

Regional Investment Programme
M25 J10 / A3 Wisley Interchange
Improvements

Scheme Assessment Report
Side Roads Addendum
November 2017

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V2.5f

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1 Introduction

In December 2014, the Department for Transport (DfT) published the Road Investment Strategy (RIS) for 2015-2020. The RIS sets out the list of schemes that are to be delivered by Highways England over the period covered by the RIS (2015 – 2020).

The Stage 2 Option Selection process concluded that:

- Option 14 should be pursued as it provides significant traffic and safety benefits up to 2037 and would be achieved at a lower cost and environmental impact than Option 9.
- This should be accompanied with widening of the A3 between Ockham Interchange and Painshill Interchange from D3AP to D4AP. The A3 over the M25 J10 is to remain D2AP.

The widening of the A3 would necessitate closing the existing direct accesses and providing alternative access for the properties that presently have direct access to the A3. The Scheme Assessment Report (SAR) presented and assessed options for these access arrangements and during the Value Management Workshop in May 2017, the following recommendations were made (those in bold are discussed in this addendum whilst those not in bold were confirmed in the SAR):

A3 Ockham to M25 J10 (including Wisley Lane) access:

- Wisley Lane
 - Further assessment of the impacts and benefits of the two proposed options (WIS-01 and WIS-10) to be undertaken.
 - Further options developed in collaboration with RHS Garden Wisley to be considered.
- Pond Farm
 - Access to Pond Farm and the campsite to be provided from Wisley Lane, although further discussion with stakeholders is required to ensure that option CAMP-02 meets all stakeholder needs.

A3 M25 J10 to Ockham access:

- Elm Corner
 - To provide access as presented in the ELM-05 option – eastwards towards Old Lane via upgrades to the BOAT 525 part of Elm Lane.

A3 M25 J10 to Painshill access:

- M25 J10 to Painshill
 - To provide access as presented in the SAN-02 option, with access to/from the San Domenico site and Long Orchard House and Farm to be via Seven Hills Road South.

A3 Painshill to M25 J10 access:

- Painshill to M25 J10
 - Further assessment of the impact of the two proposed options (PAIN-04 and PAIN-05) to be undertaken.
 - Further options developed following agreement with Painshill Park and English Heritage.

This Addendum therefore describes the further technical work and stakeholder discussions that have taken place since the SAR was submitted and focuses on drawing conclusions on access to Wisley Lane, Pond Farm and Painshill to M25 J10 affected properties.

2 Scheme components

2.1 Overview

This Addendum focuses only on those scheme components where further technical work and stakeholder engagement was required: access to/from Wisley Lane; access to Pond Farm; and access to properties along the A3 corridor from Painshill to M25 J10). It includes not only those options presented in the SAR, but also additional options based upon further stakeholder discussion, as are outlined below.

A3 Ockham to M25 J10 (including Wisley Lane) access:

- WIS-01 - Northern two-way link road between Ockham Junction and Wisley Lane running parallel to A3 mainline, combined with a bridleway bridge linking Wisley Lane and Elm Lane.
- WIS-01a – Alternative northern two-way link road between Ockham Junction and Wisley Lane running parallel to A3 mainline option with a retaining wall adjacent to RHS Wisley Gardens, combined with a bridleway bridge linking Wisley Lane and Elm Lane.
- WIS-10 - Southern two-way link road between Ockham Junction and Wisley Lane routed over the A3 carriageways running outside the Ancient Woodland, combined with bridleway links to the bridge.
- WIS-11 – Alternative southern two-way link road between Ockham Junction and Wisley Lane with a modified route over the A3 carriageways running outside the Ancient Woodland and the SPA, combined with bridleway links to the bridge.
- WIS-12 – RHS Gardens Wisley proposal for a direct access slip road from Wisley Lane to the A3 northbound. The proposal also includes a southern two-way link road with bridge over the A3 (similar to WIS-11) and south-facing slip roads at Ockham Junction.
- CAMP-02 - Two-way access road connecting Deers Farm Close to Birchmere Scout Campsite and Pond Farm, combined with an accommodation/bridleway green bridge to replace Cockrow bridge.
- CAMP-03 –Use existing access road to Birchmere Scout Campsite and Pond Farm, but routed over the A3 carriageway on an accommodation/bridleway green bridge to replace Cockrow bridge to a new connection with Old Lane.

A3 Painshill to M25 J10 access

- PAIN-04A - Service road running parallel to A3 southbound linking the Gas compound, New Farm, Heyswood Campsite and Court Close Farm with a bridge over the A3 linking to Redhill Road and/or A245 Byfleet Road, combined with bridleway links to the bridge.
- PAIN-04C – Alternative to PAIN-4A. Service road running parallel to A3 southbound linking the Gas compound, New Farm, Heyswood Campsite and Court Close Farm with a bridge over the A3 linking to Redhill Road and/or A245 Byfleet Road, combined with bridleway links to the bridge.
- PAIN-05D - Service road running parallel to A3 southbound linking the Gas compound, New Farm, Heyswood Campsite and Court Close Farm via Painshill to an alternative entry to A245 roundabout on A245

Portsmouth Road, combined with a separate brideway bridge across the A3 carriageways close to Junction 10.

- PAIN-10 – Alternative to PAIN 04A or 04C. Service road running parallel to A3 southbound linking the Gas compound, New Farm, Heyswood Campsite and Court Close Farm with a bridge over the A3 to San Domenico site, Seven Hills Road south and A245 Byfleet Road, combined with a separate brideway bridge across the A3 carriageways close to Junction 10.

2.2 A3 Ockham to M25 J10 (including Wisley Lane) access

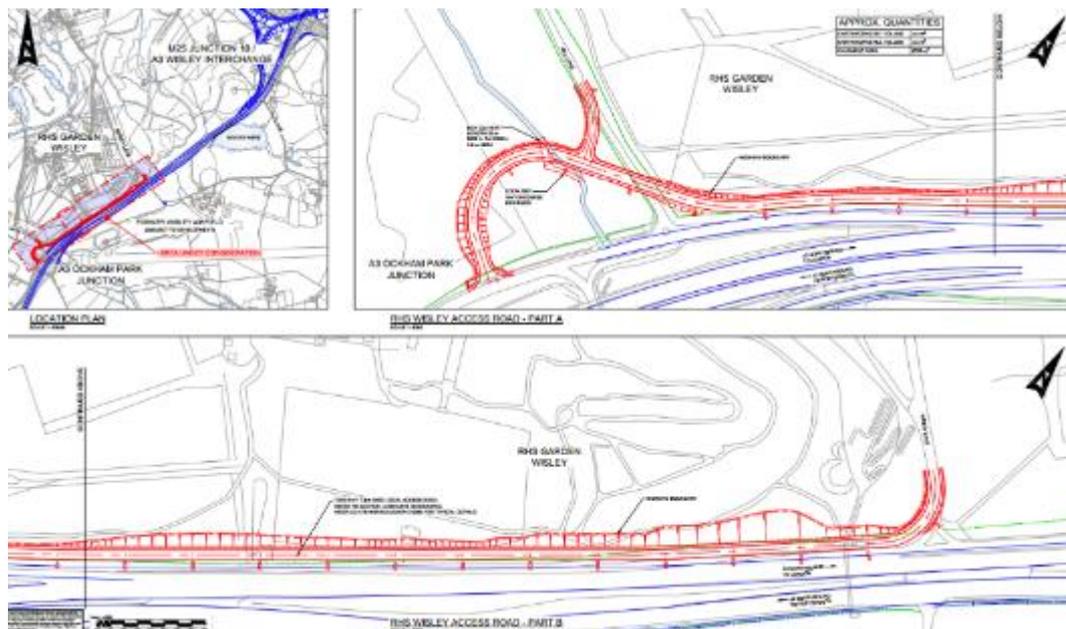
Wisley Lane links the A3 northbound carriageway with the villages of Pyrford Lock and Wisley and provides an alternative route to Pyrford and West Byfleet, as well as the busy public car park at RHS Garden Wisley. The existing access/egress to Wisley Lane via the A3 is a segregated parallel separated at-grade 'T' junction. The two options brought forward for further development WIS-01 and WIS-10 have been augmented by Option WIS-01A, WIS-11 and WIS-12.

2.2.1 WIS-01- Northern Two-way Link Road

This option entails a two-way link road running between Ockham Junction and Wisley Lane, parallel to the A3 northbound carriageway. This would reduce the existing conflict on the A3 due to weaving, diverging, and merging traffic movements for Wisley Lane (both inbound and outbound). It provides safer entry to the A3 for merging traffic from Wisley Lane using the junction on-slip and lane gain, as well as safer access to Wisley Lane traffic directly from Ockham Junction, without having to merge onto the A3 carriageway. This option would require anti-dazzle screening between the A3 and this service road and that could be provided in the form of noise screen fencing.

This would require a strip of land to be taken from RHS Wisley and would remove all of the tree belt along the south edge of the garden, including several large specimen trees.

Figure 2-1 WIS-01- Northern Two-way Link Road



Refer to Drg. No. HE551522-ATK-HSR-WIS01-DR-D-0001

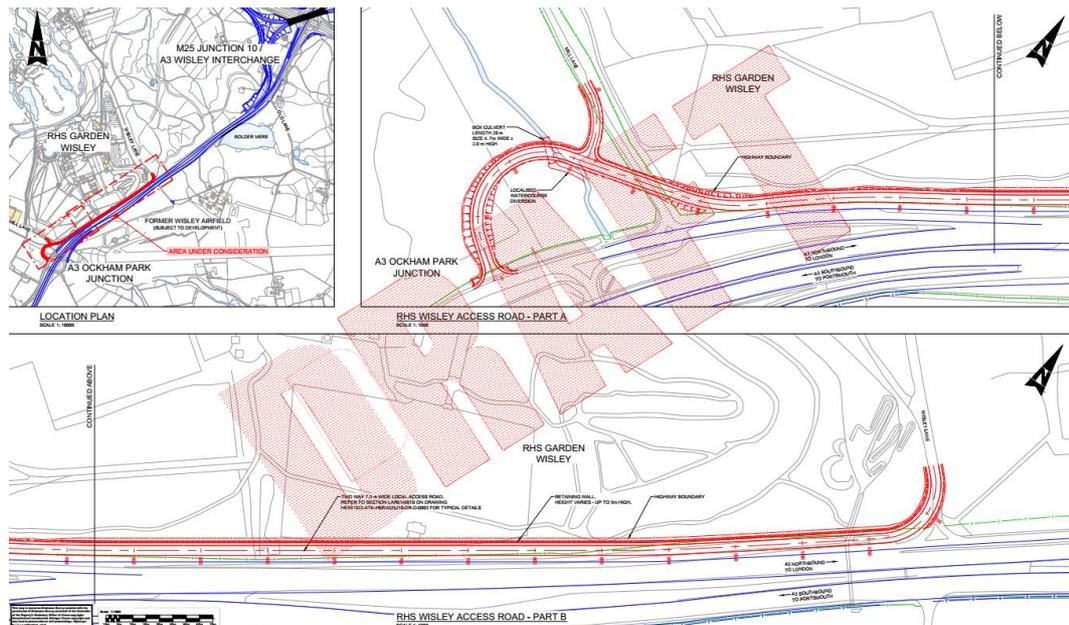
Although not shown on the drawing, this option would also entail provision of a new brideway bridge over the widened A3 carriageways and the link road, to provide access for non-motorised users (NMUs) between Wisley Lane and Elm Lane, in place of the existing footpath bridge. This would cross the A3 just south of the end of Wisley Lane and would require some loss of trees from the planted area beside the corner of Wisley Garden and some loss of registered common land to either side of Elm Lane.

2.2.2 WIS-01A – Northern Two-way Link Road alternative to WIS-01

This option entails a two-way link road running between Ockham Junction and Wisley Lane parallel to the A3 northbound carriageway, similar to Option WIS-01, with a retaining wall up to 5m high added through the RHS Wisley land to reduce land take in the grade II* Registered Park and Garden.

This option would provide the same traffic and safety benefits as Option WIS-01, but would allow much of the tree screen to be left in place along the south edge of the garden. The extent of tree loss would be partly determined by the construction method used for the retaining walls. This option would require anti-dazzle screening between the A3 and this service road and that could be provided in the form of noise screen fencing. This option would have a higher cost than WIS-01 due to the provision of a retaining wall.

Figure 2-2 WIS-01A- Northern Two-way Link Road



Refer to Drg. No. HE551522-ATK-HSR-WIS01-DR-D-0002

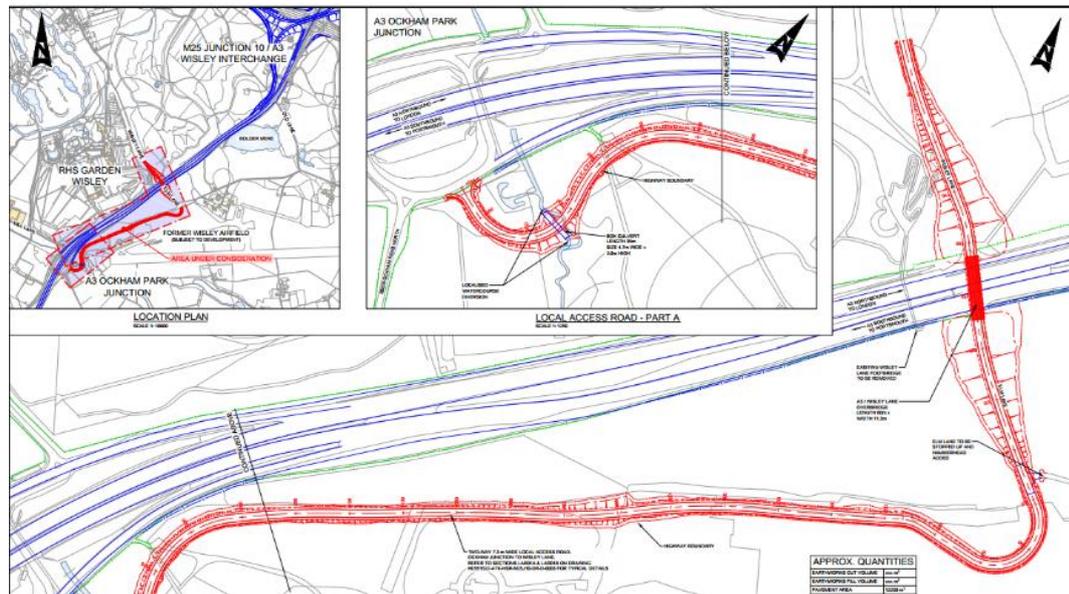
2.2.3 WIS-10 - Southern Two-way Link Road

This option entails an overbridge from Wisley Lane over to the southeast side of the A3 and a two-way link road broadly parallel to the A3 southbound carriageway to Ockham Junction. It provides safer entry to the A3 for merging traffic from Wisley Lane using the junction on-slip and lane gain, as well as safer access to Wisley Lane traffic directly from Ockham Junction, without having to merge onto the A3 carriageway.

The route would be outside the Ancient Woodland skirting the border of the former Wisley Airfield site, but would require some of the registered common land to either side of Elm Lane. Vehicular access to Elm Lane would be

stopped up, but there would be a brideway connection to the new bridge allowing access across the A3 for pedestrians, cyclists and equestrians.

Figure 2-3 WIS-10- Southern Two-way Link Road



Refer to Drg. No HE551522-ATK-HSR-WIS10-DR-D-0001

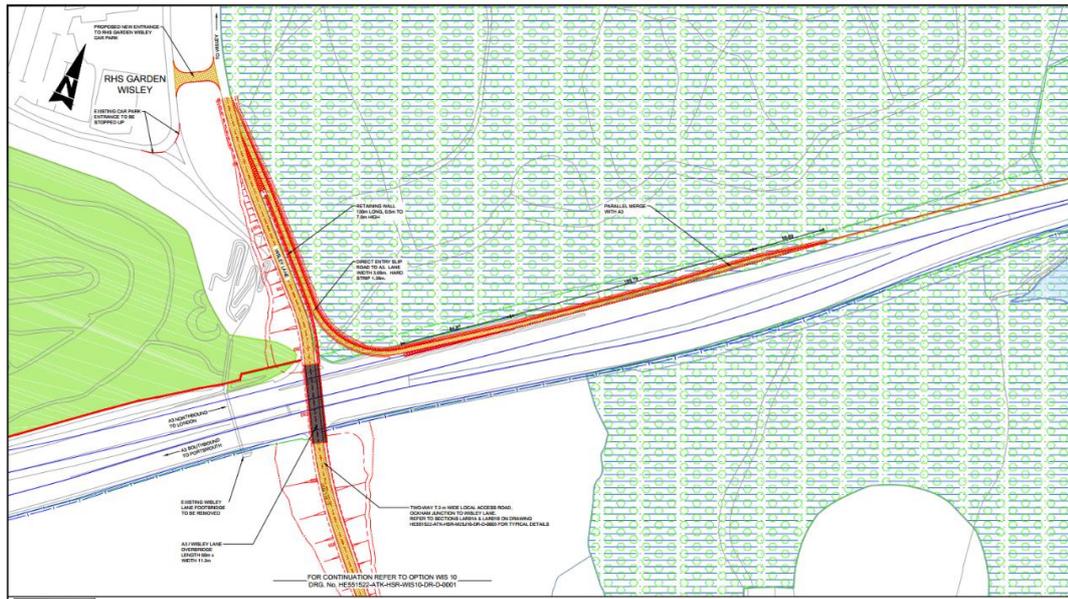
2.2.4 WIS-11 - Southern Two-way Link Road

This option entails an overbridge from Wisley Lane to the southeast side of the A3 with a two-way link road broadly parallel to the A3 southbound carriageway, similar to WIS-10, but with the overbridge moved southwards to avoid land take in the Special Protection Area (SPA) and allow Wisley Lane to remain open during construction, without the need for a temporary diversion. Again, there would be a brideway connection to the new bridge allowing access across the A3 for pedestrians, cyclists and equestrians.

The link road has been aligned to avoid the existing planning consent for an In-Vessel Composting (IVC) facility proposed in the Wisley Airfield site; however, this could be amended to reduce the loss of common land by using a tighter radius for the bend and running along the edge of the IVC site.

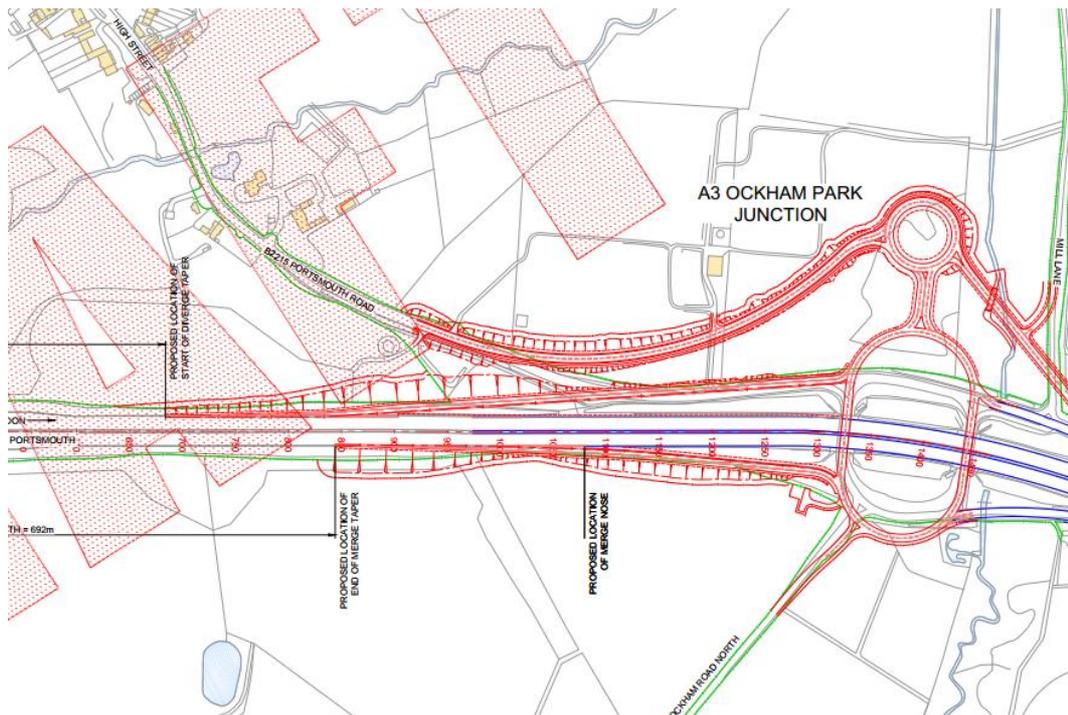
The route is outside the Ancient Woodland skirting the border of the former Wisley Airfield site.

Figure 2-5 WIS-12 – RHS Wisley Proposal



Refer to Drg. No HE551522-ATK-HSR-WIS12-DR-D-0001

Figure 2-6 OCK-04 – RHS Wisley Proposal



Refer to Drg. No HE551522-ATK-HSR-OCK-04-DR-D-0002

2.2.6 Access road to Pond Farm and Birchmere scout camp site from Wisley Lane (CAMP-02)

The existing access/egress road to Pond Farm, Hut Hill Cottage and Birchmere scout camp site is via a left in/left out junction on the northbound A3/M25 J10 slip road.

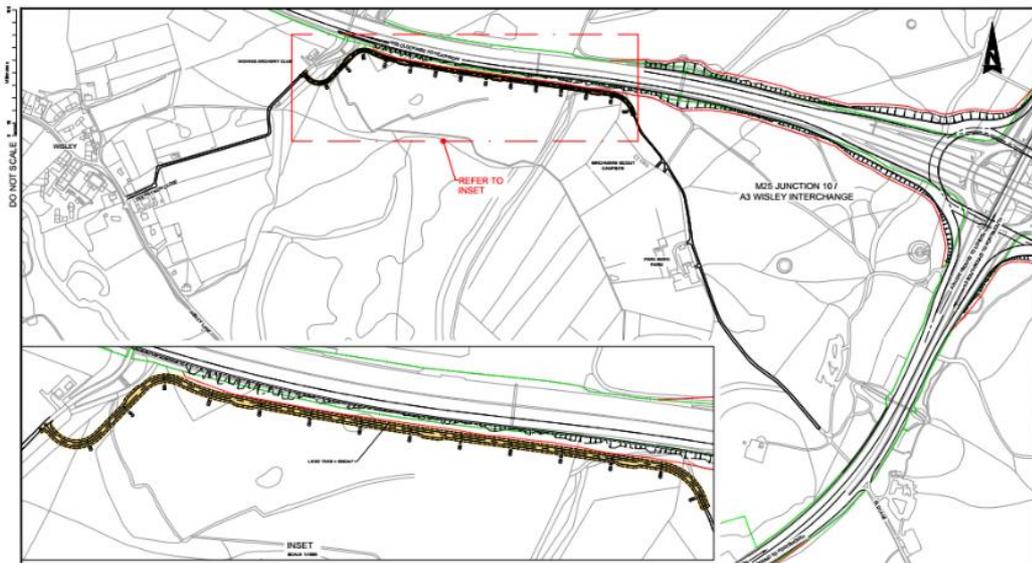
The existing access road on the M25 J10 slip road would be stopped up. This option entails a two-way access road connecting Hut Hill Cottage, Pond Farm

and Birchmere scout camp to Wisley Lane and Deer Farm Close via Wisley Common. The two-way access road is proposed to be approximately 750m long and 4.2m wide with passing places.

Although not shown on the drawing, this option would be combined with an accommodation access and bridleway overbridge replacement for Cockrow bridge, which is proposed to be a green bridge.

Whilst this would result in a safer access for Hut Hill Cottage, Pond Farm and Birchmere scout camp to and from the A3 via Wisley Lane and Deer Farm Close; discussions with stakeholders have revealed that the RHS Wisley composting site requires periodic closure of a section of this proposed route during compost turning. This effectively renders this option infeasible.

Figure 2-6 Access road to Pond Farm, Hut Hill Cottage and Birchmere Scout campsite from Wisley Lane



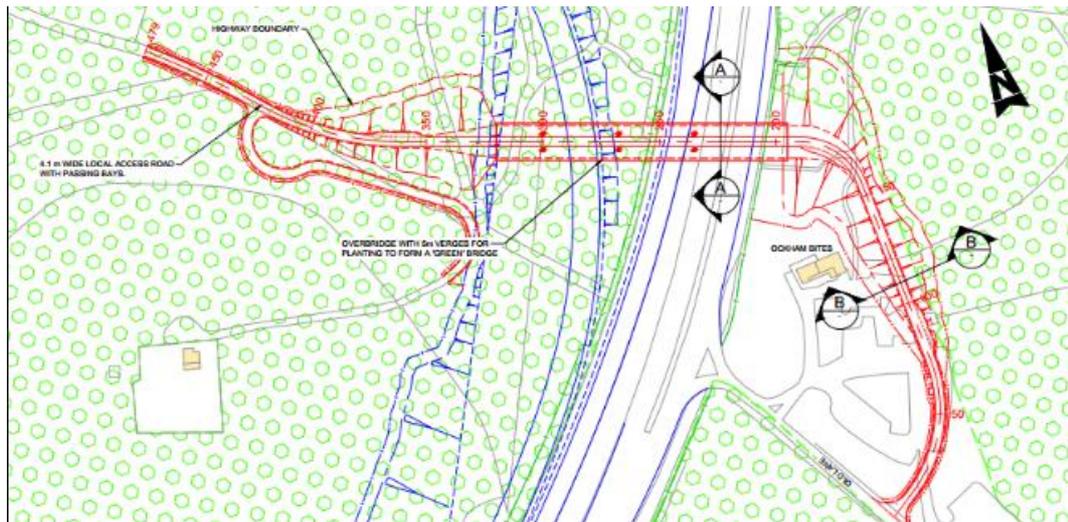
Refer to Drg. No. HE551522-ATK-HSR-WCAMP02-DR-D-0001 in Appendix B

2.2.7 Access road to Pond Farm and Birchmere scout camp site from Old Lane via a green bridge over the A3 (CAMP-03)

The existing exit from the M25 J10 slip road would be stopped up. This option entails use of the existing two-way access road connecting Hut Hill Cottage, Pond Farm and Birchmere Scout Camp by providing a link to an overbridge spanning the A3 and connecting to Old Lane. The access road embankment is located partially within Ockham Bites Café car park to reduce SPA land take; replacement parking bays can be provided elsewhere around the parking area. The access road overbridge is proposed to be a Green Bridge and would also provide a bridleway as replacement for Cockrow bridge. Note that the drawing shows a design that is suitable for Junction Option 9; for Junction Option 14, the bridge deck would be about half the length.

This would result in a safer access for Hut Hill Cottage, Pond Farm and the Scout Camp to and from the A3 via Old Lane.

Figure 2-7 Access road to Pond Farm, Hut Hill Cottage & Birchmere scout campsite from Old Lane



Refer to Drg. No. HE551522-ATK-HSR-CAMP03-DR-D-0001 in Appendix B

2.3 A3 Painshill to M25 J10 access

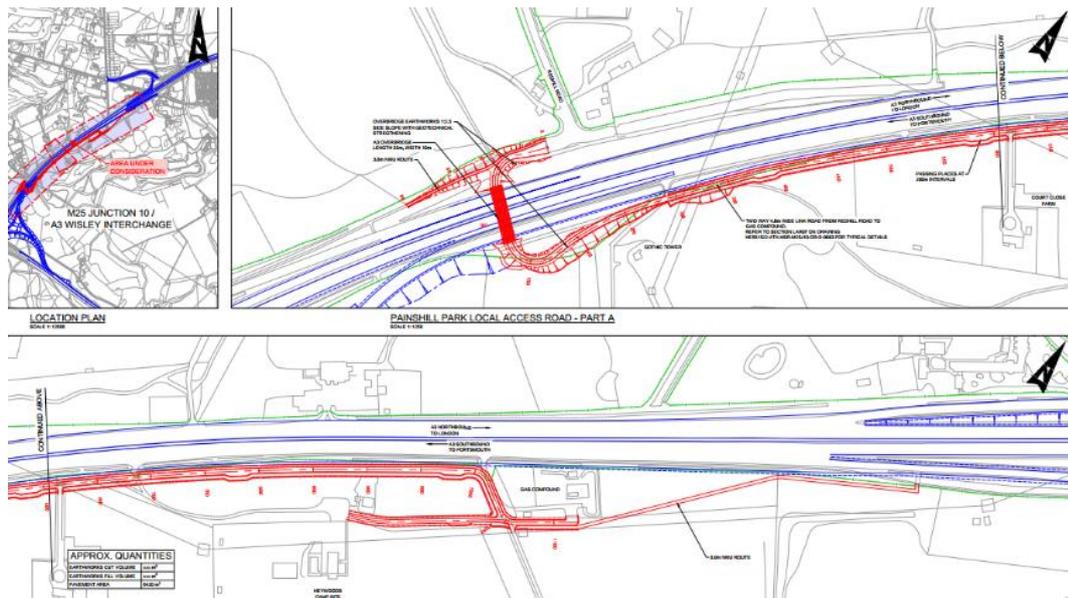
The existing direct access from the A3 southbound carriageway to Court Close Farm, Heyswood Campsite, New Farm and the gas governor compound would be stopped-up. Their access would be rerouted via a new service road adjacent to the A3 southbound carriageway, with a connection to the A245 Byfleet Road or A245 Portsmouth Road. However, an access for emergency vehicles to Painshill Park direct from the A3 may be retained.

This new access would be combined with the proposed access road adjacent to the northbound A3 carriageway, SAN-02, which provides access to the properties between Redhill Road and Seven Hills Road south.

2.3.1 PAIN-04A

This option entails a new side road that would run from the gas governor compound, New Farm and Heyswood Campsite south-westwards adjacent to the A3 southbound carriageway. The route would then pass over the A3 carriageways via an overbridge to connect to the A245 Byfleet Road via Redhill Road or Seven Hills Road south.

Figure 2-8 PAIN-04A - Bridge near Redhill Road



Refer to Drg. No. HE551522-ATK-HSR-PAIN4A-DR-D-0001 in Appendix B

2.3.2 PAIN-04C

This option is similar to Option Pain-04A, but the new access road would pass over the A3 carriageways via an overbridge further south than option 4A and connect to the A245 Byfleet Road (via Redhill Road or Seven Hills Road south). This alignment has a lower profile adjacent to the Gothic tower when compared to Option PAIN-04A. The alignment shown on the drawing is suitable for use with Junction Option 9; for Junction Option 14, the radius of the route across the A3 would be reduced, allowing the alignment to be further away from the Gothic tower, with a lower retaining wall.

Figure 2-9 PAIN-04C Bridge south of Redhill Road



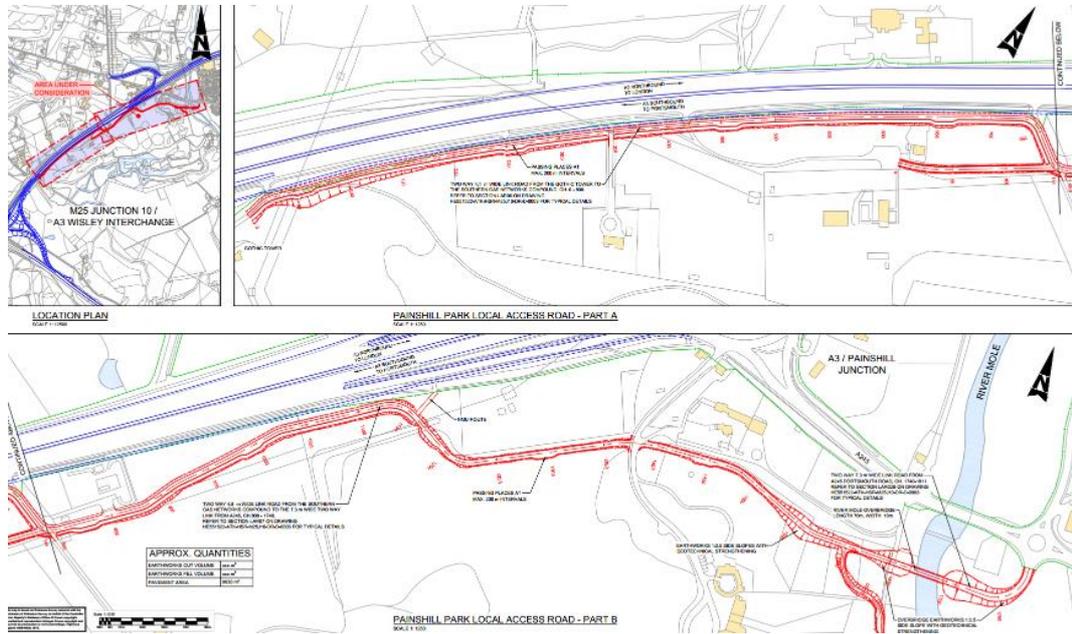
Refer to Drg. No HE551522-ATK-HSR-PAIN4C-DR-D-0001 in Appendix B

2.3.3 PAIN-05D

Access to Court Close Farm, Heyswood Campsite, New Farm and the gas governor compound would be provided via a new access road adjacent to the A3 southbound carriageway. The route would then pass to the rear of the Gas compound and skirt the outer boundary of Painshill Park, before passing

alongside the Painshill residential properties, continuing parallel to the A245 Portsmouth Road and connecting to the existing roundabout on the A245. The access road would be 4.2m to 4.8m wide with passing bays and would span the River Mole with a new bridge parallel to the existing bridge. It would also provide a new delivery access to Painshill Park and Garden.

Figure 2-1 PAIN-05D - Access road to Painshill

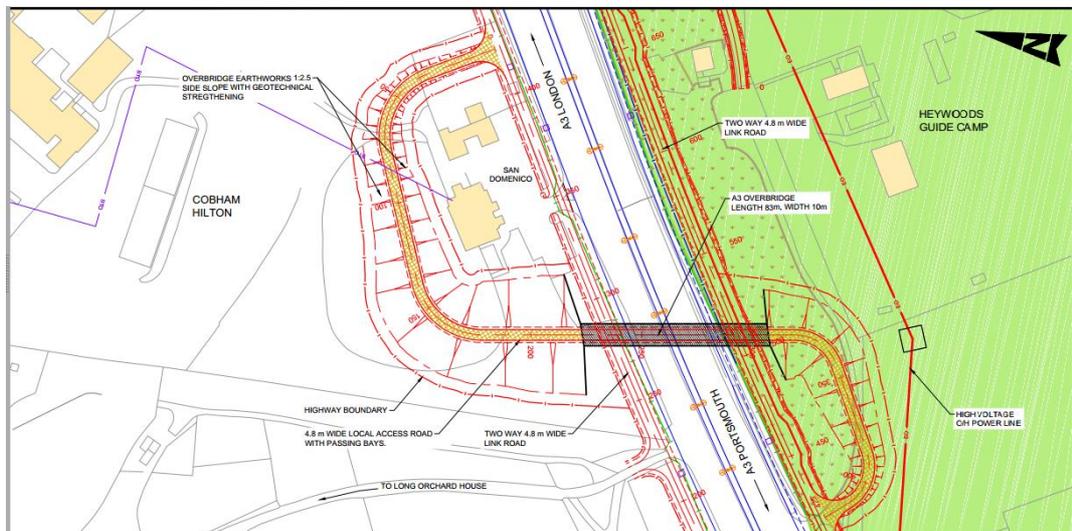


Refer to Drg. No. HE551522-ATK-HSR-PAIN05D-DR-D-0001 in Appendix B

2.3.4 PAIN-10

The local access adjacent to the A3 southbound would run from the gas governor compound, New Farm, Heyswood Campsite and Court Close Farm. The route would pass over the A3 carriageways via an overbridge to the San Domenico EuroGarages site and connect to the link road along the A3 northbound carriageway (SAN-02), Seven Hills Road south and to the A245 Byfleet Road.

Figure 2-11 PAIN-10 – Bridge at San Domenico site



Refer to Drg. No HE551522-ATK-HSR-PAIN4C-DR-D-0001 in Appendix B

2.3.5 Potential compulsory purchase of affected properties

Should environmental issues and cost of options result in no clear or obvious choice for vehicular access to properties along the southbound side of the A3 between Painshill and M25 J10, an option to compulsorily purchase the land could be considered. Whilst this would have significant impact for those affected, it could provide potential Replacement Land as required by the scheme and is, therefore, a potential new option for this component.

However, this option would only be practicable if the land acquired could be considered as suitable for inclusion within the extent of Painshill Park land as managed by Elmbridge BC, as there would be no other means of vehicular access into this area. The land is within the defined extent of the grade 1 Registered Park and Garden. If some or all of this land would to be used as Replacement Land, then public access would need to be maintained, rather than it becoming part of the enclosed Painshill Park.

There would still be a need to provide a means of maintenance access to the gas governor station from Painshill Park, to avoid the need to construct a replacement gas governor station on the opposite side of the A3.

2.4 Scheme options and costs

The information presented above has focused upon components rather than combinations of components that would comprise the M25 J10 / A3 Wisley Interchange schemes. The scheme costs have been provided by Highways England Commercial Team at a scheme level. From this information, the following can be implied about the scheme components:

In relation to A3 Ockham to M25 J10 (including Wisley Lane) access:

- Of the options adjacent to the northbound carriageway, WIS01A is approximately £1.558m more expensive than WIS01.
- Of the options adjacent to the southbound carriageway, WIS10 is approximately £0.5m more expensive than WIS11.
- Comparing the alternatives on opposite sides of the carriageway, WIS11 (which includes the cost a bridleway crossing over the A3 that would not be required) is approximately £1.8m more expensive than WIS01A.
- The proposal put forward by RHS Wisley is at least £10m more expensive than other WIS options and the Ockham slips represents approximately £8m of that difference.
- CAMP03 is approximately £6.6m more expensive than CAMP02 (schemes 13-5) although the replacement of Cockrow NMU bridge is double counted in CAMP03; which would make the costs much closer.

In relation to A3 Painshill to M25 J10 access

- PAIN10 is marginally cheaper than PAIN5d but this ignores the need for an NMU crossing of the A3 between M25 J10 and Redhill Road.
- PAIN10 is approximately £1.362m more expensive than PAIN04 (schemes 11-5) but both schemes ignore the need for an NMU crossing of the A3 between M25 J10 and Redhill Road.

3 Traffic and safety impacts

3.1 A3 Ockham to M25 J10 (including Wisley Lane) access

3.1.1 Impact at Ockham

WIS-01 (and WIS-01A) result in the closure of the existing Wisley Lane access along the A3 and a new link into the western side of the Ockham Interchange. Junction modelling software (the ARCADY module of JUNCTIONS9) was used to test the impact of the new link using our core Stage 2 assessment of Option 14. All arms of the junction were shown to operate well within the theoretical capacity (less than 85%) in all peak periods and in all forecasts years (2022 and 2037). Average delay per vehicle was shown to increase marginally above a *Without Intervention* scenario.

WIS-10 (and WIS-11) also close the existing Wisley Lane access onto the A3 but provide a new link into the eastern side of the Ockham Interchange. The core Option 14 scenario was again tested in ARCADY to understand the performance of the Ockham interchange. Whilst in most peak hours, the performance at the junction is like WIS-01, in the PM peak (in 2037) the new link is operating over the recommended threshold capacity (between 85% and 100%). This is likely due to the inclusion of the Wisley Airfield development traffic in the Stage 2 modelling. It should be noted that events days have not been tested and they could further stress the junction.

WIS-12 combines WIS-10 with a modified left-out exit from Wisley Lane onto the widened A3. As this side road option has not been explicitly modelled, it is not clear how this would affect performance of the network. The additional merge point onto the A3 is considered likely to have a negative impact on both safety and operation in comparison to the other WIS side road options although it would reduce pressure on Ockham interchange.

The accident analysis undertaken for the M25 J10 scheme showed high accident rates around the direct access of Wisley Lane onto the A3. During the period of analysis (2010-2015), six accidents have been identified as being directly related to the direct access, with a number of collisions occurring as vehicles are merging onto the A3 or slowing down/stopping on the slips roads. This scheme would result in traffic having to merge/weave across an extra lane; thus increasing the collision risk along this busy and short section before J10.

Providing a link into the Ockham Interchange (from east or west) would introduce a new conflict point for traffic on the interchange but would replace the direct access to the A3. It is considered that with the correct mitigation in terms of design, the Ockham interchange route would provide an improved level of safety benefit over the existing situation.

3.1.2 Safety implications of Wisley Lane

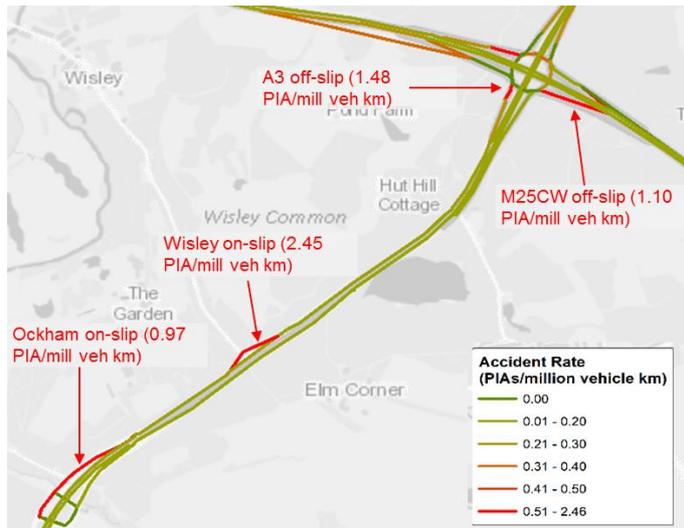
Wisley Lane links the A3 northbound carriageway with the villages of Pyrford Lock and Wisley and provides an alternative route to Pyrford and West Byfleet, as well as access to RHS Wisley.

An analysis of accidents along this stretch of the A3 shows that over a six-year period of collision data (2010 to 2015) on the northbound A3 between the Ockham on-slip and A3 off-slip, there were 29 accidents reported in the period:

- Six collisions have occurred at the Wisley Lane and layby access to the A3; five of which involved leaving the Wisley Lane layby.

- The collisions at the Wisley Lane and layby access to the A3 are a result of conflicting movements when merging/weaving or multiple vehicles attempting to leave the layby.
- Of the remaining 23 accidents on the northbound section of the A3, the two predominant causes are weaving or rear end shunts.
- The Wisley on-slip has the highest accident rate (collisions per million vehicle km) on the studied network at a rate of 2.45 PIA/m veh km (Figure 7).

Figure 3-3 Accident rates around Wisley Lane



Following consideration of the design and an assessment in traffic and safety terms Atkins does not consider WIS12 as a desirable option. Compared to other proposals this option has a weaving/merging section between Wisley Lane and M25 J10 which would involve four lanes of traffic with this scheme rather than the three lanes at present. This weaving length is on the cusp of meeting the Dual All-Purpose road standard; but this is for a single lane diverge not two lane as would be the case with this scheme.

Whilst other proposals require all traffic to access and egress Wisley Lane from Ockham Interchange, requiring a minor detour for most movements compared to WIS12; it would do so via a dedicated route that provides a canopy level approach to Wisley Lane. The marginal increase in journey distance is considered to be a negligible inconvenience and the direct access to Wisley Lane from Ockham Interchange with improved access to the A3 is an overall improvement on the existing condition.

It is recognised that traffic travelling northbound on the A3 would incur a larger diversion of approximately 6km before entering Wisley Lane. WIS12 also includes south facing slips at Ockham interchange to address this issue. Analysis of an Automatic Number Plate Recognition survey undertaken by Atkins reveals that only 20% of users of Wisley Lane on a typical day arrive and depart via the A3 to/from the Guildford direction. Journey times would be approximately four minutes longer and at this stage of analysis it is not evident that there are sufficient benefits to these road users to justify extending the scope of this project to include south facing slips for this reason alone.

3.2 A3 Painshill to M25 J10 access

There is expected to be a minimal level of traffic carried on any of the side road options in the Painshill section of the A3. Therefore, it is unlikely that there would be a discernible difference in how any of the four side road options performs with respect to traffic.

4 Environmental Appraisal

The options in the EAR were considered under the topics and methods set out in the guidance of DMRB Vol 11 Part III, as amended by later updates and advice notes. Some of the DMRB topics would have little or no bearing on the choice of side road option for this scheme and are scoped out of this report. Thus, the topics considered herein are:

- Air quality
- Water Environment
- Nature Conservation
- Noise
- Heritage
- Landscape
- People and Communities.

The remaining options are compared with each other under the above topic headings.

4.1 A3 Ockham to M25 J10 (including Wisley Lane) access

The environmental assessment for the four Wisley Lane options is shown in Table 3.1. The findings are presented in tabular format, for ease of comparison between options. Note that for WIS-12, Ockham south facing slips are excluded from the assessment to enable an easier comparison of like options. Ockham south facing slips are considered in the following section.

In terms of ranking the options based on environmental impacts:

- WIS-11 – would be preferred due to avoidance of impact on SPA/SSSI and reduction of impacts on Wisley Gardens
- WIS-01A – would follow due to its reduction of impacts on Wisley Gardens
- WIS-01 – would follow due to the loss of tree screen along south edge of grade II* registered Park & Garden and impact on views from within Wisley Gardens
- WIS-12 and WIS10 – would be least preferred due to their impact on SPA/SSSI

From the above appraisal, the preferred options from an environmental standpoint is WIS-11, which could be further refined to reduce loss of common land and woodland habitat.

Table 4-1 A3 Ockham to M25 J10 (including Wisley Lane) access environmental appraisal

Topic	Option WIS-01	Option WIS-01A	Option WIS-10	Option WIS-11	Option WIS-12	Option CAMP-03
Air Quality	No significant effects on air quality as no human health receptors likely to be affected by this option.	As per Option WIS-01	As per Option WIS-01	As per Option WIS-01.	As per Option WIS-01 but with potential for increased nitrogen deposition within SPA/SSSI	No significant effects on air quality
Water Environment	Culvert or structure required across Stamford Brook with low significance effects on the watercourse. Some loss of Zone 2 floodplain, which may require compensation capacity to be provided. Potential effects on principal and secondary aquifers if need deep foundations.	As per Option WIS-01, with additional foundations for retaining wall.	As per Option WIS-01 but with a slightly longer culvert or structure. Floodplain loss would be mostly Zone 3.	As per WIS-01 but with a slightly longer culvert or structure. Floodplain loss would be mostly Zone 3.	As per WIS-01 but with a slightly longer culvert or structure. Floodplain loss would be mostly Zone 3.	No significant effects on water environment.
Nature Conservation	Insignificant effect on SPA/SSSI. Potential impacts on protected species. Loss of woodland Habitat of Principal Importance (HPI) from within SNCI due to brideway bridge. Loss of planted woodland habitat along edge of garden.	As Option WIS-01, but with reduced loss of planted woodland habitat within garden.	Land loss from corner of SPA/SSSI for overbridge earthworks and, compared to WIS-01, increased potential for construction disturbance on SPA/SSSI. Increased loss of woodland HPI from within SNCI, plus loss of pasture HPI from within adjacent SNCI. New local	Insignificant effect on SPA/SSSI. Otherwise similar to Option WIS-10, but with slightly increased loss from woodland HPI within SNCI.	Increased effect on SPA/SSSI due to incursion of left-out lane into the land designated as SPA/SSSI. Otherwise similar to WIS11.	Some losses of SPA and SSSI associated with approach embankments

Topic	Option WIS-01	Option WIS-01A	Option WIS-10	Option WIS-11	Option WIS-12	Option CAMP-03
			road runs between woodland SNCI and airfield SNCI. Slightly increased potential to affect protected species.			
Noise	Potential construction noise impact on users of Wisley Gardens, Wisley Lane and Elm Lane, but set against context of high traffic noise levels along A3.	As Option WIS-01, but with some potential for reflection of traffic noise from face of retaining wall onto common land on opposite side of A3.	Potential construction noise impact on users of Wisley Lane and Elm Lane and on corner only of Wisley Gardens.	As Option WIS-10.	As Option WIS-11.	No significant effect on noise
Heritage	Loss of about 2.5ha from Grade II* Registered Park & Garden at RHS Wisley, compounded by the loss of tree screening. Significant adverse effect. Limited scope for effects on buried archaeology. Some loss of land from Wisley Common and change to historic character due to new bridleway bridge.	Similar to Option WIS-01, but with loss of about 1.5ha and reduced loss of tree screening.	Small loss of land from Grade II* Registered Park & Garden at RHS Wisley and limited loss of tree screening. Non-significant adverse effect. Limited scope for effects on buried archaeology.	Similar to Option WIS-10.	As Option WIS-11.	No effect on known heritage assets. Potential effects on unknown buried archaeology.
Landscape and Visual	Complete loss of tree screen along south edge of grade II* Registered Park & Garden, including	Similar to Option WIS-01, but with some of tree screen kept in place. Loss of about 1.5 ha of	Small loss of land and tree planting from corner of Wisley Gardens close to Wisley Lane, with	Similar to Option WIS-10, but with loss of woodland from Wisley Common to south of A3.	Would require structures to be built with retaining walls and thus less able to be landscaped.	Impacts would be similar to existing Cockrow Bridge. New approach ramps would

Topic	Option WIS-01	Option WIS-01A	Option WIS-10	Option WIS-11	Option WIS-12	Option CAMP-03
	several important specimen trees, leaving the widened A3 open to view. Loss of about 2.5 ha of the garden. Adverse impact on views from within Wisley Gardens, particularly the viewpoint on Battleston Hill. Loss of woodland from Wisley Common south of A3, due to bridleway bridge.	the garden. Reduced adverse impact on some views from within Wisley Gardens.	limited visual impacts. Loss of woodland from Wisley common to north and south of A3.	Loss from woodland can be reduced by using tighter radius bend and having more of route within airfield/IVC site.	Otherwise impacts similar to Option WIS-11.	require some losses of existing vegetation and visual impact on Ockham Bites café and users of the access land.
People and Communities	Some loss of common land to west of Elm Lane for provision of bridleway bridge. Improved NMU connectivity due to bridleway bridge between Wisley Lane and Elm Lane instead of existing pedestrian bridge. Temporary closure of pedestrian access across A3 may be required during construction. Safer access to Wisley village, but new length of Wisley Lane is adjacent to A3.	As Option WIS-01, but with more urban character to new length of Wisley Lane due to retaining walls.	Similar to Option WIS-01, but with increased loss of common land to west and east of Elm Lane for provision of new road bridge and bridleway link. Impact on consented site of IVC and loss of development land at Wisley Airfield, but with potential mitigation through coordination with the developers of this site. New length of Wisley Lane is set away from A3.	As Option WIS-10, but loss of common land is to west of Elm Lane and slightly greater impact on consented site of IVC. Loss from common land can be reduced by using tighter radius bend and having more of route within airfield/IVC site.	As Option WIS-11 but with loss of common land to west of A3 north of Wisley Lane	Some losses/alteration of common/access land. Impact on parking at Ockham Bites café.

4.2 Ockham south facing slip roads

At Ockham there is currently only one option (OCK 4) for south facing slip roads which is included in the WIS-12 proposal put forward by RHS Wisley. The effects are noted in the table below.

Table 4-2 Ockham south facing slips assessment

Topic	South Facing Slip Roads at Ockham Interchange
Air Quality	No significant air quality effects anticipated given that there are not any receptors that would be likely to be affected.
Water Quality	OCK 4 would cross the Stamford Brook in culvert with low significance effects on the watercourse. There would be potential significant effects on the floodplain which would require flood compensation land. There is also the potential for significant effects on principal and secondary aquifers associated with deep foundations
Nature Conservation	There is the potential for a low number of protected species to occur within the footprint of the slip roads but no effect on designated sites. It would however require the loss of 0.13ha of ancient woodland and around 0.25 ha each of deciduous woodland and wood pasture and parkland HPI
Noise	Likely to lead to an increase in noise levels at noise sensitive receptors at Ripley as the road alignment would bring traffic closer.
Heritage	Significant effects on designated heritage assets unlikely, although there is the potential for some impacts on the setting of a number of Grade II Listed Buildings on the eastern side of Ripley Conservation Area. Existing records indicate presence of archaeological remains so high potential for further finds.
Landscape and Visual	The area for the slip roads at the Ockham junction is planted with typical roadside trees that would be lost with the proposal but which would be in keeping with the road corridor and have limited additional landscape impact. A realigned Portsmouth Road and roundabout would be in an area of what appears to be regenerating scrub and scattered trees so the proposals would extend the highway corridor further into this landscape. There are few visual receptors nearby so visual impacts may be limited. The Ockham Interchange is located entirely within the Green Belt and the addition of slip roads would result in the loss of 6ha from the Green Belt.
People and Communities	No impacts on common land or access land are anticipated and there are no rights of way affected. No public open space is a
Habitat of Principal Importance	The scheme would result in the loss of approximately 0.26ha of deciduous woodland Habitat of Principal Importance, together with approximately 0.24ha of wood pasture and parkland Habitat of Principal Importance, located mostly on the west side of the A3. To avoid a significant policy accordence risk it would be necessary to demonstrate that the need for and benefits of the works would outweigh this harm.
Flood Risk Zone 3	Approximately 1.3ha of the works would be within flood zone 2 and a further 0.15ha would be within flood zone 3. To avoid significant policy accordence risks it would be necessary to demonstrate through a flood risk assessment that the works would not increase the risk of flooding and that the design is flood resilient and resistant to the satisfaction of the Environment Agency.

4.3 A3 Painshill to M25 J10 access

The environmental assessment for the four A3 Painshill to M25 J10 options is shown in Table 4-3. The findings are presented in tabular format, for ease of comparison between options.

In terms of ranking the options based on environmental impacts:

- Option PAIN-04C would be the preferred choice as it provides a route for the affected properties and a bridge for access and NMU requirements and having reduced impacts on setting of Gothic tower (although Historic England need to see revised and enhanced design).
- Option PAIN-04A would be the next choice as it too provides a route for the affected properties and a bridge for access and NMU requirements (although Historic England need to see revised and enhanced design).
- Option PAIN-10 would also need an NMU bridge near J10 and result in additional loss from ancient woodland compared to the PAIN-04 options although this would receive fewer comments from Historic England).
- Option PAIN-05 would be least favoured due to additional impacts within Painshill Park, on settings of listed buildings and on riverside area adjacent to Cobham, as well as need for NMU bridge near J10

From the above appraisal, the preferred option from an environmental standpoint is PAIN-04C, although further work is required on the design to demonstrate the impacts from the Gothic Tower in Painshill Park. On this basis, PAIN-10 should also be consider a viable alternative but recognising that an NMU crossing near the Gothic Tower is still required.

Table 4-3 A3 Painshill to M25 J10 access environmental appraisal

Topic	Option PAIN-04A	Option PAIN-04C	Option PAIN-05	Option PAIN-10
Air Quality	No significant air quality issues anticipated, given that traffic flows would be below any threshold for assessment.	As Option PAIN-04A	As Option PAIN-04A	As Option PAIN-04A
Water Environment	No significant WFD or water quality issues identified provided appropriate mitigation is included.	As Option PAIN-04A	As Option PAIN-04A	As Option PAIN-04A.
Nature Conservation	Potential for protected species within footprint considered unlikely. No impact on SPA but minor impact on SSSI for provision of bridleway links to bridge. Small losses of habitat from Ancient Woodland, Deciduous Woodland HPI, Wood pasture and Parkland HPI and Local Nature Reserve.	As Option PAIN-04A, with minor changes in footprint.	Increased potential for protected species within larger footprint, due to works for additional bridge across River Mole. Additional losses from riverine habitats.	Increased potential for protected species within larger footprint, due to works for additional bridge across A3. Increased loss from Ancient Woodland.
Noise	Very low traffic flows, therefore no significant traffic noise effects on human receptors. Some construction noise impacts on nearby properties and users of the open spaces and the campsite, set against context of A3 traffic noise.	As Option PAIN-04A	Increased potential for construction noise impacts, due to works for additional bridge across River Mole close to residential properties in Cobham and in Painshill Park, which are less affected by A3 traffic noise.	Increased potential for construction noise impacts, due to works for additional bridge across A3. San Domenico site is within a Noise Important Area but this is not relevant as the property would be demolished.
Heritage	Increased scheme land take from edge of Painshill Park, with adverse impact on Grade I Registered Park & Garden, but limited effect on rest of park. Adverse effects on setting of Grade II* listed Gothic tower, due loss of trees opening up views to the widened A3.	Similar to Option PAIN-04A, but with reduced effect on setting of Gothic Tower, as less tree loss and bridge further away (and still beyond sign gantry). Bridge closer to hengiform monument south	Substantially increased impact on grade I Registered Park & Garden and on settings of listed buildings, as new access track runs past houses within Painshill Park; but locally reduced impact beside Gothic	Increased scheme footprint within defined extent of grade I Registered Park & Garden (but not beside Gothic tower and not within park area accessible to the public), due to works for additional bridge across A3.

Topic	Option PAIN-04A	Option PAIN-04C	Option PAIN-05	Option PAIN-10
	New bridge visible from tower, but beyond portal sign gantry spanning widened road. Potential effects on setting of grade II listed Foxwarren Cottage, but largely screened by existing woodland. Potential to disturb buried archaeological remains.	of Gothic Tower; but setting unlikely to be significantly affected due to topography and intervening vegetation.	tower. Additional potential impact on buried archaeology within park and near River Mole, including possible site of Medieval bridge.	Increased loss from Ancient Woodland.
Landscape	Adverse visual impacts on nearby properties and users of the open spaces and the campsite. Some loss of trees from edge of Grade I Registered Park & Garden near Gothic tower and in ancient woodland by campsite, as well as from edges of open space land.	Similar to Option PAIN-04A, but with slightly reduced tree loss within Grade I Registered Park & Garden and slightly increased tree loss within open space land.	Increased loss of trees within grade I Registered Park & Garden and increased visual impact on properties, compared to Option PAIN-04A, as the new access track runs past houses within Painshill Park; but reduced tree loss near Gothic Tower. Increased adverse impact on landscape character of Painshill Park and River Mole.	Compared to Option PAIN-04A, Increased adverse visual impacts on nearby properties and on users of the campsite. Reduced loss of trees from edge of Grade I Registered Park & Garden near Gothic tower, but increased loss from ancient woodland by campsite and woodland within San Domenico site.
People and Communities	Substantially improved connectivity across A3 for users of the open spaces and for local residents. Localised losses from open space land for provision of bridleway links to bridge. Longer but safer access route to camp site.	Similar to Option PAIN-04A, but with slightly increased loss from open space land and slightly longer access route to camp site.	Similar to Option PAIN-04A near J10, but with slightly decreased loss from open space land. Additional impact on open character and amenity of informal walks alongside River Mole.	Similar to Option PAIN-04A, with slightly decreased loss from open space land but increased impact on amenity of campsite. Reduced residual extent of San Domenico site for potential development.

5 National Policy Statement Accordance Appraisal

5.1 Background and Purpose of Appraisal

This section of the report sets out an assessment of the side road options in terms of their degree of accordance with the policies contained in the Government's National Policy Statement on National Networks (NPSNN), published by the Department for Transport in December 2014. Under the Planning Act 2008, the policies in the NPSNN provide the basis upon which proposals for nationally significant infrastructure projects would be examined and determined by the Secretary of State, unless relevant legal obligations and duties dictate otherwise. As the M25 Junction 10/A3 Interchange is considered to meet the requirements stipulated in the Planning Act 2008 (as amended) for a nationally significant infrastructure project, the degree of accordance with the NPSNN policies would be an important consideration in the option selection process. Highways England expects that conformity with the NPSNN and other relevant legal obligations should carry exceptional weight as opposed to equal balance with other option sifting criteria.

The assessment in this section of the report supplements that contained in the M25 J.10/A3 Wisley Interchange Improvements National Policy Statement Accordance and Option Appraisal Summary Report, dated August 2017 (Document reference HE551522-ATK-HGN-2-RP-C-4800). Since that report was produced, several additional side road options have been identified, as described earlier in this report. Whilst Highways England would not be the highway authority for the side road proposals that are the subject of this report, these works would be an integral part of the wider Junction 10/A3 Wisley Interchange Improvement Scheme and would be promoted within the development consent order (DCO) application as associated development. On this basis, the policies of the NPSNN are taken to be directly relevant to the consideration of the side road options.

As the project is still at the option selection stage, detailed proposals for non-motorised users (NMUs) have yet to be fully developed. Whilst the comparative assessments contained in this report are therefore based largely on highway alignment options, it is acknowledged that the selection of options should also take into account the extent to which they can incorporate opportunities to address the needs of cyclists, pedestrians and equestrians. The NPSNN states that it expects applicants to use reasonable endeavours to make provision for NMUs in the design of new schemes and to address problems of severance and other historic problems where the strategic road network has become a barrier to sustainable travel.

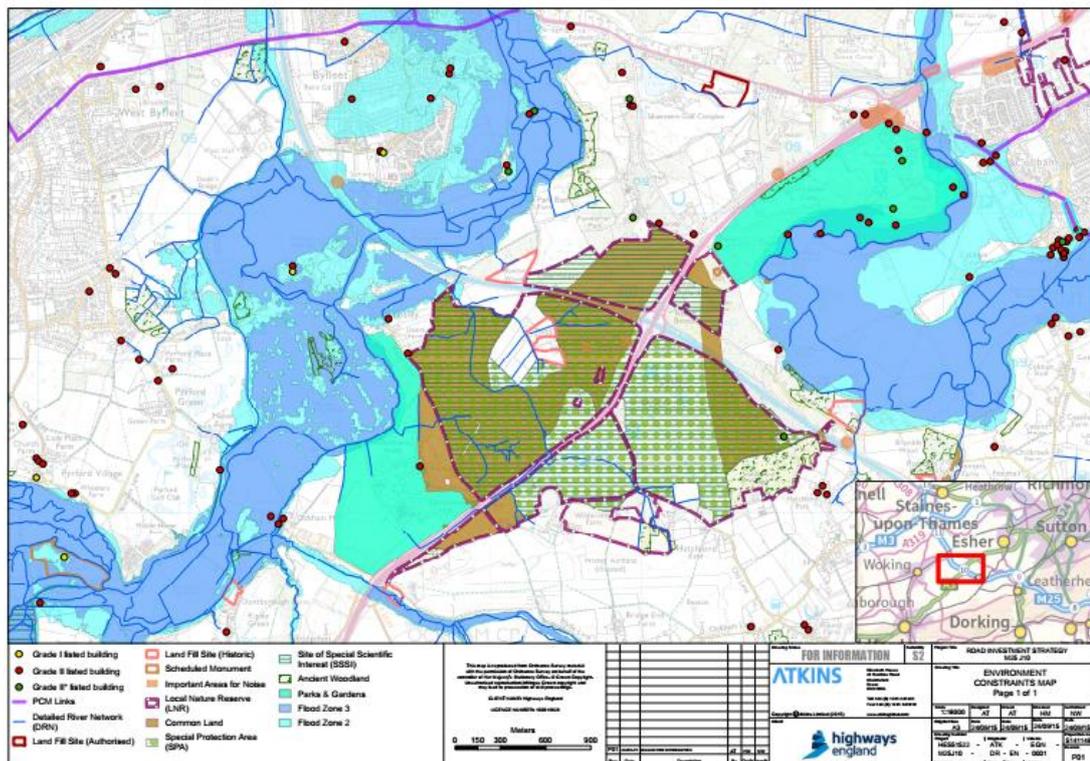
5.2 Relevant Legal and Policy Tests for the Assessment of Side Road Options

5.2.1 Planning Designations and Key Environmental Constraints

Figure 5-1 shows the main environmental and planning constraints applicable to the study area for the side roads options. Much of the woodland and heathland surrounding M25 Junction 10 and on either side of the A3 is designated as the Ockham and Wisley Commons Site of Special Scientific Interest (SSSI). That part of the SSSI situated to the south of the junction also forms part of the Thames Basin Heaths Special Protection Areas (SPA), a site of European importance designated for its valued contribution in supporting three species of rare or vulnerable bird. The area is managed as a Local Nature Reserve by Surrey Wildlife Trust and additional areas of woodland to the north east of the Ockham Interchange are locally designated as Sites of Nature Conservation Importance. There are pockets of ancient woodland alongside

the A3 and the mixed deciduous woodland and woodland pasture close the A3 are among the list of habitats protected under the Natural Environment and Rural Communities (NERC) Act 2006 as Habitats of Principal Importance. Several protected species, including bats, great crested newts and sand lizards may also be present within the study area. The Mole Gap to Reigate Escarpment Special Area of Conservation (SAC) designated under the European Habitats Directive is also potentially of relevance. Although the site is some 8.5km away, there is the potential for one of its qualifying features, Bechstein's Bats, to be present within the study area.

Figure 5-1 Environmental Constraints



Over 320 hectares of the woodland and heathland around Junction 10 are registered as common land or are classified as access land under the Countryside and Rights of Way Act 2000 and thus provide a valued resource for public recreation. Painshill Park, to the north of Junction 10 is a Grade I registered park, whilst the Royal Horticultural Society's Wisley Garden to the south is a Grade II* registered garden. Both of these registered parks and gardens are open to the public and are valued both as designated heritage assets and as popular visitor attractions. There are several listed buildings both within the registered parks and close to the A3 and the M25, as well as three scheduled monuments in the vicinity of Junction 10. All the land alongside the A3 is designated as Green Belt and there are watercourses and waterbodies protected under the EU Water Framework Directive, including the River Mole, Stratford Brook, Guilehill Brook and Bolder Mere.

The area is relatively sparsely populated, with the areas around the A245 Painshill Junction and at Elm Corner (to the south of Ockham Common) containing most of the nearby sensitive receptors. There is an extant planning permission for a composting facility on part of the former Wisley Airfield. An application for the development of over 2,000 new homes on the Wisley Airfield site is currently the subject of an appeal, which has yet to be determined.

Noise Important Areas, which are where 1% of the population that are affected by the highest noise levels from major roads are located, have been declared at some

locations along the A3 and A245 near Painshill and along the M25 to the west. Air Quality Management Areas have been declared at Cobham and along the M25 in Runnymede Borough, due to exceedances of NO₂ pollutant concentrations in the past.

5.2.2 Principal Legal and NPSNN Policy Tests of Relevance to the Option Selection Process

The NPSNN sets out the need for the development of nationally significant infrastructure projects on the national road and rail networks in England. It explains that there is a critical need to improve the national networks to address congestion and to better support sustainable economic growth and support quality of life and wider environmental objectives. It establishes that the starting point for the examination of any DCO application is that there is a compelling need for development of the network and that there is a presumption in favour of granting development consent for proposals that meet this need. It also makes clear that projects should be designed to minimise social and environmental impacts and that in determining a DCO application, the adverse impacts of a proposal should be weighed against its benefits.

Whilst the NPSNN contains a wealth of policies that cumulatively could weigh against a proposal, in practice they do not all carry the same weight and importance. In choosing between options, particular regard should be paid to the policies which direct that development consent should be refused unless certain conditions are met. If applicable, those policies, together with other relevant legal tests, have the potential to present a very significant risk to the delivery of the Proposed Scheme. Given the highly-constrained environment around M25 Junction 10 and alongside the A3, a number of these tests would be applicable. Those of most relevance are as follows:

- **Air Quality:** whether the scheme would comply with the legally binding limit values in the European Council Directive on Ambient Air Quality and Cleaner Air for Europe (2008/50/EC) and comply with the objectives in the Government's National Air Quality Strategy. The NPSNN directs that development consent should be refused if a proposed scheme would cause a zone or agglomeration to become or remain non-compliant with EU limit values. It also indicates that substantial weight would be given to air quality considerations where a project would lead to a significant air quality impact especially within or adjacent to Air Quality Management Areas (AQMAs) or where it would have an adverse impact on designated nature conservation sites.
- **Water Environment:** whether the scheme would cause a deterioration in the water quality status of a classified water body and hence breach the European Council Water Framework Directive (2000/60/EC), and if so, whether it could be demonstrated that there are no better environmental solutions and that there are reasons of overriding public interest to justify the project going ahead. In addition, whether a scheme would give rise to other significant adverse effects on the water environment that would weigh against it in terms of accordance with the NPSNN policy principles.
- **Thames Basin Heaths Special Protection Area (SPA):** whether the scheme, either individually or cumulatively, would adversely affect the integrity of the SPA and, as a consequence, breach the provisions of the European Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Flora and Fauna and Directive 2009/147/EC on the Conservation of Wild Birds. In such an instance, development consent cannot be authorised unless it can be demonstrated that there are no other feasible and less damaging alternatives, that there are Imperative Reasons of Overriding Public Interest and that suitable compensation can be secured.

- **Mole Gap to Reigate Escarpment Special Area of Conservation (SAC):** whether the scheme would be likely to adversely affect Bechstein's Bats, one of the qualifying features of the SAC and thus breach the provisions of the European Council Habitats Directive. In which case, development consent cannot legally be granted unless it can be demonstrated that there are no other feasible and less damaging alternatives, that there are Imperative Reasons of Overriding Public Interest and that suitable compensation could be achieved.
- **European and Nationally Protected Species:** whether the scheme would be likely to harm or disturb a protected species and thus breach the provisions of either the European Habitats Directive or the Wildlife and Countryside Act 1981. In which case, a mitigation licence derogating from the protections cannot be granted unless it can be demonstrated that there would be no other satisfactory alternative solution and in the case of European Protected Species that the works would not be detrimental to the maintenance of the species at a favourable conservation status and that there are imperative reasons of overriding public interest for the works to go ahead.
- **Ockham and Wisley Commons Site of Special Scientific Interest (SSSI):** whether the scheme would take place within or be likely to have an adverse effect on the SSSI, which would be contrary to the NPSNN, unless it can be demonstrated that the benefits of the project clearly outweigh both the impacts on the features of the site and any broader impacts on the national network of SSSIs.
- **Ancient woodland:** whether the scheme would result in the loss of or deterioration of irreplaceable habitats, including ancient woodland and aged or veteran trees, and thus conflict with the policies of the NPSNN, unless it can be demonstrated that the national need for and benefits of the development in that location clearly outweigh the loss.
- **Species and Habitats of Principal Importance:** Whether the scheme would harm habitats or species of principal importance and thus conflict with the policies of the NPSNN, unless it can be demonstrated that the need for and benefits of the development clearly outweigh the harm.
- **Designated Heritage Assets:** Whether the scheme would cause substantial harm to or the total loss of significance of a designated heritage asset, which would be contrary to the NPSNN, unless it can be demonstrated that the harm or loss is necessary to deliver substantial public benefits that outweigh that loss or harm. Significance derives not just from an asset's physical characteristics but also from its setting, or the surroundings in which the asset is experienced and thus works in close proximity to a heritage asset have the potential to cause substantial harm.
- **Green Belt:** whether the scheme would constitute inappropriate development in the Green Belt and whether very special circumstances exist to justify the development and whether it can be demonstrated that the harm is clearly outweighed by other considerations. Provision may also need to be made for suitable replacement land to offset any Green Belt losses, to ensure compliance with the Green Belt (London and Home Counties) Act 1938, which is still an extant piece of legislation and is of relevance to the Proposed Scheme;
- **Open Space:** whether the scheme would result in the loss of any existing open space, which would be contrary to the NPSNN, unless it can be demonstrated that the open space is surplus to requirements and that the benefits of the project (including need) would outweigh the potential loss, taking into account any positive proposals to provide new, improved or compensatory land or facilities.

- **Common land:** whether the scheme would result in the loss of any registered common land or affect rights of commoners, a special Parliamentary procedure would be necessary unless provision is made for replacement land that is equally advantageous in terms of rights and trusts to be given in exchange.
- **Noise:** whether the scheme would give rise to significant adverse impacts on health and quality of life and thus conflict with policies in the NPSNN, unless suitable and effective mitigation can be secured to ensure that noise levels would not exceed the Significant Observed Adverse Effect Level.
- **Road Safety:** whether an option would contribute to an overall improvement in the safety of the Strategic Road Network (SRN) and incorporate all reasonable steps to minimise the risk of road casualties as required by the NPSNN.
- **Flood Risk:** whether the scheme would be at risk of flooding or would increase the risk of flooding elsewhere, contrary to the NPSNN, unless it can be demonstrated that the wider sustainability benefits outweigh the risk.

It is a legal requirement of the Planning Act 2008 that consent can only be granted if the Secretary of State is satisfied that the benefits of a project would outweigh any likely harm. If conflict with any of the above tests is anticipated, it would be important that a clear and compelling case is made to demonstrate that the project should go ahead. Other legislation, such as the Wildlife and Countryside Act 1981, the Natural Environment and Rural Communities Act 2006 and the Infrastructure Planning (Decisions) Regulations 2010 impose additional duties on decision makers to have regard to conserving biodiversity or to the desirability of preserving designated heritage assets whilst exercising their duties. These therefore indicate the likely weight that would be given to the avoidance of impacts on such resources in any DCO examination process. There is also a legal duty on Highways England (in the Infrastructure Act 2015) to have regard to the environment and to the safety of people using the strategic road network.

5.3 A3 Ockham to M25 J10 (including Wisley Lane) access

5.3.1 Wisley Lane access

Two options for providing an alternative access to Wisley Lane have been considered to date in Stage 2, notably:

- Option **WIS01** which involved the construction of a new road running parallel to and alongside the west side of the A3 north bound carriageway, to connect Wisley Lane with the Ockham Interchange; and
- Option **WIS10**, which connected Wisley Lane to the Ockham Interchange via a new road constructed to the east of the A3, crossing over the A3 on a new bridge to connect back with Wisley Lane to the north of the existing footbridge.

Both options were assessed as giving rise to significant environmental effects and policy accordancy risks and on balance Option WIS01 was considered to be less damaging overall, primarily because it avoided impacting on the Thames Basin Heaths Special Protection Area and the Wisley and Ockham Commons Site of Special Scientific Interest. Nevertheless, Option WIS01 was still considered to entail significant risks, given its impact on the Grade II* registered garden at Wisley.

Recognising these risks and concerns, consideration was given to whether any further alternative but less damaging solutions could be found. Three additional options have been identified for assessment as follows:

- Option **WIS01A** which effectively follows the same general alignment as Option WIS01 but with reduced earthworks and the incorporation of a retaining structure to reduce encroachment into the Grade II* registered garden at Wisley.

- Option **WIS11**, which is effectively a variant of Option WIS10, but with the bridge over the A3 repositioned slightly to the south to avoid encroachment in to the boundary of the SPA/SSSI and a slight variation in the horizontal alignment of the access road on the east side of the A3 to reduce encroachment into the Wisley Airfield site and to minimise severance of woodland habitat and common land to the south of Elm Lane.

A further variant of WIS11 has been proposed by RHS Wisley – Option WIS12. This is effectively WIS11 but with a left-out slip road similar to the current arrange. The slip is routed through the SPA and SSSI at Wisley Common.

This section of the report therefore considers whether in policy accordance terms the alternative options would offer a better solution for providing access to Wisley Lane. The assessment compares in turn each new variant against the original option design and a final comparison is made between those options considered to offer most merit.

5.3.1.1 *Comparing Options WIS01 and WIS01A*

The incorporation of a retaining structure in WIS01A instead of cutting earthworks (as proposed in WIS01) was intended specifically to reduce the extent of encroachment into the Grade II* registered garden at Wisley. It achieves this by approximately 0.6ha overall. At its widest point, the width of encroachment in to the registered Wisley Garden would be approximately 12m in Option WIS01A, compared with 20m in Option WIS01.

In most other respects, Option WIS01 and WIS01A are considered to be broadly comparable, although the retaining structure is likely to have a more urban appearance that could be difficult to assimilate. The question as to whether Option WIS01A would offer a better alternative solution compared with WIS01 would therefore be largely determined by comparing the effects of the two options on the registered garden at Wisley.

5.3.1.1.1 *Effects on the Grade II* Registered Wisley Garden*

Option WIS01 would require approximately 2% of the registered garden, whilst Option WIS01A would require 1.1% of the garden. However in terms of the likely effects on the overall significance of the garden as a heritage asset, the difference between the two options is unlikely to be material. This is because in both cases most of the 7.3m wide access road would still need to be aligned through the edge of the registered garden, albeit with less earthworks for Option WIS01A than Option WIS01.

In both options, the land that would be affected comprises a belt of trees along the outer edge of the registered garden. Some of this tree belt is likely to have been planted to screen the A3 when the Ripley By-pass was built during the 1970s, but some is also likely to date back to at least the 1930s, when the original historic gardens were extended to include an area known as Battleston Hill and the Portsmouth Fields. Historical maps from the 1950s indicate the existence of a narrow belt of trees along the boundary of the A3 and records provided by RHS Wisley confirm that the tree belt includes some specimens of Scots Pine, Oak and Giant Redwood that are likely to be in the order of 100 years old, some quite rare. Whilst the belt of trees is therefore of variable historic and horticultural value and is not specifically referenced in the register's description of the garden, it does nevertheless contain some specimens which contribute to the overall value of the garden as a designated heritage asset and its purpose in showcasing collections of different species. The loss of these trees is therefore likely to impact on the value of the registered garden to a degree, although it is unlikely to cause substantial harm and constitute a ground for rejecting a DCO application specifically.

However, the tree belt also serves to screen some views towards the A3 from the outer areas of the garden, including areas where major redevelopment is proposed as part of RHS's Master Plan. Whilst these areas cannot be regarded as part of the Garden's

overall historic and artistic core, the loss of this screening would nevertheless diminish the experience of appreciating the features in this part of the garden, including the network of paths in Battleston Hill, the trials field and views over the field from the upper Terrace and from the area of orchard on the south-east edge of the Garden. This is likely to constitute a significant adverse effect on the Garden.

Land take beyond the tree belt would be limited in both Options, but could include some slight encroachment at Battleston Hill and on the very edge of the trials field to the south. These losses would adversely impact on the garden but would be unlikely to cause significant harm overall. No part of the original late nineteenth century and early twentieth century garden, which is of most historic significance and interest, would be affected. Neither would either of the options affect those areas of the garden deemed to be of particular artistic interest, such as the Canal, Loggia and Country Garden.

Concluding Observations on Options WIS01 and WIS01A

Overall, despite the reduced land take in Option WIS01A, the difference between Options WIS01 and WIS01A, in terms of their effects on the Grade II* registered Wisley Garden is unlikely to be material. Both options are likely to give rise to significant impacts, although Option WIS01A with its smaller land take would be the least damaging of the two. Option WIS01A may also offer some acoustic benefit for the Gardens over WIS01, given that the retaining structure might offer some attenuation for traffic noise from the A3, although this has not been formally assessed at this stage.

5.3.1.2 Comparing Options WIS10, WIS11 and WIS12

Option WIS11 has been designed primarily to reduce the impacts on the SPA and SSSI that would arise in Option WIS10. Option WIS12, as presented in Figure 2-5 includes a skewing of the WIS10 overbridge to allow left out from Wisley Lane on to the A3 to be retained. This left out is shown to take land from the corner of Wisley Common with SSSI and SPA designation. In many regards WIS10 and WIS12 are therefore alike to the west of the A3 whilst WIS11 and WIS12 are alike to the east of the A3.

The total area of land take for Option WIS11 is slightly greater than was the case for Option WIS10, by approximately 0.2ha, mostly due to its slightly different horizontal alignment on the east side of the A3.

Overall, the additional 0.2ha of land take required for Option WIS11 to the east of the A3, including on registered common land and the locally designated Site of Nature Conservation Importance, is unlikely to give rise to materially different adverse effects compared with those already assessed for Option WIS10. However, as the designs are further developed there may be opportunities to refine the alignment of WIS11 to reduce its land take back into line with that required for Option WIS10.

On the east side of the A3, the main point of difference between the two options is likely to relate to the potential impacts on a parcel of ancient woodland situated immediately north of the Ockham Interchange. Option WIS10 runs alongside this woodland but would avoid any permanent encroachment. However the drawings for Option WIS11 appear to show some slight permanent encroachment into the edge of the ancient woodland, which would weigh more significantly against Option WIS11 given that such losses are irreplaceable and cannot be fully compensated for. The project engineers have subsequently confirmed that it would be possible to realign WIS011 to avoid encroachment into the ancient woodland and on this basis, Options WIS10 and WIS11 are assumed to be comparable in this regard.

It is also noted that Option WIS10 would involve slight encroachment into the boundary of land at the former Wisley Airfield which has the benefit of an extant planning permission for a composting facility and which is also the subject of a current appeal for a major residential development. Option WIS11 is aligned closer to the A3 and

would largely avoid this impact. Whilst the NPSNN requires applicants to consider the effects of a scheme on existing and proposed land uses, there is nothing in the NPSNN to indicate that relatively minor impacts would constitute a reason for refusal of development consent. On this basis, the potential for some slight encroachment into the development areas is assumed unlikely to constitute a major NPSNN accordance risk, although it may present a more notable risk in terms of accordance with local policies. It may also affect project costs once compensation requirements are taken into account.

On the west side of the A3, both options would encroach into the edge of the Grade II* Registered Wisley Garden to varying degrees. Option WIS11 would require 0.1ha whilst Option WIS10 would require 0.03ha, with the difference being largely attributable to the angle at which the overbridge would cross the A3. The area affected in both options, is entirely outside the fence line of the RHS Garden. It comprises an area of woodland verge between the south side of Wisley Lane and the A3 footbridge and the loss of this area is unlikely to be of significance to the overall value of the garden as a designated heritage asset. This difference is therefore unlikely to be of particular relevance when deciding between options, although any opportunity to reduce encroachment should be taken when further refining the scheme design.

The main point of difference between the options is that Option WIS11 would (apart from some repositioning of road signs in the verge) avoid any permanent encroachment into the SPA and SSSI to the north of Wisley Lane, whereas Option WIS10 would result in the loss of approximately 0.37ha. As previously assessed, individually the loss of 0.37ha of habitat from the SPA/SSSI in Option WIS10 is unlikely to cause an adverse effect on the overall integrity of the SPA contrary to the provisions of the Habitats and Wild Birds Directives. However, given the requirement for Habitats Assessments to take into account in-combination and cumulative effects, the potential for adverse effects cannot be ruled out. On the basis that development consent cannot legally be granted for a proposal if a less damaging feasible alternative exists, this would represent a notable legal risk for Option WIS10 if this test were applied to each and every element of the overall Proposed Scheme.

[Concluding Observations on Options WIS10, WIS11 and WIS12](#)

Overall, whilst Option WIS11 would involve slightly greater land take and a greater impact on a small area of the Registered Garden at Wisley compared with Option 10, these impacts would be outweighed by its benefits of avoiding permanent encroachment into the SPA and SSSI. Option WIS11 is therefore considered to offer a lower legal and policy accordance risk than Option WIS10 and WIS12, provided that encroachment into the ancient woodland can be avoided and that the loss of common land, habitat of principal importance and encroachment into the edge of the registered Wisley Garden boundary at Wisley Lane can be reduced as far as possible.

5.3.1.3 Comparative Assessment of Options WIS01A and WIS11

Table 5-1 presents a high-level desk based comparative assessment of Options WIS01A and WIS11, which based on the above analysis are considered to be least damaging from a policy accordance perspective.

Overall, neither of these options are likely to involve significant risks of compliance with the EU Air Quality Directive, the Water Framework Directive and the Habitats and Wild Birds Directives. Both options would carry a small risk about the potential for works to harm or disturb protected species, but at this stage, there is insufficient information to distinguish the level of risk between the two options. Both options would also require work immediately alongside the boundary of the Thames Basin Heaths SPA and very stringent construction management measures would need to be agreed with Natural England to minimise the risk of significant harm or damage to SPA habitat during construction.

There are however, a few notable differences between these two Options, which need to be taken into account. The loss of trees and woodland along the boundary of the Grade II* registered garden at Wisley and slight encroachment into the Battleston Hill and the Trials Field associated with Option WIS01A would give rise to a significant adverse effect on the registered Wisley Garden. Whilst the magnitude of impact would not be sufficient to cause substantial harm and thus represent grounds for refusal of development consent specifically, the adverse effects are likely to weigh heavily against Option WIS01A compared with WIS11.

Option WIS11 on the other hand, would have a larger footprint than Option WIS01A. It would thus result in greater losses of Green Belt, Habitat of Principal Importance, registered common land and locally designated Sites of Nature Conservation Importance. As noted above, Option WIS11 also runs alongside a belt of ancient woodland situated to the north of Ockham Interchange. Whilst it is understood that the alignment can be adjusted to avoid any permanent encroachment, its proximity to the woodland carries a degree of risk and would necessitate careful construction management practices to avoid any harm. Option WIS11 would also result in the loss of a significantly greater area of Green Belt than Option WIS01.

It is acknowledged that the above assessment does not take into account any differences between the two options in terms of NMU provision. The widening of the A3 would necessitate replacement of the existing footbridge at Wisley Lane and this would need to be reprovided as a bridleway bridge to address historic anomalies in the classification of the public rights of way network. Option WIS11 would enable the bridleway to be accommodated within a single highway overbridge structure, although some further refinement to the design would be needed to facilitate a bridleway connection from Elm Lane on to the bridge. However, the assessment of Option WIS01A does not take into account any land take impacts associated with works that would be needed to replace the existing footbridge with a new bridleway overbridge. This would be likely to require some additional areas of land on both sides of the A3 to accommodate the earthworks to support a new bridge structure. At this stage, it is estimated that this could result in the permanent loss of approximately 0.6ha of land on the east side of the A3 which comprises registered common land/access land and which is designated as both habitat of principal importance and a Site of Nature Conservation Importance. It could also require approximately 0.3ha of land on the west side of the A3 from the verge at Wisley Lane, which although outside of RHS Wisley ownership still falls within the boundary of the Grade II* registered garden. Having regard to these NMU considerations, the impact of Option WIS01 is likely to be greater, which should be taken into account in the decision-making process.

[Concluding observations on Options WIS01 and WIS11](#)

Overall, both Options WIS01A and WIS11 would give rise to significant effects and in reaching a final balanced decision, it is necessary to consider the significance of the resources affected, the scope to secure suitable and adequate mitigation or compensation and the implications of addressing the needs of NMUs.

Wisley Garden is a designated heritage asset of high significance and the potential to mitigate impacts due to the loss of boundary trees would be limited in the short to medium term. Replacement planting would not be able to offset the loss of any of the important specimen trees of particular horticultural or landscape significance that are within the belt of trees likely to be affected. These factors need to be given weight in the decision-making process and highlight the degree of policy accord risk associated with Option WIS01A.

For Option WIS11, policies allow for any positive proposals to offset the loss of common land/open space to be taken into account and the environmental assessment work undertaken to date indicates the potential offset the loss of Habitat of Principal Importance through suitable compensatory planting, although a strong and compelling

case would need to be made to justify that the benefits of the scheme would outweigh the impacts. Project engineers have also confirmed that Option WIS11 can be aligned to avoid any encroachment into the ancient woodland. The Site of Nature Conservation Importance and Local Nature Reserve designations are of local rather than national importance and would therefore carry less weight in determination of a nationally significant infrastructure project. Although the legal requirement for decisions makers to have regard to conserving biological diversity should not be under-estimated in terms of appraising the risks.

Overall, whilst both options carry significant policy accordence risks, when the significance of the affected designations and the scope to mitigate and/or compensate are taken into account, Option WIS11 is considered to be preferable to Option WIS01A. All other things being equal, the project would therefore need to determine whether this would be sufficient to justify the additional costs and any other traffic and operational performance implications associated with Option WIS11 compared with Option WIS01A, particularly recognising the fact that the majority of traffic likely to be using the realigned road would be people visiting the RHS Wisley Garden specifically.

Table 5-1 Comparative Assessment of Options WIS01A and WIS11

Issue	Option WIS01A	Option WIS11
Air Quality Directive: Compliance with EU limit values and Air Quality Strategy Objectives	No risks associated with compliance with EU limit values or Air Quality Strategy Objectives within AQMAs anticipated. Overall, little to differentiate Options WIS01A and WIS11 in terms of air quality. Option WIS01A is a shorter route and thus would result in marginally lower pollutant emissions than WIS11.	As per Option WIS01A. Given the relatively low numbers of vehicles involved in accessing Wisley Lane compared with the main A3 and M25 routes, neither option is likely to give rise to significant air quality effects on human health that would present a policy risk to the scheme gaining development consent.
Water Framework Directive and NPSNN water resources policies	No significant WFD compliance or policy accordence issues identified, subject to suitable mitigation being put in place, including to avoid risk of contamination of secondary bedrock aquifer and impacts on flood plain for Stratford Brook.	As per WIS01, although on balance Option WIS01 was considered preferable in terms of impacts on water resources as it would be less disruptive to natural plan form.
Habitats Directive: Protected Species	Potential for a low number of protected species within overall footprint of 1.4ha. It would be necessary to demonstrate that the species would be maintained at favourable conservation status and that it would be in the public interest for the project to proceed.	As per WIS01A, albeit the footprint is greater at 3.7ha. Potentially the risk of compliance could be greater. If further more detailed habitat and species surveys indicate that Option WIS01A could be a less damaging and satisfactory alternative. As surveys are ongoing it is not possible to determine the level of difference between the two side road options at this stage.
Habitats Directive: Mole Gap to Reigate Escarpment Special Area of Conservation	Significant compliance risks assumed unlikely.	As per WIS01A.
Habitats Directive: Thames Basins Heaths Special Protection Area	No direct loss of habitat would occur and significant adverse effects on integrity of adjacent SPA unlikely. A risk that some very slight temporary encroachment into SPA may be necessary during works to tie-in WIS01A to the existing Wisley Lane carriageway, but significant adverse effects are assumed unlikely with the adoption of stringent construction management practices.	As per WIS01A – Option WIS11 can be designed to avoid the need for any permanent encroachment into the boundary of the SPA.
Noise	Given the low traffic numbers associated with the side road options, neither option has been modelled specifically. In combination with modelling results for the Core Scheme WIS01 (which is assumed to be representative of WIS01A) was found to result in more minor noise increases than WIS10 (assumed to be representative of WIS11) and that	If WIS10 model results are also representative of WIS11, on balance WIS11 is likely to have a lesser noise effect. However, the difference in noise effects between the two side road options is not considered to be significant and should not therefore be used as a determining factor in the option selection process.

Issue	Option WIS01A	Option WIS11
	there would be more receptors exceeding the SOAEL in the design year for WIS01 than for the modelled scenario with WIS10.	
Road Safety	No detailed road safety audits have been undertaken at this stage. It is assumed that both options would offer a comparable level of performance.	Both options offer safety improvements due to the closure of a direct connection between the A3 and Wisley Lane.
Ockham and Wisley Commons Site of Special Scientific Interest	Neither Option would necessitate permanent loss of SSSI land. There is a risk of temporary encroachment during works to tie in the new side road with the existing Wisley Lane carriageway, but significant effects are assumed unlikely with the adoption of stringent construction management practices.	As per Option WIS01A.
Ancient Woodland	No impacts on ancient woodland anticipated.	Whilst the drawings indicate some encroachment into ancient woodland at Elm Corner Woods, project engineers have confirmed that there is the potential to realign the road outside of the ancient woodland to avoid such impacts. Stringent construction management practices would be needed to avoid significant effects during construction.
Designated Heritage Assets	Option WIS01A would result in the loss of 0.7ha of land from the Grade II* registered garden at Wisley. Whilst this loss is unlikely to cause substantial harm to the significance of the heritage asset, the loss boundary tree screening would impair enjoyment and appreciation of the outer areas of the Garden. This is assessed as a significant adverse effect that would weigh against this Option, particularly considering the fact that a Grade II* registered garden is one which is deemed to be particularly important and more than special interest.	Option WIS11 would result in the loss of approximately 0.1ha of land from the Grade II* registered garden at Wisley. The area that would be affected is located adjacent to the junction of Wisley Lane and the A3. It is outside the boundary of RHS's garden and significant effects on the heritage asset are considered unlikely.
Green Belt	Option WIS01A would result in the loss of approx. 1.4ha of Green Belt land overall. As the side road comprises a local transport infrastructure work, it does not constitute inappropriate development in the Green Belt unless it would adversely affect the openness and purpose of the Green Belt. The retaining structure in WIS01A, loss of	Option WIS11 would result in the loss of 3.7ha of Green Belt. Most of the route would be aligned through woodland at Elm Corner Woods and would necessitate significant clearance of vegetation. Replacement of the existing footbridge over the A3 near Wisley Lane with a 7.3m wide two-way access road would have a more urbanising

Issue	Option WIS01A	Option WIS11
	<p>trees alongside the edge of the A3 and wider highway corridor would have an urbanising effect on this area. The magnitude of landscape impact has been assessed as moderate adverse, which indicates the potential for effects on the openness of the Green Belt to occur with this Option.</p> <p>Loss of land from the Green Belt would be slightly greater once account is taken of the need to construct a replacement NMU bridge in the vicinity of Wisley Lane and Elm Lane.</p>	<p>influence than at present and these works have been assessed as giving rise to a moderate adverse landscape impact in the long term, but which could be major in the construction phase.</p> <p>Overall the significance of any effects on the openness of the Green Belt are likely to be broadly comparable with those in Option WIS01A. Both options would therefore entail a policy accordance risk and further work would be required as part of the EIA process to assess Green Belt implications in more detail. If compensatory land is required, this would be greater for Option WIS11 and would add to the project costs.</p>
Open space/Common land	<p>No permanent impacts on public open space or common land anticipated.</p> <p>However, Option WIS01A as drawn does not currently make provision for a replacement bridleway bridge over the A3 near Wisley Lane. This would necessitate approximately 0.6ha of common land on the east side of the A3 which should be considered.</p>	<p>Option WIS11 would result in the loss of 1.2ha of registered common land and access land and would sever a further 2 ha of land from the main area of common land at Ockham Common. Option WIS11 would therefore require suitable replacement land to compensate for this loss, in addition to that already required for the core scheme. This would weigh against Option WIS11 in the decision-making process.</p>
Habitat of Principal Importance	<p>Option WIS01A would result in the loss of approximately 0.9ha of deciduous woodland that is a Habitat of Principal Importance, which would be contrary to the NPSNN policies unless it can be demonstrated that the need for and benefits of providing this option outweigh its impacts.</p> <p>The extent of HPI affected is likely to be slightly greater, once the need to construct a replacement bridleway bridge near Wisley Lane is considered.</p>	<p>Option WIS11 would result in the loss of approximately 3.8 ha of deciduous woodland and pasture that is Habitat of Principal Importance, which would weigh more heavily against the option in the decision-making process.</p>
Flood Risk Zone 3	<p>Less than 0.1ha of the works would fall within the flood zone 3. Further assessments would be required during Stage 3 to establish potential for conflict with NPSNN policy.</p>	<p>Option WIS11 would require approximately 0.3h of land within flood zone 3. As per WIS01A, further assessment would be required in Stage 3 to establish potential for conflict with NPSNN policy. On balance Option WIS11 likely to have a greater impact than Option WIS01A, but the difference is unlikely to be of sufficient significance to influence option selection.</p>

5.3.1.4 *Conclusions on Wisley Options*

Option WIS01A was developed specifically to reduce the impact of Option WIS01 on the Grade II* registered Wisley Garden. The assessments have shown that whilst on balance, WIS01A would result in marginally less encroachment than WIS01 and is therefore preferred, the effects on Wisley Garden are unlikely to be materially different. Both options would result in the loss of much of the tree belt, which provides valuable screening for the gardens from traffic on the A3. Whilst the main historic and artistic core of the garden would be unaffected, the loss of the tree screening would impact on the appreciation of the gardens and would give rise to a significant adverse effect, albeit not one which would be considered to cause substantial harm and justify development consent being refused.

Option WIS11 was developed specifically to reduce the impact of Option WIS10 on the SPA and SSSI. Whilst Option WIS11 would involve more land take than Option WIS10, this would be outweighed by its benefits in reducing encroachment in to the SPA. Option WIS11 would however encroach further into the boundary of the Registered Wisley Garden than Option WIS10, but as the area affected beside the A3 Wisley Lane junction lies outside of the fence line of the Garden, the effects of this increased land take were not considered to be significant. Option WIS11 also has the potential to encroach into an area of ancient woodland to the east of the A3, but project engineers have confirmed that this can be avoided through slight realignment. On this basis, Option WIS11 is considered to carry less legal and policy accordance risk than Option WIS10.

Option WIS12 was put forward as a variation of Option WIS10, to avoid impacts on Wisley Garden, whilst still facilitating traffic leaving Wisley to join the A3 northbound carriageway directly. Even if Option WIS12 could be refined to avoid direct loss of SPA habitat, it would be a significant departure from safety/design standards that would weigh heavily against it.

Overall, Option WIS11 is considered to carry less policy accordance risk than Option WIS01A, largely on the basis that it avoids significant adverse effects on Wisley Garden and because there is likely to be greater scope to mitigate and compensate for some of its impacts, through additional compensatory habitat creation measures and making provision for suitable replacement common land. Option WIS11 also makes provision for a replacement NMU crossing, whilst Option WIS01A would necessitate further works and consequential impacts on land to the east of the A3 that would need to be taken into account.

5.3.2 **Alternative Access Arrangements for Hut Hill Cottage, Pond Farm and the Birchmere Scout Camp**

5.3.2.1 *Options for Assessment*

At present, a small number of properties situated to the south-west of Junction 10, namely; Hut Hill Cottage, Pond Farm and the Birchmere Scout Camp, take access directly from the A3 northbound off-slip road. For safety reasons, this access would need to be closed in the Proposed Scheme. It is also understood that there may be a car park for Wisley Common which could also be affected by this closure, but effects on this specifically have not yet been assessed.

The designs assessed to date have made provision for an alternative access for these properties via Wisley Lane. The Core Scheme Options 9 and 14 included provision for a 750m long two-way access road, largely following the route of an existing unmade track through Wisley Common, which ran parallel to the M25 in part and then connected to Wisley Lane via Deer Farm Close to the west. This element of the Proposed Scheme was referred to as CAMP02. The National Policy Statement Accordance an Option Appraisal Summary Report undertaken in June 2017 did not assess this scheme element specifically, as the CAMP02 design was integral to both of

the Core Options 9 and 14 and any adverse effects were therefore taken into account as part of the wider comparative exercise.

However, since that assessment was undertaken further consideration has been given as to whether it might be possible to identify a more direct alternative access arrangement for these properties. An alternative solution, referred to as CAMP03B has been identified. This would entail constructing a road bridge across the A3 in the vicinity of the existing Cockrow Bridge (a bridleway bridge) enabling a shorter access route connecting the properties to Old Lane on the east side of the A3. In developing the design for CAMP03B, the opportunity has also been taken to incorporate a “green-bridge’ design concept, to help improve connectivity between the different parts of the designated habitats that are separated both by the A3 and the M25. To ensure the decision-making process on options is as objective as possible, the designs for CAMP02 have also been updated to incorporate provision for a replacement footpath and bridleway bridge to replace the existing Cockrow Bridge. This enables the options to be assessed and compared on the same basis.

This section highlights any key policy and legal accordance issues which might be of relevance to the decision making process on the two CAMP options.

5.3.2.2 Comparative Assessment of Options CAMP02 and CAMP03B and Option Selection Recommendations

Table 5.3 below sets out the key findings of a high level, desk-based comparative assessment of the two access options referred to as CAMP02 and CAMP03B. As relatively minor elements of the Proposed Scheme, the differences are likely to be very finely balanced overall when considered against the key legal and policy tests in the NPSNN. Given the low number of vehicles likely to be using this route, the analysis focuses on the permanent impacts likely to arise during construction as the basis of informing the policy accordance analysis.

Regardless of which Option is preferred, the Proposed Scheme would need to make provision to replace the existing Cockrow footpath and bridleway bridge to span over the widened A3. This makes both options very finely balanced in terms of their spatial extent at and around the Cockrow Bridge specifically. Overall, Option CAMP02 would in total require approximately 3.3ha of land, whilst CAMP03B would require approximately 1.7ha. In virtually every key respect, notably the effects on the SPA, SSSI, common land and open access land and the effects on Habitats of Principal Importance, the impact of Option CAMP03B is therefore likely to be less than the impact of Option CAMP02, given its smaller footprint.

The key determining factor in choosing between these options is likely to centre on the degree of impact on the SPA and SSSI. In this regard, Option CAMP03B is to be preferred, as not only would it affect a smaller area of SPA and SSSI habitat, but also the areas affected on the east side of the A3 are likely to be less critical in supporting populations of the protected bird species, given their location adjoining areas of activity associated with car parking and the Ockham Bites café. Option CAMP02 on the other hand aligns the earthworks on the east side of the A3 further north, which is likely to extend the area of disturbance to a greater degree. The legal test in the European Directive is that consent should not be granted where a less damaging feasible alternative exists. As at this stage, the potential for the works in either option to adversely affect the integrity of the SPA (either individually or cumulatively) cannot be ruled out, a precautionary approach would therefore support Option CAMP03B as the least damaging solution.

5.3.2.3 Concluding observations on the CAMP02 and CAMP03B Options

The high level assessments undertaken to date, indicate that Option CAMP03B should be the preferred option, given its smaller footprint and less disturbance to the SPA and other environmental designations.

It would nevertheless be important to ensure that a clear and convincing case is made on safety grounds for stopping up the existing access which currently connects directly on to the A3 northbound off-slip. Given the potential for significant effects in this highly sensitive environment, a DCO application would need to justify that the need for and benefits of this closure would outweigh the additional impacts associated with constructing an alternative access route.

Table 5-3 Comparative Assessment of Options CAMP02 and CAMP03B

Issue	Option CAMP02	Option CAMP03B
Air Quality Directive: Compliance with EU limit values and Air Quality Strategy Objectives	As traffic flows on the CAMP road would be very low, neither option would result in significant air quality effects on human receptors or give rise to concerns about compliance with EU limit values. Both options involve works within the SPA, which may exacerbate air quality effects on vegetation and hence accordance with Air Quality Strategy Objectives.	As per Option CAMP02 in terms of air quality effects..
Water Framework Directive and NPSNN water resources policies	No significant WFD compliance or policy accordance issues identified, subject to suitable mitigation, including to avoid risk of contamination to secondary bedrock aquifer.	As per CAMP02.
Habitats Directive: Protected Species	Potential for some protected species to occur within scheme footprint.	As Per Option CAMP02, although within a smaller overall scheme footprint.
Habitats Directive: Mole Gap to Reigate Escarpment Special Area of Conservation	Option CAMP02 is unlikely to cause any breach of compliance with the EU Habitats Directive in relation to the SAC.	As per CAMP02.
Habitats Directive: Thames Basins Heaths Special Protection Area	Option CAMP02 would entail track surfacing and some new track formation works within the SPA, together with a new green bridge over the A3, affecting approximately 2.1ha of habitat within the SPA and increasing the area of disturbance to bird species. At this stage, the potential for , these works to adversely affect the integrity of the SPA,(both individually and cumulatively when account is taken of other works as part of the Proposed Scheme) cannot be ruled out. This could raise a legal compliance risk with the European Directive unless it can be demonstrated that there is no other less damaging and feasible alternative. Option CAMP03B is likely to offer a less damaging solution in terms of its effects on the SPA, which weighs significantly against CAMP02.	CAMP03B would involve the construction of a new green bridge over the A3, affecting approximately 1.2ha of SPA land on either side of the A3 in the vicinity of Cockrow Bridge and extending the area of disturbance to bird species. The potential for adverse effects on the SPA (both individually and cumulatively with other aspects of the Proposed Scheme) therefore cannot be ruled out at this stage. However, much of the footprint of CAMP03B on the east side of the A3 would be outside the boundary of the SPA and given the level of activity associated with the Ockham Bites Café and car park, adjoining areas of SPA are likely to be of more limited value in supporting populations of the 3 protected bird species, than those affected by CAMP02 on the east side of the A3. On this basis and given its smaller footprint overall, Option CAMP03B is considered to offer the less damaging option.

Issue	Option CAMP02	Option CAMP03B
Noise	CAMP02 is expected to have low traffic flows and would not therefore generate noise levels loud enough to give rise to a significant adverse effect on nearby receptors. Some disturbance during construction may be possible, but limited sensitive receptors in this locality.	As per CAMP02.
Road Safety	Not assessed at this stage.	As per CAMP02.
Ockham and Wisley Commons Site of Special Scientific Interest	Option CAMP02 would affect approximately 2.1ha of the SSSI. Both options incorporate proposals for a green bridge which would help to mitigate the increased severance effects associated with the widening of the A3.	Option CAMP03B would affect approximately 1.2ha of the SSSI and on this basis would have a lesser impact than CAMP02
Ancient Woodland	No effects on ancient woodland are anticipated.	As per CAMP02.
Designated Heritage Assets	The Bell Barrow Scheduled Monument is located approximately 190m away to the north and the Bowl Barrow Scheduled Monument is approximately 140m away to the north and north-west. No significant impacts on designated heritage assets are anticipated.	The alignment of CAMP03B would be marginally further away from the Bell Barrow scheduled Monument than CAMP02, and no works to the track would be required which passes approximately 140m away from the Bowl Barrow Scheduled Monument to the north-west. As per CAMP02, no significant impacts on designated heritage assets are anticipated.
Green Belt	CAMP02 would affect approximately 3.3ha of land within the Green Belt. The replacement of the existing Cockrow Bridge with a pedestrian and bridleway Green Bridge is unlikely to materially harm the openness of the Green Belt, although the clearance of trees to facilitate earthworks supporting the bridge abutments would have an urbanising effect in the short to medium term, until landscape mitigation matures and helps to integrate the works into the environment. Track formation and surfacing works on the west side of the A3 are unlikely to affect the it's the overall openness or purposes of the Green Belt or conflict with Green Belt policy to a significant degree. However, under the Green Belt (London and Home Counties) Act 1938, provision may need to be made for replacement land despite its limited effect overall.	CAMP03B would affect approximately 1.7ha of land within the Green Belt, which is less than CAMP02. However, given its greater width to accommodate vehicles accessing properties to the west of the A3, CAMP03B may give rise to a more urbanising effect and thus on balance the effects on the Green Belt are likely to be broadly comparable between options. As per CAMP02, the Green Belt (London and Home Counties) Act 1938 may necessitate a requirement for exchange land to be offered for any loss of green belt land.

Issue	Option CAMP02	Option CAMP03B
Open space/Common land	Option CAMP02 would have a footprint of approximately 2ha of common land/open space (access land). Whilst the works would not necessarily diminish the overall permanent space available for recreational use of Wisley Common, taking a precautionary principle, provision should be made to include sufficient replacement land to offset this impact to reduce policy accordant risks.	CAMP03B has a smaller footprint than CAMP02 and thus less impact on the common land and open space. Some of the area affected currently forms part of the public car park adjacent to the Ockham Bites Café and the loss of visitor parking would impact on access to the Common for recreational purposes. There may be some scope to redesign the existing car park to allow more efficient use of the space and thus ensure that a comparable number of bays can be maintained. Temporary disruption to visitors is likely to be unavoidable and would affect public enjoyment of this area. As with CAMP02, replacement land may need to be offered to compensate for losses of common land.
Habitat of Principal Importance	Option CAMP02 would affect some Habitat of Principal Importance, primarily deciduous woodland and woodland pasture, on both sides of the A3.	Broadly, as per Option CAMP02, but slightly smaller footprint overall.
Flood Risk Zone 3	No encroachment into areas at risk of flooding anticipated.	As per CAMP02.

5.3.2.4 *Conclusions on the CAMP02 and CAMP03 Options*

Both options would represent relatively small elements of the overall Proposed Scheme for the M25 Junction 10 Project and are unlikely to significantly affect the prospects of the scheme gaining development consent in their own right. The effects of the options are likely to be finely balanced. However, Option CAMP03B would require less land take compared with Option CAMP02 and would have a lesser impact on the SPA, both in terms of direct loss of habitat and the extent and importance of the areas likely to be disturbed, particularly on the east side of the A3. On this basis, Option CAMP03B is considered to carry a lower level of legal and policy accordance risk than CAMP02.

5.3.3 Ockham Interchange: South-Facing Slip Roads

5.3.3.1 *Background to the Option for Assessment*

The Core Scheme for the M25 Junction 10/A3 Wisley Interchange Project does not make provision to increase the capacity of the Ockham Interchange at the southern end of the scheme. Junction modelling software (the ARCADY module of JUNCTIONS9) was used to test the impact of the new link using our core Stage 2 assessment of Option 14. All arms of the junction were shown to operate well within the theoretical capacity in all peak periods and in all forecasts years (2022 and 2037) for a WIS01 arrangement whilst for a WIS11 type arrangement the performance at the junction is like WIS-01, but in the PM peak (in 2037) the new link is operating over the recommended threshold capacity. This is likely due to the inclusion of the Wisley Airfield development traffic in the Stage 2 modelling. It should be noted that events days have not been tested and they could further stress the junction.

During the non-statutory consultation process, a number of stakeholders have expressed the view that south-facing slip roads should be provided as part of the scheme, both to improve traffic and environmental conditions at Ripley and to improve access to the RHS Gardens at Wisley, if the existing direct connection between Wisley Lane and the A3 were to be closed. This option is being favoured by RHS Wisley as even though approximately 20% of typical daily demand to Wisley Lane comes from the A3, that traffic would need to travel past Ockham Interchange, u-turn at M25 J10 and then exit at Ockham Interchange; an increase in distance of approximately 6km.

South facing slips at Ockham junction would be a separate scheme to the M25 J10 RIS scheme and would require ministerial approval if it were to be taken forward. However, it was raised by respondents at the public consultation and the project has therefore undertaken a high level review and assessment.

5.3.3.2 *Policy Accordance Assessment and Conclusions*

Table 5-2 presents a summary of a very high level NPSNN accordance appraisal. The most significant policy risks relate to the potential for conflict with policies on the Green Belt, ancient woodland, Habitats of Principal Importance and flood risk. The scheme would result in the loss of agricultural land; however, the significance of the loss has not been assessed at this stage.

In terms of the Green Belt, this proposal would result in the loss of an additional 6ha of land. It would need to be demonstrated that very special circumstances exist to justify this loss and that it would not harm the openness of the Green Belt. In the case of effects on ancient woodland, whilst the area affected would be small, the policy test in the NPSNN is set very high given that such resources are held to be irreplaceable. The test requires a national need for the development to be established. This could be difficult to demonstrate unless the traffic modelling indicates that the slip roads are necessary to support the smooth and efficient operation of the trunk road network, which, according to work to date, is unlikely.

It is also recognised that the incorporation of south-facing slip roads could potentially generate some environmental benefits, but these have not yet been assessed as part

of this exercise. These could potentially include reduced noise and emissions in Ripley, if the slip roads led to rerouting of traffic away from Ripley. However, it is unlikely that these benefits would be particularly significant as apart from those trips originating in the south and destined specifically for Wisley Lane, relatively few journeys would have the need to exit the A3 northbound at Ockham. It is assumed that most trips for example originating from Guildford and destined for West and East Horsley (which are the main built-up areas likely to generate trips via Ockham) would use the A25 and A246 as a more direct route. This would appear to suggest that the need for and benefits of providing the south facing slip roads at the Ockham Interchange are unlikely to outweigh the costs involved and the additional policy impacts identified in Table 5.4 below.

It is however noted that paragraph 5.165 of the NPSNN does require applicants to consider existing and proposed land uses near a project and whether proposals might preclude a new development or proposal in a development plan from coming forward. Further assessment would therefore need to be undertaken to consider more specifically the implications of the Wisley Airfield proposals vis a vis the case for south facing slip roads at Ockham.

Table 5-2 Assessment of South Facing Slip Roads at the Ockham Interchange

Issue	South Facing Slip Roads at Ockham Interchange
Air Quality Directive: Compliance with EU limit values and Air Quality Strategy Objectives	No significant air quality effects anticipated given that there are not any receptors that would be likely to be affected. Risks of non-compliance with EU limit values are considered unlikely. However no detailed air quality modelling of this scenario has been undertaken and potential traffic re-routing could give rise to different air quality effects elsewhere in the wider study area which may affect the ability to meet Air Quality Strategy Objectives at some specific individual receptors.
Water Framework Directive and NPSNN water resources policies	No significant WFD compliance or policy accordane issues identified subject to suitable mitigation being put in place, to avoid risk of contamination to secondary bedrock aquifer or impacts on Stratford Brook and Guilehill Brook.
Habitats Directive: Protected Species	There is the potential for a low number of protected species to occur within the footprint of the slip roads.
Habitats Directive: Mole Gap to Reigate Escarpment Special Area of Conservation	The scenario is unlikely to cause any breach of compliance with the EU Habitats Directive in relation to effects on the SAC, which is more than 8km away.
Habitats Directive: Thames Basins Heaths Special Protection Area	No significant direct or indirect impacts on the SPA anticipated.
Noise	Likely to lead to an increase in noise levels at noise sensitive receptors at Ripley as the road alignment would bring traffic closer. An assessment of noise would need to be undertaken using projected traffic flows if this option were to be considered further for traffic or operational reasons.
Road Safety	Not assessed at this stage.
Wisley and Ockham Commons Site of Special Scientific Interest	No significant direct or indirect impacts on the SSSI anticipated.
Ancient Woodland (Park Wood)	The south facing slip road works would result in the loss of 0.13ha of ancient woodland from the edge of Park Wood, representing approximately 5% of the total block of ancient woodland on the west side of the A3. The NPSNN contains a presumption against losses of ancient woodland unless it can be demonstrated that the national need for and benefits of providing the slip roads would clearly outweigh the loss. This would present a policy accordane risk as it may be difficult to demonstrate a national need.
Designated Heritage Assets	Significant effects on designated heritage assets unlikely, although there is the potential for some impacts on the setting of a number of Grade II Listed Buildings on the eastern side of Ripley Conservation Area which would need to be investigated further.

Issue	South Facing Slip Roads at Ockham Interchange
Green Belt	The Ockham Interchange is located entirely within the Green Belt and the addition of slip roads would result in the loss of 6ha from the Green Belt. Construction of a new roundabout and realignment of the B2215 Portsmouth Road would have an urbanising appearance, which given the more open nature of the landscape at this location along the A3, could impact on the openness of the Green Belt to a degree. This would be a policy accordance risk that would weigh against the scenario and would need to be considered further. It may also be necessary to make provision for suitable replacement land to ensure compliance with the Green Belt (London and Home Counties) Act 1938.
Open space/Common land	No impacts on common land or access land anticipated.
Habitat of Principal Importance	The scheme would result in the loss of approximately 0.26ha of deciduous woodland Habitat of Principal Importance, together with approximately 0.24ha of wood pasture and parkland Habitat of Principal Importance, located mostly on the west side of the A3. To avoid a significant policy accordance risk it would be necessary to demonstrate that the need for and benefits of the works would outweigh this harm.
Flood Risk Zone 3	Approximately 1.3ha of the works would be within flood zone 2 and a further 0.15ha would be within flood zone 3. To avoid significant policy accordance risks it would be necessary to demonstrate through a flood risk assessment that the works would not increase the risk of flooding and that the design is flood resilient and resistant to the satisfaction of the Environment Agency.

5.4 A3 Painshill to M25 J10 access

5.4.1 Options for Assessment

To meet current highway and safety design standards, the Proposed Scheme proposes to close off several private accesses that currently connect directly with the A3. In the Painshill area, this includes on the east side of the A3; the Gas Valve Compound, New Farm, the Heyswood Guide Camp, Court Close Farm and the emergency access to Painshill Park. Earlier in Stage 2, consideration has been given to two possible options for alternative access arrangements to serve these properties, notably:

- Option **PAIN04**, which involved the construction of a bridge over the A3 to provide a new road which linked the properties on the east side of the A3 with Redhill Road on the west side of the A3; and
- Option **PAIN05**, which involved the construction of a new 1.8km access road through Painshill Park to connect the properties with the A245 at a point east of Cobham Bridge.

The National Policy Statement Accordance and Option Appraisal Summary Report dated August 2017 (Ref HE551522-ATK-HGN-2-RP-C-4800) concluded that Option PAIN05 would carry significant risks in achieving development consent, as it was assessed as being likely to cause substantial harm to the Grade I registered Painshill Park, contrary to the NPSNN policies. The prospects of being able to provide a clear and compelling case to justify this option were considered to be limited, given that Option PAIN04 would offer a less damaging alternative that would achieve the same purpose. Moreover, Option PAIN05 would involve considerably more land take than PAIN04, including from the Registered Park and from the Green Belt, as well as works to bridge over the River Mole, which would have a greater impact on water resources. On this basis, it was recommended that Option PAIN04 be preferred over Option PAIN05 from a policy accordance perspective. However, it was still recognised that Option PAIN04 presented very significant policy challenges, most notably due to its possible impact on the setting of the Grade II* Listed Gothic Tower on the edge of Painshill Park. Therefore, it was agreed that consideration would be given to identifying further options with a view to avoiding or reducing potential impacts as far as possible.

Two further options have been identified as follows:

- Option **PAIN4C**, which is based on Option PAIN04, but moves the proposed A3 overbridge approximately 80-90m southwards to cross the A3 to the south of Redhill Road and the Gothic Tower. Option PAIN4C, like Option PAIN04, incorporates provision for an emergency access for Painshill Park in the vicinity of the Gothic Tower. Option PAIN4C also incorporates retaining walls for the bridge works on the east side of the A3, instead of the cutting earthworks which were proposed in Option PAIN04; and
- Option **PAIN10**, which moves the proposed A3 overbridge northwards by approximately 600m compared with Option PAIN04, to cross the A3 in the vicinity of the Heyswood Guide Camp and the site of the former San Domenico restaurant to the west. Under Option PAIN10, no provision would be made for an alternative emergency access to Painshill Park, instead emergency vehicles would continue to use the existing access point direct from the A3 as per the current arrangement. Option PAIN10, would provide alternative access to serve Court Close Farm, the Heyswood Guide Camp, New Farm and the Gas Valve Compound.

This section of the Addendum Report, therefore considers the policy and legal risks associated with the additional options and whether they might offer any benefit over Option PAIN04. Given the very significant risks identified in taking forward Option PAIN05, no further assessment of PAIN05 has been undertaken as it would continue to be difficult to justify when other less damaging alternatives could be taken forward.

5.4.2 Comparative Assessment of Legal and Policy Risks associated with Painshill Options

Table 5.4 summarises a comparative assessment of the Painshill Options in relation to the key legal and NPSNN policy considerations identified above.

Comparing Options PAIN04 and Option PAIN4C

The first question to be addressed in this assessment is whether Option PAIN4C is likely to offer any benefit over the original Option PAIN04.

Heritage Considerations

The principal concern with Option PAIN04 related to its impact on the setting of the Grade II* Listed Gothic Tower on the edge of Painshill Park, a building which by virtue of its grading is deemed to be particularly important and of more than special interest. The alignment of Option PAIN04 would be within approximately 30m of the Gothic Tower and would necessitate the clearance of vegetation and trees along the boundary of the A3 to make space for the access road. This would reduce the level of screening between the Gothic Tower and the A3, potentially opening up views to the A3, particularly looking north, as well as potentially affording views to the new bridge over the A3 despite it sitting approximately 8m below the ground level of the Tower. It is also noted that the clearance of trees alongside the A3 in Option PAIN04 would potentially open up views to existing trunk road signage situated to the west of the Gothic Tower approximately 150m ahead of the southbound diverge to Junction 10. A new signage gantry is also likely to be required at this location with a widened A3, which is also likely to be visible in views from the Gothic Tower. Whilst the setting of the Gothic Tower has already been highly compromised by the proximity of high voltage power lines and to a lesser extent by some limited oblique views to the A3 from upper floors and by traffic noise, Option PAIN04 was considered likely to further compromise the setting and hence affect the significance of the building as a designated heritage asset.

Whilst the impact of Option PAIN04 was considered unlikely to be of such a magnitude that it would cause substantial harm (and thus warrant development consent being refused), the potential for a significant adverse effect on the setting of the building could not be ruled out based on a Stage 2 level of assessment. The NPSNN requires a clear and convincing justification for any harm to heritage assets of this significance and it would be necessary to demonstrate that the harm would be outweighed by the public benefits of the proposal. Historic England has expressed significant reservations about the potential impact on the setting of the Gothic Tower and could potentially object to this at the DCO examination stage. These factors could therefore present a significant risk for Option PAIN04 that could weigh against the Scheme in the DCO examination process.

Option PAIN04A was also assessed as potentially causing a significant adverse effect on the Grade I Registered Painshill Park, which by virtue of its grading is deemed to be a Park of exceptional historic interest and a heritage asset of the highest level of significance. Option PAIN04 would result in the loss of approximately 1.2ha of land from within the Registered Park boundary. Whilst much of this land take would occur in the vicinity of the Heyswood Guide Camp, an area which has not been subject to any restoration works, Option PAIN04 would also extend over one of the walking routes/tracks in the vicinity of the Gothic Tower on the edge of the Park, which could

have an adverse impact on the enjoyment and appreciation of this specific area of the Park and its integrity as a series of inter-connected architectural, artistic and horticultural compositions.

Option PAIN4C has been developed specifically to reduce the magnitude of impact on the Grade II* Listed Gothic Tower. The position of the proposed A3 overbridge has been shifted southwards by approximately 80-90m which reduces the potential for visual intrusion compared with Option PAIN-04A. The design also incorporates retaining wall structures instead of earthworks, which means that the access road can be aligned slightly further away from the Tower and the amount of land take to be reduced. Whilst the new road itself, being some 8-9m below the ground level of the Gothic Tower is unlikely to be visually intrusive, Option PAIN-04C would still require the removal of trees alongside the A3. As with Option PAIN04, this would compromise the setting of the Gothic Tower, although to a slightly lesser degree. It would also open up views to existing roadside signage and potentially to a new signage gantry which is likely to be required at a position to the north of the overbridge. Given its slightly reduced land take, Option PAIN4C would also involve less encroachment into the boundary of the Registered Painshill Park.

Both Option PAIN04 and Option PAIN4C are likely to adversely affect the setting of the Grade II listed Foxwarren Cottage, situated on the west side of the A3 at Redhill Road. The potential risk of Option PAIN4C affecting the setting of the hengiform Scheduled Monument that is situated approximately 80m away at Red Hill is also noted. This is a particularly rare form of scheduled monument and is of particularly high heritage significance. Given the topography and extent of tree cover, the risk of impact is likely to be low, but further more detailed assessments would be required to rule out noise and visual intrusion.

Overall, whilst Option PAIN-04C is likely to have a lesser impact on the setting of the Gothic Tower than Option PAIN04, both Options are assessed as being likely to give rise to significant adverse effects on designated heritage assets. In developing designs for the scheme, opportunities to shift the alignment of the road further from the Tower should be taken if possible.

Other Considerations

In most other respects, Option PAIN-04A and PAIN-04C would be broadly comparable, including the effects on the Green Belt, the loss of ancient woodland and the loss of Habitat of Principal Importance. In both cases, these issues would cumulatively add to the policy risks associated with the provision of the local access option and it would be important for the Project to demonstrate both the need for and benefit of the A3 widening and the safety case for stopping-up the existing side roads and private access points.

The one notable difference is that Option PAIN-04C would encroach slightly into registered common land at Red Hill, to the order of approximately 0.1ha. Given that there is scope to take into account any positive proposals made to compensate for such losses, it is considered that this additional impact would not materially add to the policy risks associated with Option PAIN4C.

Overall, given that the impact on the Grade II* Gothic Tower is of particular concern to Historic England, and recognising the fact that Foxwarren Cottage is by virtue of its grading an asset of lower importance, Option PAIN-04C is considered likely to carry less policy accordancy risk than Option PAIN04. Further detailed assessments would however be necessary to ensure that significant adverse impacts on the setting of the hengiform Scheduled Monument situated some 80m away from the bridge works would be avoided.

[Comparing Options PAIN4C and PAIN04 with Option PAIN10](#)

In Option PAIN10, the proposed A3 overbridge is shifted approximately 600m northwards compared with Option PAIN-04A. Thus the impact on the Grade II* Gothic Tower would be largely avoided, as construction of an alternative access road would not require the clearance of trees near the tower. Neither would Option PAIN-10 adversely affect the setting of the Grade II Listed Foxwarren Cottage on the west side of the A3 or the setting of the hengiform Scheduled Monument at Red Hill that might arise with Option PAIN-04C.

Option PAIN-10 would also reduce the land take from the boundary of the Grade I registered Painshill Park compared with both Options PAIN-04A and PAIN-04C. In Option PAIN10, the emergency access arrangements to Painshill Park would remain as per the current situation, which means that construction of the access road would not result in any land take from the boundary of Painshill Park to the south of Court Close Farm. Most of the land take in PAIN-10 would actually involve land outside of Painshill Park Trust's management and the effects on the historical significance of the Registered Park and its main historic, architectural and horticultural features would therefore be further reduced when compared with Options PAIN-04A and PAIN-04C. For these reasons, Option PAIN-10 would be the least damaging in terms of impacts on all relevant designated heritage assets.

However, Option PAIN-10 would have a marginally greater impact on ancient woodland than either Option PAIN-04A or PAIN-04C, amounting to approximately 0.2ha greater loss from a small block of ancient and semi-natural woodland situated alongside the A3 on the edge of Painshill Park. In total, Option PAIN-10 would result in the loss of 0.7ha of the ancient woodland, equivalent to almost half of the block of woodland. This deciduous woodland is also Habitat of Principal Importance (HPI). Whereas, Option PAIN-04A or PAIN-04C would affect approximately 0.5ha of the ancient woodland.

The NPSNN contains a presumption against the loss of ancient woodland unless it can be demonstrated that the national need for and benefits of the development in that location clearly outweigh the loss. It also contains a presumption against the loss of HPI. Clearly the need for the access road fundamentally derives from the need to widen the A3 as an integral part of a nationally significant infrastructure project (to address problems at M25 Junction 10), together with the safety case for closing off the existing private access points which connect directly to the A3. Thus, it should be possible to demonstrate the scheme's benefits and national need. However, this would, nevertheless, be a policy risk that would weigh slightly more against Option PAIN-10 than the other options, given that ancient woodland is an irreplaceable resource and the policy test is, therefore, set very high.

In other key respects, such as accordance with Green Belt policy, Options PAIN-10, PAIN-04A and PAIN-04C are likely to be broadly comparable. As local roads, they need not constitute inappropriate development, provided that it can be demonstrated that they would not harm the openness of the Green Belt. Further legal advice would be necessary to confirm whether the loss of Green Belt land would require compensatory exchange land to be provided to meet the requirements of the Green Belt (London and Home Counties) Act 1938. To choose between the options at Painshill would, therefore, require a judgement to be made about the importance of protecting the significance of the heritage assets compared with the importance of protecting the ancient woodland. All of these resources are of national importance, which makes the options finely balanced and other considerations such as cost, environmental impacts on specific receptors would also be of relevance. It is noted that Option PAIN-10 would be likely to entail some loss of land from within the boundary of the Heyswood Guide Camp on the east side of the A3 and from the site of the former San Domenico restaurant on the west side. Whilst these considerations would need to be taken into account, they would not necessarily present significant

national policy accordance issues in the context of a Nationally Significant Infrastructure Project.

It is also acknowledged that the arrangements for NMU users have yet to be designed in detail at this options stage of the project. Widening of the A3 and alteration of the Junction 10 roundabout would necessitate a permanent diversion of the bridleway which currently crosses over the north-facing slip roads at the Junction. Options PAIN04 and PAIN4C would offer a more convenient diversion route for NMUs than Option PAIN10. Indeed, if Option PAIN10 were to be the preferred route, it may be necessary to provide a separate bridge over the A3 specifically for NMUs. Depending upon the final location (most likely in the same broad location as Option PAIN4C), there is the potential for a second bridge to give rise to additional impacts which would need to be taken into account in the decision- making process.

Table 5-4 Comparative Assessment of Options PAIN04, PAIN4C and PAIN10:

Issue	Option PAIN-04A	Option PAIN-04C	Option PAIN-10
Air Quality Directive: Compliance with EU limit values and Air Quality Strategy Objectives	No significant air quality issues anticipated, given that traffic flows would be below any threshold for assessment.	As per Option PAIN04	As per Option PAIN04
Water Framework Directive and NPSNN water resources policies	No significant WFD compliance or policy accordance issues identified, subject to suitable mitigation being put in place, including to avoid risk of contamination to secondary bedrock aquifer.	As per PAIN04.	As per PAIN04.
Habitats Directive: Protected Species	Potential for a low number of protected species to occur within scheme footprint.	As per PAIN04.	As per PAIN04
Habitats Directive: Mole Gap to Reigate Escarpment Special Area of Conservation	No significant compliance risks identified.	As per PAIN04.	As per PAIN04.
Habitats Directive: Thames Basins Heaths Special Protection Area	No direct loss of SPA habitat would be required and significant adverse effects on the SPA are considered unlikely.	As per PAIN04.	As per PAIN04.
Noise	<p>Negligible impact likely given the low traffic flows.</p> <p>Further assessment may be required to verify the impact on properties at Redhill Road, once projected traffic flows for the access road are confirmed.</p> <p>Consideration may need to be given to the use of Seven Hills Road South as an alternative, if suitable access controls can be incorporated to prevent use by other local traffic.</p>	As per PAIN04.	As per PAIN04, although given PAIN10's alignment within 15m of two vacant buildings on the west side of the A3 which are situated within a Noise Important Area, further assessment may be required to assess the potential for significant adverse effects to occur. However, this is considered unlikely either because these buildings would be acquired to facilitate construction of the proposed scheme or because of the site owner's aspiration to use them for commercial purposes

Issue	Option PAIN-04A	Option PAIN-04C	Option PAIN-10
Road Safety	Not assessed at this stage.	As per PAIN04.	As per PAIN04.
Ockham and Wisley Commons Site of Special Scientific Interest	Significant adverse effects on SSSI considered unlikely. The bridge works over A3 would be within approx. 40m of SSSI boundary on west side of A3 and stringent construction management practices would be required to avoid the risk of indirect or secondary adverse impacts. Some slight encroachment into the SSSI would be unavoidable when diverting the NMU route from Junction 10, however this would apply irrespective of which side road option is taken forward.	As per PAIN04. The bridge works would be within 10m of the edge of the SSSI on the west side of the A3, there is some risk of potential encroachment during construction, which would need to be assessed carefully in the next stage of the project.	No significant effects on the SSSI are anticipated.
Ancient Woodland	Would result in the loss of approximately 0.5ha of ancient woodland from an area of unnamed ancient and semi-natural woodland situated alongside the A3 on the edge of Painshill Park. This represents about 1/3 rd of the block of woodland. This would be contrary to NPSNN policy and thus it would be necessary to demonstrate that the national need and benefits of the project outweigh this impact. This would be an issue that would weigh against the Project at DCO examination.	As per PAIN04.	Option PAIN10 would result in the loss of about 0.7ha of ancient woodland from the block of unnamed ancient and semi-natural woodland adjoining the east side of the A3. This would represent about half of the block of woodland and 0.2ha greater impact than in PAIN04 and PAIN4C. This would be a policy risk for the project at DCO examination.
Designated Heritage Assets	Option PAIN04 would result in the loss of approx.1.2ha of land from the edge of the Grade I Registered Painshill Park. Most of the historic areas of the park centred on the River Mole would be unaffected, however some works would encroach over a walking routes/tracks near the Gothic Tower. Whilst this would affect only a very small part of the Park	Loss of land from and effects on the Grade I registered Painshill Park would be broadly comparable or marginally less than with Option PAIN04. Repositioning of the bridge over the A3, approximately 80-90m to the south (compared with PAIN04) and the use of retaining walls instead of earthworks, would reduce effects on the Gothic	Option PAIN10 would also require approximately 1.2ha of land from the Registered Park boundary but most of the area affected would lie outside that which is currently within the Painshill Park Trust management or which has been restored. Significant adverse effects are therefore unlikely.

Issue	Option PAIN-04A	Option PAIN-04C	Option PAIN-10
	<p>and would not result in substantial harm, given its high sensitivity and historic importance, the impact could still be significant.</p> <p>Significant adverse effects (less than substantial harm) on the setting of the Grade II* Gothic Tower are also assessed as possible, due to encroachment on the setting of the Tower and the loss of trees opening up views from the Tower to the A3 looking north and possibly to the proposed overbridge. The setting of the Grade II listed Foxwarren Cottage is also likely to be affected. These issues would weigh against Option PAIN04 but need not constitute a reason to refuse development consent in their own right. These constitute policy risks that would need to be taken into account in the option selection process, particularly as Historic England has expressed significant concerns about the likely effects.</p>	<p>Tower. However, the removal of trees alongside the A3 would still adversely affect its setting, albeit to a lesser degree.</p> <p>PAIN4C would also potentially impact on the setting of the Grade II Listed Foxwarren Cottage, situated on the west side of the A3 and there could be a small risk of impact on the setting of the hengiform Scheduled Monument situated approximately 80m to the east.</p>	<p>Option PAIN10 is not anticipated to give rise to any significant adverse impacts on the setting of the Grade II* Gothic Tower or other designated heritage assets in this area. Even if a separate NMU bridge needs to be provided in the vicinity of Redhill Road, this is unlikely to affect the setting of the Gothic Tower to the same degree as Options PAIN04 and PAIN4C, although such a structure could still potentially affect the setting of the grade II listed Foxwarren Cottage. Overall, Option PAIN10 is considered to be less damaging from a heritage perspective.</p>
Green Belt	<p>Option PAIN04 would result in the loss of approximately 1.3ha of Green Belt land. All options have been assessed as giving rise to significant landscape character effects, which indicates the potential for Green Belt policy accordance risks if it cannot be demonstrated that the openness would not be compromised. Otherwise local roads need not be treated as inappropriate development, which may negate the requirement to offer</p>	<p>Green Belt effects are likely to be comparable with Option PAIN04.</p>	<p>Effects on the Green Belt are likely to be comparable with Option PAIN04 and PAIN4C, as all options would involve bridge works over the A3. However, it is noted that the landscape character assessment has assessed Option PAIN10 as giving rise to a lower magnitude of impact than PAIN4C, most likely taking into account the urbanising effect of the retaining structure in PAIN4C. If a separate NMU bridge also needs to be provided under Option PAIN10, this</p>

Issue	Option PAIN-04A	Option PAIN-04C	Option PAIN-10
	exchange land under the Green Belt (London and Home Counties) Act 1938.		would add to the urbanising influence of the option.
Open space / Common land	No significant impacts on public open space or common land anticipated. The status of land at Red Hill (potentially within the Local Nature Reserve Boundary) would need to be confirmed in Stage 3, as if this is also access land, Option PAIN04 may result in very slight encroachment of 0.07ha. This would add to replacement land requirements, but is unlikely to present a significant additional policy risk.	Option PAIN4C encroaches into the edge of common land and access land at Red Hill, resulting in the loss of approximately 0.1h that would need to be compensated through the provision of suitable alternative replacement land. Failure to demonstrate that this impact has been compensated could represent a policy risk for the project at DCO examination.	No effects on common land or open access land anticipated. However, it should be noted that diversion of the bridleway which runs through Junction 10, would impact on registered common land and open space to the north east of the Junction.
Habitat of Principal Importance	Potential for the loss of approx. 1.9ha of deciduous woodland and woodland pasture Habitat of Principal Importance.	Potential for the loss of 0.6ha of deciduous woodland that is Habitat of Principal Importance.	Potential for the loss of 0.7h of deciduous woodland that is Habitat of Principal Importance. In all cases, it would be necessary to demonstrate the benefits of the scheme outweigh its impacts to justify making an exception to NPSNN policy on the protection of HPI.
Flood Risk Zone 3	No encroachment into areas at risk of flooding.	As per Option PAIN04.	As per Option PAIN04.

5.4.3 Conclusions on Painshill Options

With the exception of Option PAIN05, which is considered to give rise to very significant policy risks on the grounds of it being likely to cause substantial harm to the Grade I Registered Painshill Park, the Options for Painshill are considered to be finely balanced.

Option PAIN4C has been designed to reduce the impacts that would otherwise occur with PAIN04, most notably on the Grade II* Listed Gothic Tower. The assessments indicate that whilst PAIN4C would be less damaging in this regard, it would still be likely to adversely affect the Tower to a degree, potentially giving rise to a significant adverse effect on its setting primarily due to the removal of screening trees opening views of the A3. In addition, Option PAIN4C (as well as Option PAIN04) could adversely affect the setting of the Grade II listed Foxwarren Cottage and there would be a small risk of impact on the setting of the hengiform Scheduled Monument under Option PAIN4C. Option PAIN4C could also encroach slightly into registered common land on the east side of the A3, adding to the compensation requirements for the Proposed Scheme.

Option PAIN10, on the other hand would enable significant adverse effects on the Gothic Tower to be avoided and neither would it be likely to significantly affect Painshill Park, as most of the land required is outside of the managed and restored park area. Although not necessarily a key show-stopping policy test in the NPSNN, the landscape effects also indicate that Option PAIN10 would have a lower adverse impact, which may be of relevance to Green Belt considerations. However, on the negative side, Option PAIN10 would have a slightly greater adverse impact on ancient woodland resulting in the loss of approximately 0.7ha of ancient woodland compared with 0.5ha of ancient woodland loss in options PAIN04 and PAIN4C. Option PAIN10 would also be less convenient as an alternative crossing point for NMUs, given that the existing bridleway through the north side of the junction would need to be permanently diverted. However, this could be addressed through the provision of an additional and separate NMU crossing to be sited in the vicinity of Redhill Road. This would add to the cost of the project and could potentially affect the setting of the Gothic Tower, albeit to a lesser degree than is likely to be the case under Option PAIN4C and PAIN04.

On balance, the benefits that Option PAIN10 could offer in terms of avoiding potentially significant heritage impacts on the grade II* listed Gothic Tower is considered likely to outweigh its slightly greater impact on ancient woodland when compared with either Option PAIN04 or PAIN4C as well as its greater area of land take overall. The ancient woodland would be affected regardless of which option is taken forward and the extra area of loss (0.2ha) in Option PAIN10 is unlikely to materially change the significance of the effect on this woodland when compared with the effects of Option PAIN4C. Whereas the avoidance of potentially significant impacts on the Gothic Tower and other heritage assets that Option PAIN10 would offer, would represent a material benefit in terms of reduced policy accordancy risks. On this basis and having regard to the statutory obligations in the Infrastructure Planning (Decisions) Regulations 2010, which require those making decisions on NSIPs to have regard to the desirability of preserving a listed building and its setting, Option PAIN10 is preferred.

However, recognising the weight that would be given to the protection of ancient woodland at DCO examination, consideration should be given to further refining the design of Option PAIN10 where opportunities arise, with a view to reducing the extent of impact on ancient woodland as far as possible. It is however recognised that such opportunities are likely to be significantly constrained by the proximity of overhead power lines in this area and security arrangements for the Heyswood Guide Camp.

5.4.4 Compulsory Acquisition of Affected Properties as an Access Option/Solution

A further possible solution to the problem of access at Painshill is to include provision within the DCO to compulsorily acquire some of the affected properties, notably Court Close Farm, New Farm and the Heyswood Guide Camp, thus negating the need and impacts associated with having to provide an alternative means of vehicular access.

The analysis presented above has highlighted the degree of challenge in identifying an alternative means of local access that is suitable and convenient for all of the properties affected and environmentally acceptable in this highly-constrained location. The presence of two sets of overhead power lines alongside the A3 has further constrained possible solutions, to the extent that overall it has not been possible to identify a single solution which avoids either impacting upon ancient woodland (as is the case in Option PAIN10) and/or affecting the setting of listed buildings and potentially a scheduled monument (as is the case in Options PAIN04 and PAIN4C). All options would affect the Grade I registered Painshill Park to varying degrees, particularly any possible solutions that seek to reconnect to the local network in the Cobham direction. Alternative solutions to the north of PAIN10 would be constrained by the presence of sensitive land uses, including Felton Fleet School, whilst options to the south of PAIN4C would be constrained by the proximity of the Wisley and Ockham Commons SSSI, common land and the hengiform scheduled monument. All of these factors would represent notable policy risks for the scheme at examination, if other solutions were to be pursued.

The degree of benefit that a compulsory acquisition solution could offer would ultimately depend upon a range of factors, including the costs of acquisition relative to the cost of bridge construction and acquiring land for its construction, as well as a range of environmental, land use, stakeholder and policy considerations. Moreover, unless all of the properties were to be acquired, there would continue to be a degree of impact that would reduce the level of benefit. The Heyswood Guide Camp is the main traffic generator of the affected group of properties, with coaches regularly needing to access the site, particularly during the summer season. If the Camp site were to be acquired along with the neighbouring Court Close Farm it is possible that a more modest alternative access solution routed out via Painshill Park could be agreed upon to enable New Farm and the Gas Valve Compound to be retained.

Section 122 of the Planning Act 2008 requires that a DCO may only authorise compulsory acquisition of land if the following key tests are satisfied:

- that the land to be acquired is necessary to facilitate the scheme to which the development consent relates (in other words that it is no more than is reasonably necessary (or proportionate) and that there are no satisfactory alternative solutions that can be found); and
- that there is a compelling case in the public interest for the land to be acquired compulsorily (in other words there is a need for the project generally as well as for the closure of the access points in question and that the public benefits of avoiding significant environmental impacts outweigh the private losses of those property interests likely to be affected).

The public benefit that would derive from the A3 widening and the safety case for closing the direct access points is assumed to provide a compelling case in general terms. Thus the merits of a compulsory acquisition solution would instead centre on whether or not there are any other reasonable alternative access solutions that could have been adopted instead.

The assessment of the Painshill side road options presented above highlights that the options are finely balanced, both Options would give rise to significant environmental and policy impacts. To justify a compulsory acquisition solution, it would need to be

demonstrated that those impacts would be of such significance that it would be in the public interest to avoid them and to do otherwise would put the delivery of the project in jeopardy. For Option PAIN10, it logically follows that the merits of the acquisition case would focus on whether the policy risk associated with the loss of ancient woodland in Option PAIN10 and to a lesser extent its impact on the Grade 1 registered Painshill Park would warrant interference with rights of ownership or use and thereby potentially engaging the human rights of those with an interest in the land under Articles 1 and 8 of the First Protocol of the European Convention on Human Rights. For Option PAIN4C the case would depend upon the weight given to the avoidance of impacts on the setting of the Grade II* listed Gothic Tower and the reasons why Option PAIN10 could not be taken forward as a potentially less damaging alternative.

At this stage, there remains a question as to whether the acquisition case would be sufficiently compelling. In the case of Option PAIN10, whilst the NPSNN contains a presumption against the loss of ancient woodland, it does allow for exceptional cases to be made where there is a national need and where it can be demonstrated that the benefits of the project outweigh the harm. There is undoubtedly some scope to make that case, including taking into account the already fragmented nature of the woodland. However, this would still remain a notable policy risk for the project at examination. For Option PAIN4C, the need to avoid significant adverse effects on a grade II* listed building could provide a stronger case, but this could be undermined if Option PAIN10 was proven to offer a viable and less damaging alternative that avoided the need for compulsory acquisition. In both cases, an NMU crossing would still need to be provided to replace that which currently passes through the north side of Junction 10. This means that even with a compulsory acquisition solution, some impacts and land take would be unavoidable, which would diminish the overall case and justification.

Overall, for a compulsory acquisition solution to be viable, there would need to be confidence that the policy accordancy risk would clearly outweigh the risk to the project should the justification for compulsory acquisition not be accepted and the impacts on private interests be deemed to outweigh the policy harm.

In policy accordancy terms, there is nothing in the NPSNN that explicitly suggests that the displacement of the Guide Camp and one or two residential properties (as a result of compulsory acquisition) would constitute grounds for the refusal of a nationally significant infrastructure project in policy terms. Although undoubtedly the Guide Camp is a valuable recreational facility, it is unlikely that its acquisition would be regarded as a loss of open space (land used for the purposes of public recreation) as the use of the site is limited to members of the Guides Association only. This means that the presumption against the loss of open space in the NPSNN would not be applicable to an acquisition solution. Other national planning policies, notably in the National Planning Policy Framework, contain a presumption against the unnecessary loss of valued community facilities and thus the Environmental Impact Assessment of the Proposed Scheme is likely to assess its loss as a significant community effect. However, this effect can theoretically be addressed through financial compensation to allow a suitable alternative site to be procured.

Taking these factors into account, it is recommended that Highways England enter into negotiations with affected property interests to identify opportunities to acquire by agreement. Even if a compulsory acquisition route were to be pursued following further assessment work on impacts, it would still be necessary to demonstrate that all reasonable steps had been taken to resolve matters by agreement in the first instance.

[Concluding observations on Compulsory Acquisition](#)

Overall, compulsory acquisition could be a solution which merits further investigation, but given the stringent tests and the need for compelling justification, further work would be needed to establish whether a sufficiently strong case can be proven. It is recommended that Highways England continues to engage with the Heyswood Guide

Camp and other property interests to identify whether suitable alternative accommodation could be found. It is also recommended that further discussions are progressed with Historic England, Natural England, Surrey County Council and Painshill Park Trust to establish whether they would support the principle of land acquisition as a means of avoiding significant environmental impacts and delivering a holistic compensation package.

5.5 Summary and Conclusions

The assessment has highlighted that all of the local side road/access road options are likely to affect designations that would conflict with NPSNN policies to varying degrees. Individually, none of the impacts would be of such magnitude that they would constitute grounds for development consent being refused. However, the accumulation of impacts would undoubtedly present significant challenges that would weigh against the proposals at the DCO examination stage. It would be necessary therefore to demonstrate that the need for and benefit of closing the access points would outweigh the cumulative effects of doing so. The greater the harm and conflict with policies (measured in terms of impact and the sensitivity of the receptor) the greater the level of safety benefit that would need to be proven.

Overall, the options are considered to be very finely balanced and other factors such as cost and stakeholder needs would also have a significant bearing on the final decision. However, based on an analysis of likely accordance with the National Policy Statement for National Networks and other relevant legal tests, the options with the lowest potential risk for the DCO are on balance considered to be:

- **A3 Ockham to M25 J10 (including Wisley Lane) access** – Option WIS11, on the basis that it can be designed in such a manner so as to avoid significant impacts on the SPA and SSSI and on RHS's Garden at Wisley, provided that ancient woodland can be avoided through slight realignment and suitable compensatory measures can be identified to offset impacts on ecological resources and common land; and
- **A3 Painshill to M25 J10 access** – Option PAIN10, primarily because it would avoid significant effects on the Grade II* Gothic Tower at Painshill Park, although the possibility of acquiring properties affected on the east side of the A3 may also warrant further consideration, particularly if that can be achieved by agreement, as this would negate the need for an overbridge and a slightly greater impact on ancient woodland that Option PAIN10 would entail;

A decision on the south facing slip roads at the Ockham Interchange would need to be determined largely on the basis of traffic need by the Local Highway Authority and whether the benefits of providing the slip roads are so compelling that they justify the additional costs and environmental impacts. The addition of the slip roads would result in further impacts on the Green Belt and on ancient woodland that would cumulatively weigh against the overall scheme at the DCO stage, particularly if a national need for these particular works cannot be demonstrated.

6 Further work and recommendation

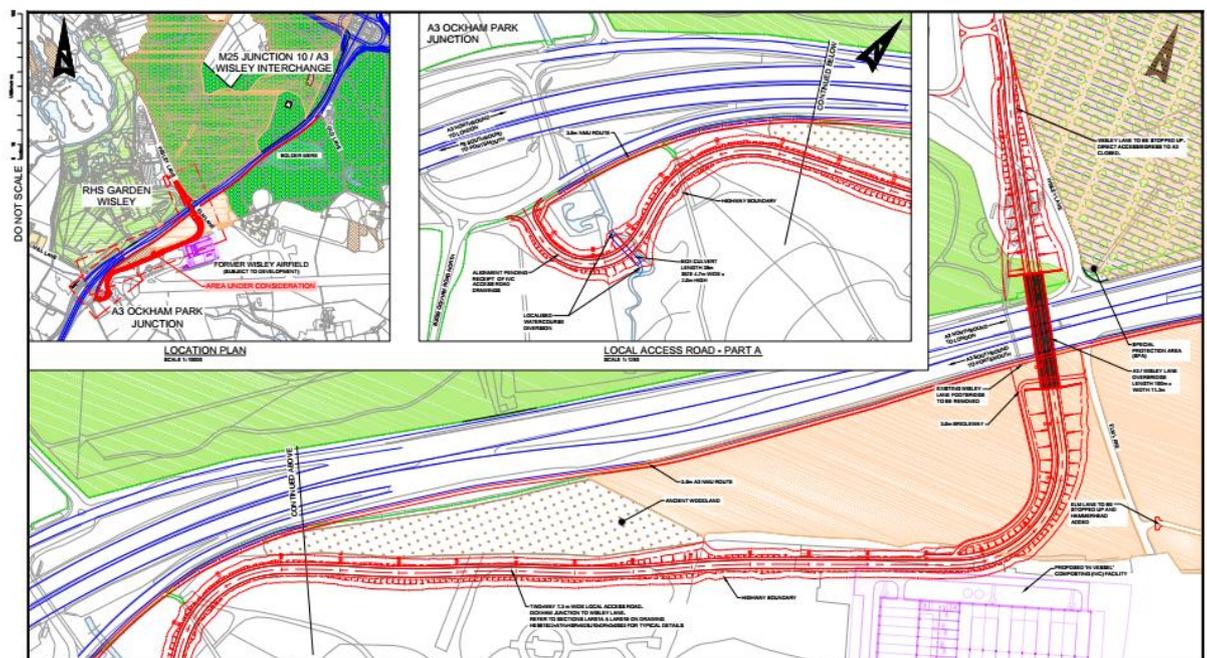
6.1 Further work since the first draft

Between the first draft (v2.4a) and the second draft (v2.4b) further work has been undertaken to refine the WIS11 option to avoid the ancient woodland and by RHS Wisley's consultant to avoid SPA land take. The changes are relatively minor and are intended to reduce the impacts of the scheme on certain land use designations and as such are presented below rather than assessed above.

6.1.1 Amendments to WIS11

The amendments remove the road some the ancient woodland. This option was already favoured for its environmental impacts and accordance with the National Policy Statement and the changes would have little impact on cost, although would require negotiation with Wisley Airfield Limited. This would not change the conclusions of the earlier work and WIS11 would still be favoured.

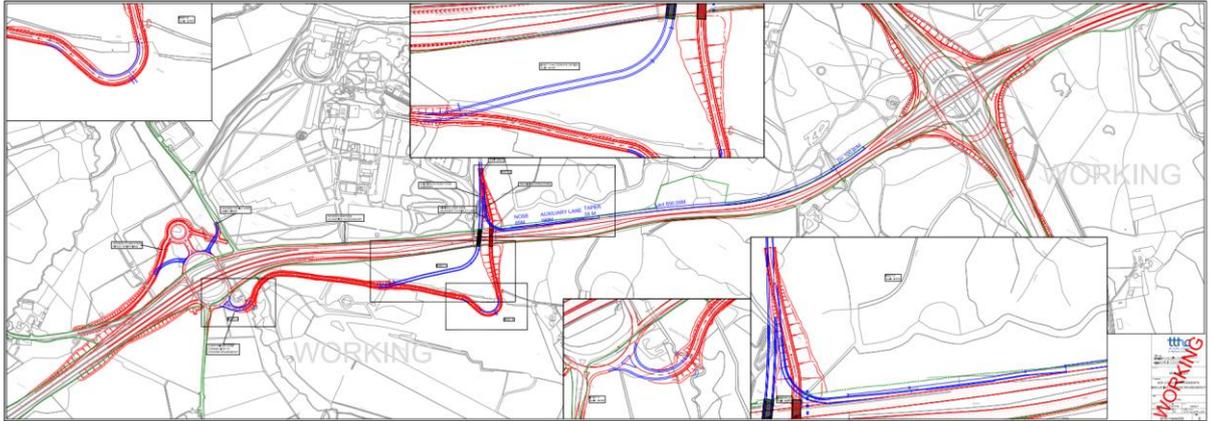
Figure 6-1 Refined WIS11



6.1.2 Amendments to WIS12

Option WIS12 (Figure 6-2) was put forward by the RHS as an alternative solution to reduce impacts on the SPA and to still enable its visitors to exit directly to the A3 northbound carriageway from Wisley Lane. The RHS has raised concerns about the closure of Wisley Lane on the grounds that it would result in more circuitous journeys for the 30-40% of its visitors originating from the south. Data collected by Atkins shows that approximately 20% of visitors travel to/from the south via the A3 and would thus be potentially affected by circuitous routing.

Figure 6-2 Refined WIS12 proposed by RHS Wisley



The refined Option WIS12 would avoid any encroachment into land within the current RHS Wisley fence line, although as with Options WIS10 and WIS11, it would still necessitate some works on land at the junction of Wisley Lane, which would fall within Registered Garden boundary. The loss of this area of woodland verge is unlikely to give rise to a significant adverse effect on the value of Wisley Garden as a designated heritage asset.

When other key policy tests are taken into account, The refined Option 12 does not appear to offer any significant benefit compared with the refined Option WIS11. More significantly, the refined Option WIS12 could result in the potential loss of an additional strip of SPA and SSSI habitat which is also registered common land alongside Wisley Lane (further analysis is required to confirm this although it looks to be no more than only a very small impact) and alongside the A3. The potential for air quality effects on the SPA would also be greater with the refined Option WIS12 than with the other options due to proximity. This means that in terms of the more critical SPA and SSSI designations, the refined Option WIS12 would have a greater impact than the refined Option WIS11. Given the importance of the SPA designation and the legal tests about having to demonstrate that there are no other feasible and less damaging alternatives, the refined Option WIS12 would entail a greater legal compliance risk than WIS11, which should be given appropriate weight in the option selection process.

The effect on road safety and highway design standards is also a relevant consideration. The NPSNN directs that consent should be refused if a scheme does not contribute to an improvement in the safety of the Strategic Road Network (SRN). Observed accident data for the period 2010-2015 indicates that there were six reported accidents directly relating to the Wisley Lane junction, primarily due to the conflict between A3 traffic and traffic merging onto the A3 from Wisley Lane rather than traffic exiting the A3. COBA-LT analysis has shown that if Wisley Lane were to be kept open with a widened A3, there would on average be one more accident per year than would occur under a WIS01 type arrangement, which over a 60 year appraisal period would equate to a difference of £3-£4million economically. As Option WIS12 would still incorporate a northbound merge, it follows that it would not be able to achieve the same degree of safety benefit as the other Wisley Options. This would present a further risk that would weigh against either Option WIS12.

The side roads assessments do not appear to suggest that the benefits for RHS Wisley visitors (in terms of more direct egress) would outweigh the adverse impacts, including the increased impact on the SPA/SSSI and area of common land to the north of Wisley Lane and the greater safety risk for road users. On this basis, there is insufficient evidence to justify taking forward the refined Option WIS12 over the refined Option WIS11.

6.2 Recommendation

This assessment has considered the environmental, policy, traffic and cost impacts of the various side road components considered during Stage 2 but not concluded at the time of SAR submission (access to Wisley Lane, Pond Farm and Painshill to M25 J10 affected properties).

This analysis has been undertaken at a relatively high level, although all options have been discussed with stakeholders during site visits to supplement the study team's thinking about the options.

The level of information available for assessing the comparative options is broadly consistent with the methodology adopted throughout Stage 2. Whilst it is unlikely that further design detail and assessment would result in changed conclusions, the study team recognise that Stage 3 would involve more detailed design and assessment and that may highlight challenges to delivering a component that isn't evident at present.

6.2.1 A3 Ockham to M25 J10 (including Wisley Lane) access:

On this basis the study team recommend **Option WIS11** as the preferred solution to closing Wisley Lane's access to the A3. This is on the basis that:

- The cost of WIS11 (which includes NMU access across the A3 but its costs included another crossing) is only thought to be marginally more expensive than WIS01.
- The environmental impact of WIS11 is least in terms of the SPA/SSSI and also avoids the screening offered by the tree line at the RHS boundary with the A3.
- In policy terms the impact of WIS11 on the Common Land can be mitigated by replacement whilst any impact on Registered Park and Garden land cannot be.
- In traffic terms the impact of WIS11 on the Ockham interchange can be mitigated by signalisation of the roundabout which is part of the Wisley Airfield Development proposal (should it proceed).
- The study team find no need for left out access from Wisley Lane to the A3 (WIS12) nor at south facing slips required at Ockham.

Regarding access to Pond Farm; Option CAMP03B would require less land take compared with Option CAMP02 and would have a lesser impact on the SPA, both in terms of direct loss of habitat and the extent and importance of the areas likely to be disturbed, particularly on the east side of the A3. On this basis, the study team recommend **Option CAMP03B**.

6.2.2 A3 Painshill to M25 J10 access

This is less clear cut but the possibility of combining NMU access on the **PAIN-04c** option is compelling, not least because an NMU crossing in the vicinity of the Gothic Tower would be required in either option. However, the opposition of Historic England is known and challenges that this would face have been described in this note. Further design work reduce impact on the registered Park and Garden and to reduce impact on the ancient woodland should be pursued. Should this not be possible, the alternative solutions would be PAIN-10, although that affects Ancient Woodland, and purchase by agreement.