KN added that part of the SOCG with Historic England included consultation with Historic England to identify opportunities for enhancement, such as interpretive signage. KN explained that this forms part of the Register of Historical and Environmental Commitments, as part of the Written Scheme of Investigations and also known as the Archaeological Strategy.

7.1.6 The ExA queried the effect the proposed scheme would have on the Painshill Grade I registered park and garden. KN explained that the Applicant had prepared a statement of significance [APP-123] which discussed Painshill registered park and garden in detail. KN explained that document [APP-12] identified the significant parts of the park and garden which contributed to its setting. KN noted that the area where the Applicant proposed the access road to be located is not in an area considerably contributing to the significance of the park. As such, KN explained that the applicant considered the proposed route to not affect the significance of the registered park and garden through its setting, although it does demand some land take on the peripheral edges of the park.

7.1.7 In response to Robert Brown's question relating to the original residencies of Lord Hamilton, KN explained that whilst Painshill Park is considered a Grade II* listed building, the Scheme would not have any physical impact on the property, nor were any impacts to the setting identified. KN also noted that, contrary to Mr Brown's statement, the current Grade II* listed building at Painshill House was not the original residence of Charles Hamilton and, being separated from the rest of the Park and Garden and with limited contributions of setting, did not contribute to the significance of the land and garden.

8. Tree and landscape considerations (Agenda Item 8)

The ExA invited the Applicant to explain how the ancient woodland at Heyswood has been identified.

8.1.1 PW confirmed that the original Ancient Woodland Inventory was reviewed twice, the most recent of which took place in 2011 where a reassessment was carried out based on the advances in digital information. PW explained that the purpose of these revisions was to ensure that ancient woodland had been correctly identified and assess the boundaries of ancient woodland parcels. PW explained that all three assessments of the Ancient Woodland Inventory concluded that the woodland at Heyswood was classified as ancient woodland and that the boundary of the ancient woodland had not changed throughout the revisions. Therefore, the Applicant is confident that the ancient woodland boundary used in the assessments in accurate.

8.1.2 In response to the ExA's query as to whether the Applicant was confident the documentary evidence provided proved that the woodland predated 1600 and is therefore ancient woodland in accordance with the NNPF, PW confirmed that this was the intended focus of the 2011 revision of the Ancient Woodland Inventory and therefore, the Applicant is confident in the conclusions of the updated Ancient Woodland Inventory. PW also explained that the Applicant had also surveyed the woodland and identified nine ancient woodland indicator species which, whilst not conclusive, supported the findings of the inventory.

The ExA invited the Applicant to provide an update with regard to the tree root impact following on from the tree root surveys in respect of the trees on RHS Wisley/A3 boundary

8.1.3 MHQC explained that the Applicant was currently undertaking survey work which showed that the roots extended beyond what was originally thought because there was a discrepancy between the survey boundary shown on the land ownership plan and the location of the RHS fence.

8.1.4 MHQC explained that the RHS fence appears to be closer to the A3 and that the preliminary findings indicate that there may be a risk to the trees but that the Applicant is in the process of investigating with its engineers to determine whether an engineering solution which would protect those trees could be found. MHQC explained that whilst the central reservation in this area is quite wide but not wide enough to accommodate a fourth lane and Wisley diversion route, there may be scope to tweak the alignment of the A3 and move the lane slightly towards the centre in order to protect those trees. At present, the Applicant is unable to provide an answer as to whether this is possible but is working to find an engineering solution in order to retain those trees.

The ExA noted that the Applicant intended for there to be double the number of lighting columns along the A3 but the same number of lighting units. The ExA queried whether this had been assessed in the Environmental Statement and whether this would have any impact.

8.1.5 Andrew Shuttleworth (**AS**) explained that the central reserve lighting column would be replaced by verging lighting columns between Bolder Mere and Cockcrow Bridge and between the junction 10 slip roads and Painshill junction slip road. AS added that the central lights will be replaced with verge lighting in the area closer to RHS garden, retaining the same number of columns but in slightly different positions.

8.1.6 In response to the ExA's query as to whether the move from central lighting to verge lighting had been assessed, AS confirmed that it had been assessed by the Applicant. AS added that, in terms of nearby residencies, the Applicant expected very little change in the nature of the lighting, save for some cases where the carriageway and slips roads will be widened. In these instances, AS explained that the lights would be moved slightly further out to accommodate the wider road. AS noted that there are only a handful of properties near to these roads which are to be widened and therefore the Applicant considered the lighting impact of the Scheme to be small.

9. Socio-economic matters (Agenda Item 9)

The ExA asked the Applicant to comment on the relevant and written representations received from the RHS and in particular consideration of the questionnaire design and the conclusions drawn in the economic forecast contained in the Hatch Regeneris representation [REP1-039].

9.1.1 Dr Fayyaz Qadir (**FQ**) made the following points in relation to the questionnaire designed by RHS:

- FQ explained that the RHS survey of 645 individuals [REP1-039: para 1.15] was not an acceptable sample size from the statistical analysis perspective (representing only 0.06% of the total visits of more than 1.1 million referred to in Table 1 of REP1-039) and therefore undermined the credibility of the questionnaire's results;
- FQ explained that the questionnaire issued by RHS was bias as it did not give the participants sufficient options. FQ explained that the questionnaire had been designed in such a way as to evoke negative responses from the participants, especially in relation to journey time. FQ noted, for example, that the questionnaire [REP1-039: Appendix A, Question 5] only referred to additional journey time of 10 minutes in relation to journeys "to" RHS Wisley when it should have referred to journey times "to" and "from" RHS Wisley. MHQC added that these questions should have taken into account that any additional journey time would be split between the journey "to" and "from" RHS Wisley, as opposed to being the additional time for a journey "to" RHS Wisley only;
- FQ explained that the estimation of the increased journey time and journey distance in the questionnaire was inaccurate [Table 4 of REP1-039], which had consequently led to an overestimation of the economic impacts in the RHS report. FQ noted that RHS had obtained the journey times using Google Maps, which was simply not sufficiently reliable for this analysis as it did not consider the effects from the improvement work on junction 10 and did not consider the routing impact this would have on the network;
- FQ explained that the RHS report presents inaccurate route utilisation factors [in REP1-039: Table 6] when compared with the ANPR data collected by Highways England. FQ explained that regular visitors to RHS would learn from their experience and choose the quickest route to get to their destination. FQ explained that this was not a factor the questionnaire and the associated analysis took into consideration, which undermined its credibility; and
- FQ noted that it is not clear that RHS has undertaken a safety assessment of their proposed solution. FQ explained that the questionnaire asked the respondents to rate their level of convenience for travel "to" RHS Wisley [REP1-039: Appendix A, Question 4]. The questionnaire should have asked about travel "from" RHS Wisley in order to understand respondents' safety concerns about the exit from RHS Wisley onto the A3. The RHS proposed 'left out' solution is not compliant with DRMB design standards.

9.1.2 MHQC added that the entire socio-economic impact assessment provided by RHS was based on a series of questions in a survey which the Applicant does not agree with nor accept. MHQC added that, in addition to this, RHS had not taken account of the improvements that the Scheme will bring about, such as the safety improvements and time improvements for those travelling from the north.

9.1.3 MHQC referred to Table 2.8 of the TASIR [REP2-011] and noted that some of the journey times indicated an overall reduction, which RHS's questionnaire simply did not recognise.

10. Discussion of the Applicant's proposed changes to the submitted application (Agenda Item 10)

10.1.1 Mark Challis (**MC**) mentioned that the Applicant had written to the Planning Inspectorate in November 2019 and informed them that it wished to make seven changes to its proposed scheme. MC noted that the Applicant had since reviewed these changes and wished to now only make six, as it will not be pursuing a change to the limits of deviation as defined in article 7 the dDCO [REP2-002].

10.1.2 MC explained that there is a non-targeted statutory consultation in progress which began on 6 January 2020 and is due to end on 4 February 2020 in relation to these proposed changes. MC explained that the Applicant welcomes responses to the consultation and will of course consider all responses received. The Applicant is expecting to make a formal request to the ExA to examine the changes at Deadline 4.

10.1.3 MC explained that the Applicant is doing all it reasonably can to avoid invoking the Infrastructure Planning (Compulsory Acquisition) Regulations 2010 but that the matter is not fully in Highways England's control as the consent of various land owners is required. MC added that should the regulations be invoked, the Applicant is aware of the relevant procedural requirements and notice periods and is confident that there remains sufficient time to allow for these and for the ExA to examine the proposed changes within the examination period.

Printed on paper from well-managed forests and other controlled sources.

Registered office Bridge House, 1 Walnut Tree Close, Guildford GU1 4LZ
Highways England Company Limited registered in England and Wales number 09346363