
WPIL's Responses to the Examining Authority's First Written Questions

Prepared for:

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1. Summary

- 1.1. This report provides Wisley Property Investment Limited's (WPIL) responses to the Examining Authority's First Written Questions in respect of the proposed M25 Junction 10 upgrade. It refers where necessary to the Written Representation (WR) submitted by WPIL in November.
- 1.2. WPIL is the principal landowner of Wisley Airfield, which is allocated for a new settlement by allocation A35 of the adopted Guildford Local Plan 2015-2034 (GBLP). Appendix 1 of our WR demonstrates WPIL's land ownership on the basis of the previous planning application submitted in 2014 (which was dismissed at Appeal in June 2018, 'the Appeal Scheme'). Part of the new settlement allocation is affected by Highways England's (HE) Development Consent Order (DCO) application for the upgrading of M25 Junction 10. A planning application for the new settlement will be submitted in 2020, with implementation envisaged alongside the HE's proposed works from 2022. The first occupations in 2022/23 will coincide with the practical completion of the Junction 10 works. WPIL's planning application will be a resubmission to the application dismissed at appeal, as the outstanding matters informing the dismissal of that appeal were resolved with the adoption of the GBLP.
- 1.3. As outlined in our WR, notably Section 3, WPIL is broadly supportive of the DCO scheme and the necessity to make enhancements to the strategic road network on the A3/ M25 at and around Junction 10. Subject to satisfactory resolution of the issues identified in the WR (see Sections 4 and 5 of this Representation), the improvements will enable the delivery of the GBLP allocation, as noted by the Plan itself (for example Section 3: *Spatial Vision for the Borough*, Policy ID2: *Supporting the Department for Transport's "Road Investment Strategy"*, allocation A35: *Former Wisley Airfield, Ockham* and Appendix 6 - *Infrastructure Schedule*). In particular, allocation A35 acknowledges the relationship between the delivery of the new settlement and the M25 Junction/A3 Wisley interchange upgrade. The delivery of the Junction upgrade is supported by Guildford Borough Council's (GBC) Infrastructure Delivery Plan (IDP).
- 1.4. Where relevant, resolutions to some of the Written Questions may be achieved by a Statement of Common Ground, in progress with HE (see paragraphs 4.5-4.7 of the WR). In addition, WPIL will review and where necessary respond to the Local Impact Reports (LIRs) of Guildford Borough Council (GBC) and Surrey County Council (SCC), due for submission to the DCO Examination in December 2019.
- 1.5. As an update to the Examination, the Examining Authority will be aware that the Judicial Review of the GBLP was concluded on 4 December ([2019] EWHC 3242 (Admin)) (**Appendix 1**). All the grounds for the challenge were dismissed, and hence full weight may continue to be applied to the adopted GBLP.
- 1.6. We have noted that some of the Examiners Questions refer to 'Oakham Park' and have taken this as a typo, as the relevant highways are known as 'Ockham Interchange' or 'Ockham Park'.

2. Responses to Examining Authority's First Written Questions for WPIL

2.1. This section outlines the questions addressed to WPIL in the Examining Authority's (ExA) First Written Questions and WPIL's responses.

Question: 1.13.4

Please provide a copy of:

- a) **The 'WSP scheme' for the Ockham Park junction referred to in paragraph 7.61 of the TA [APP-136].**
- 2.2. The Detailed Access Drawing (Ockham Interchange) including improvements (ref. 0934-SK-005 F) was attached to WPIL's Written Representation (WR) at Appendix 5 (REP1-048). This was agreed with Highways England, Guildford Borough Council (GBC) and Surrey County Council (SCC) and submitted to the Wisley Airfield appeal inquiry as an agreed condition plan. The Wisley Airfield appeal draft conditions were attached to the Written Representations at Appendix 10 (see condition 4).
- b) **The appeal decision referred to by the Wisley Action Group [RR-029].**
- 2.3. The Appeal Decision was attached to WPIL's WR at Appendix 7a. This should be read in conjunction with the associated costs application determination attached to WPIL's WR at Appendix 7b, the letter from James Brokenshire to GBC Leader Paul Spooner deciding not to intervene in GBLP (October 2018) attached to WPIL's WR at Appendix 8 and James Maurici QC's closing statement to the Appeal (November 2017) attached to WPIL's WR at Appendix 9.
- 2.4. Issue 4 of the Judicial Review of the GBLP, which was dismissed by the High Court on 4 December 2019 (**Appendix 1**), made clear that:
- The Appeal Decision concerned a larger part of allocation A35 and not all of it. The GBLP Inspector did treat the Appeal Decision as relevant in determining the soundness of the Allocation and provided determination on its relevance in his Report.
 - The frameworks for the respective decisions on the Appeal Scheme and the GBLP soundness were markedly different, notably in the context that the Appeal Scheme was judged on the basis of the former 2003 Local Plan.
 - The Appeal Decision afforded appropriate weight to the objections to allocation A35 on the basis that the GBLP was emerging. The GBLP Inspector judged the soundness of allocation A35 on the basis of those objections.
 - By the time of the GBLP Examination, major strategic issues such as highways could be resolved, which was not the case at the time of the Appeal Scheme Inquiry.

- c) The Transport Assessment or any other document prepared by WPIL in connection with the determination of the appealed planning application that identifies the anticipated vehicular traffic volumes and routing associated with the redevelopment of the airfield.

2.5. **Appendix 2** to this submission contains Appendix J to highways engineer Colin McKay's proof of evidence to the Wisley Airfield appeal inquiry shows the anticipated traffic volumes generated from the Appeal scheme – which is of comparable size to the allocation. The generated traffic volumes are outlined in **Figure 2.1**. These traffic volumes were validated and agreed with SCC.

Figure 2.1 – Trip Generation of Wisley Airfield Development

Summary of proposed vehicular trip rates

Vehicular trip rate per dwelling or 100sqm GFA	AM Peak (0800-0900)			PM Peak (1700-1800)		
	In	Out	Two-way	In	Out	Two-way
Residential (trips per dwelling)	0.100	0.395	0.494	0.360	0.160	0.520
B1 Employment (trips per 100sqm GFA)	1.414	0.327	1.741	0.206	1.089	1.295
B2/B8 Employment (trips per 100sqm GFA)	0.670	0.158	0.828	0.118	0.728	0.846
Employment A3/ A5 (trips per 100sqm GFA)	2.567	2.345	0.219	3.518	3.138	6.656
Secondary School (trips per pupil)	0.138	0.081	0.219	0.023	0.032	0.055

Resulting number of vehicular trips

Vehicular trip rate per dwelling or 100sqm GFA	AM Peak (0800-0900)			PM Peak (1700-1800)		
	In	Out	Two-way	In	Out	Two-way
Residential (2,068 dwellings)	207	817	1,022	744	331	1,075
B1 Employment (1,790sqm GFA)	25	6	31	4	19	23
B2/B8 Employment (2,500sqm GFA)	17	4	21	3	18	21
Employment A3/ A5 (2,240sqm GFA)	58	53	110	79	70	149
Secondary School (500 external pupils)	69	41	1	12	16	28

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Wisley Airfield



External vehicular trip generation

Vehicular trip rate per dwelling or 100sqm GFA	AM Peak (0800-0900)			PM Peak (1700-1800)		
	In	Out	Two-way	In	Out	Two-way
Residential	121	755	874	678	263	941
B1 Employment	20	5	25	3	16	19
B2/B8 Employment	13	3	17	2	15	17
Employment A3/ A5	14	13	28	20	18	37
Secondary School	35	20	55	6	6	14
Total	203	796	998	709	318	1,027
Total employment	83	41	124	31	56	86

Internal %	Vehicular trip rate per dwelling or 100sqm GFA	AM Peak (0800-0900)			PM Peak (1700-1800)		
		In	Out	Two-way	In	Out	Two-way
	Residential (2,068 dwellings)	86	62	148	66	68	134
20%	B1 Employment (1,611sqm GFA)	5	1	6	1	4	5
20%	B2/B8 Employment (2,250sqm GFA)	3	1	4	1	4	4
75%	Employment A3/ A5 (560sqm GFA)	43	39	83	59	53	112
50%	Secondary School (500 external pupils)	35	20	55	6	8	14

(Source – **Appendix 2: Appendix J – Appendices to the proof of evidence of Mr Colin McKay - based on Scenario C 2031 with Development Model Flows**)

- 2.6. The routing of traffic from The Wisley Airfield Development site is based on 2011 journey to work data for the employment element, and a combination of journey to work data (to account for work related trips) and a simple gravity model (account for other journey purposes) for the residential elements. A summary of the distribution for both residential and employment uses was agreed with SCC and HE as part of the Transport Assessment scope and is shown in Table 4-2 of the Assessment Approach and Forecast Assumptions Report that forms Appendix F to the Transport Assessment Addendum (see **Appendix 8**). This information is reproduced in Figure 2.2 below.

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Wisley Airfield



Figure 2.2 – Distribution of Wisley Airfield development trips

Location	Residential Trips (%)	Employment Trips (%)	
Surrey	Elmbridge	10	6
	Epsom and Ewell	1	1
	Guildford	34	43
	Mole Valley	9	6
	Reigate and Banstead	0	1
	Runnymede	6	3
	Spelthorne	1	0
	Surrey Heath	1	2
	Tandridge	0	1
	Waverley	2	7
	Woking	22	13
Buckinghamshire	0	0	
Hampshire	2	5	
Kent	0	0	
West Sussex	1	2	
Berkshire	1	1	
East Sussex	0	0	
Inner London	3	1	
Outside London	6	4	
East of England	0	0	
South West	0	0	
East Midlands	0	0	
North East	0	0	
North West	0	0	
West Midlands	0	0	
Yorkshire and the Humber	0	0	
Scotland	0	0	
Wales	0	0	
Total	100*	100*	

Responses to Examining Authority's First Written Questions

Wisley Airfield



*minor errors due to rounding

Source:- **Appendix 8: WSP -Table 4-2 of the Assessment Approach and Forecast Assumptions Report that forms Appendix F to the Transport Assessment Addendum (December 2015)**

- 2.7. The routes to/from the development to each location were determined by the SINTRAM traffic model used in WPIL's planning application. This was a different traffic model to the one now being used by HE in its Traffic Assessments, and did not include the full M25 junction 10 enhancement currently proposed. SINTRAM also included a restriction preventing southbound movements along Old Lane towards the site, a restriction that forms no part of HE's current scheme.
- 2.8. Only the net effects of the development on future traffic flows are available from documents previously produced for WPIL's Wisley Airfield planning application and subsequent appeal, so it is not possible to distinguish the development traffic on the wider highway network from the effects of traffic reassignment due to future congestion on the network. However, it is possible to identify the number of vehicle movements at each site access, as outlined in Figure 2.3.

Figure 2.3. – The number of vehicle movements at each site access

Access	AM		PM	
	In	Out	In	Out
Old Lane	37	349	128	162
Ockham Park	167	447	581	158

See **Appendix 2: Extract of Appendix N - Appendices to the proof of evidence of Mr Colin McKay**

- d) **The 'Agreed Statement on Progress' of 13 March 2018 concerning the provision of north facing slips at Burnt Common junction referred to in paragraph 2.3.2.5 of SCC's relevant representation [RR-004].**
- 2.9. Please see **Appendix 3** attached.

Question 1.13.5

By reference to a map please provide details of all of the intended, agreed or otherwise, vehicular and non-motorised user access points for the redevelopment of Wisley Airfield.

- 2.10. **Appendix 4** outlines the various accesses proposed as part of the delivery of the Appeal Scheme. Similar measures will be proposed as part of the new planning application for the proposal on allocation A35.
- 2.11. Wisley Airfield is crossed by footpaths and bridleways, as shown on the Site PRow's plan (**see Appendix 5**). The site benefits from an existing access from Ockham Lane, and a consented access from Ockham Park roundabout by virtue of the implemented, extant in-vessel composting planning consent

APP/B3600/A/09/2098568 (March 2010), described in paras. 2.5-2.10 of the WPIL WR to the DCO Examination (the consented IVC access is shown at Appendix 8 of the WR).

- 2.12. The Wisley Airfield Appeal scheme proposed to stop up the existing access to Ockham Lane save for NMU users, and to introduce a new access to Old Lane in accordance with 0934-SK-025-J (**See Appendix 6**), as agreed with GBC and SCC and submitted as an agreed planning condition plan to the Wisley Airfield Appeal (see Appendix 10 of the WPIL WR). Policy A35 of the GBLP requires primary access to the site allocation via the A3 Ockham Interchange, and a through vehicular link is required between the A3 Ockham Interchange and Old Lane. A potential access to the Wisley Airfield new settlement is at Appendix 3 of WPIL's WR.

Question 1.13.6

Having regard to the representations made by SCC [RR-004], RHS [RR-024] and WPIL [RR-030] if the Secretary of State was to grant the DCO and then the authorised scheme was to be implemented, could south facing slips at the Ockham Park junction subsequently be installed without detriment to either the free or safe operation of the A3?

- 2.13. It would be difficult to retrofit the south facing slips at the Ockham Park junction existing roundabout as the existing roundabout would need either the large scale junction improvement proposed by RHS Wisley Gardens in the past, or a new roundabout on B2215 Portsmouth Road and a new bridge over the A3 for the southbound on slip. In either case, this could potentially clash with the existing slip roads for the Ripley Service areas by leaving insufficient distance between them to satisfy DMRB design standards for grade separated junctions.
- 2.14. There is no requirement in the GBLP for south facing slips at Ockham Interchange, and the infrastructure is not required to deliver allocation A35. WPIL would therefore not support the implementation of this infrastructure as it is not necessary. It is also not thought that HE would support the implementation. Hence the DCO cannot have a bearing on this unplanned infrastructure.

Question 1.13.7

Without south facing slip roads at the Ockham Park junction how would traffic originating from the south of this junction and heading for the Wisley Airfield redevelopment site exit the A3 and how would southbound traffic exiting the airfield site join the A3? The responses to this question should include any identified routes being drawn on a map base.

- 2.15. The WSP drawings in **Appendix 7** show the following routes:

Northbound –

- a) off at Burnt Common, via B2215 Portsmouth Road and Ripley to Ockham Park then via Wisley Lane

Diversion; or

- b) north on A3 to Junction 10 then u-turn at Jn 10 then via A3 slip road on southbound carriageway south of Junction 10 to Old Lane access; or
- c) north on A3 to Junction 10 then u-turn at Jn 10 and via A3 southbound carriageway to Ockham Park then via Wisley Lane Diversion.

Southbound

- a) via Old Lane to A3 slip road on southbound carriageway south of Junction 10; or
- b) via Wisley Lane diversion to Ockham Park junction, B2215 Portsmouth Road, Ripley, to A247 Clendon Road and A3 southbound on-slip.

- 2.16. The ExA should note that northbound route b) to the site was not available in the Wisley Airfield Appeal scheme due to the proposal at that time to close Old Lane to southbound traffic at a point south of the A3/Old Lane junction between the two existing car parks. Surrey County Council and Highways England agreed that closure as part of the access strategy at that time. At this time it is not decided whether or not to promote that closure as part of any revised planning application for development on Wisley Airfield.

Question 1.13.8

- a) What, if any, interdependency would there be between the implementation of a redevelopment scheme for Wisley Airfield and any development that might be authorised by a road scheme subject to the DCO application?**

- 2.17. As explained in WPIL's WR, the implementation of the DCO has the potential to alter the delivery of Wisley Airfield allocation A35, hence the involvement of WPIL in this DCO application process. The opportunity exists to co-ordinate both the DCO implementation and the new settlement application. The DCO application can inform the consultation and determination of the planning application for the new settlement. The planning approval for Wisley Airfield will include conditions and Section 106 obligations, which can correspond with the provisions of the DCO.
- 2.18. There is likely to be a Grampian condition on the development of Wisley Airfield prohibiting occupation of any dwellings until any road scheme authorised by the DCO application is open to traffic, as envisaged by the HE / WPIL Agreed Position Statement (see Appendix 11 of the WPIL WR).
- 2.19. Given this Grampian condition, it is imperative that HE continues to work with WPIL to ensure the timely delivery of both schemes in order to ensure the GBLP is implemented effectively. The timing of the planning application to implement allocation A35 was outlined in Table 2.1 of the WR.

- b) Is there any requirement under the provisions of allocation A35 of the Guildford Local Plan of 2019**

for south facing slips at the Ockham Park junction to be provided and if so at what stage in the airfield scheme's build out would the slips' need to be available for use?

2.20. There is no such requirement.

Question 1.13.15

How many 'U-turn' movements generated by RHS Wisley and the redevelopment of the Wisley Airfield have been predicted to take place within M25 J10 by 2037 in the absence of south facing slips at the Ockham Park junction?

2.21. This is a question for the applicant. WPIL is unable to advise on this matter.

Question 1.16.19

Would the proposed land take for the Proposed Development have any adverse effect on the proposals to mitigate Wisley's Airfield redevelopment on the SPA, including the provision of Suitable Alternative Green Space?

2.22. As set out within Table 4.1 of WPIL's WR, the proposed land take has the potential to adversely affect the Wisley Airfield proposals to mitigate the impact on the SPA in the short term. The majority of the proposed land take is temporary under Book of Reference 2/1 and 2/3 (AS-002). However the timings of the DCO implementation could potentially delay the occupation of the dwellings as an initial phase of SANG is proposed as part of phase 1 and therefore may need to in place prior to occupation of any dwellings.

2.23. Based on this, and as set out in the WPIL WR, WPIL's first preference is for this land to be removed from the DCO application, or as a second preference it should only extend to an area not proposed for SANG to avoid impact on SANG creation and housing delivery.

2.24. Should the ExA be minded to retain the temporary construction compound and topsoil storage area as shown on Work Plans 2 and 23 (AS-003), it is requested that a Requirement is put in place that this area is not used beyond 2022. This timeframe would ensure the first dwellings can be occupied in 2022/23 once the initial phases of SANG are delivered.



Appendices



Appendix 1.0 Judgement. Judicial Review of the GBLP [2019] EWHC 3242 (Admin) (December 2019)



Neutral Citation Number: [2019] EWHC 3242 (Admin)

Case Nos: CO/2173,2174,2175/2019

IN THE HIGH COURT OF JUSTICE
QUEEN'S BENCH DIVISION
ADMINISTRATIVE COURT
PLANNING COURT

Royal Courts of Justice
Strand, London, WC2A 2LL

Date: 04/12/2019

Before :

SIR DUNCAN OUSELEY
Sitting as a High Court Judge

Between :

COMPTON PARISH COUNCIL (2173)
JULIAN CRANWELL (2174)
OCKHAM PARISH COUNCIL (2175)

Claimants

- and -

GUILDFORD BOROUGH COUNCIL
SECRETARY OF STATE FOR HOUSING,
COMMUNITIES AND LOCAL GOVERNMENT
-and-

Defendants

WISLEY PROPERTY INVESTMENTS LTD
BLACKWELL PARK LTD
MARTIN GRANT HOMES LTD
CATESBY ESTATES PLC

Interested
Parties

Richard Kimblin QC (instructed by Richard Buxton & Co) for Compton Parish Council
Richard Kimblin QC and Richard Harwood QC (instructed by Richard Buxton & Co) for
Julian Cranwell
Richard Harwood QC (instructed by Richard Buxton & Co) for Ockham Parish Council

James Findlay QC and Robert Williams (instructed by the solicitor to Guildford Borough
Council) for the First Defendant
Richard Honey (instructed by the Government Legal Department) for the Second Defendant

James Maurici QC and Heather Sargent (instructed by Herbert Smith Freehills LLP) for the **First Interested Party**

Richard Turney (instructed by Mills & Reeve LLP) for the **Second Interested Party**
Andrew Parkinson (instructed by Cripps Pemberton Greenish LLP) for the **Third Interested Party**

Christopher Young QC and James Corbet Burcher (instructed by Eversheds Sutherland LLP) for the **Fourth Interested Party (in 2174)**

Hearing dates: 5,6 and 7 November 2019

Approved Judgment

Sir Duncan Ouseley:

1. Guildford Borough Council submitted its amended proposed “Local Plan: Strategy and Sites (2015-2034)” to the Secretary of State for Housing, Communities and Local Government on 13 December 2017. It did so after public consultation on the 2016 version of the Plan and later on the amendments to it in the 2017 version, as eventually submitted. This submission was for the purpose of a Public Examination, PE, of the Plan, pursuant to s20 of the Planning and Compulsory Purchase Act 2004, by an Inspector appointed by the Secretary of State. The Inspector held the PE in June and July 2018. Guildford BC published the Main Modifications which it proposed asking the Inspector to make to the submitted Plan to make it sound; there was public consultation upon those proposed Main Modifications in September to October 2018. The publication in September 2018 of revised household projections, and the effect which that also had in reducing the need for housing in Guildford BC’s area to meet needs from the neighbouring Woking BC area, caused Guildford BC to make representations to the Inspector about the housing requirements in the submitted Plan and its Proposed Modifications. In February 2019, the Inspector resumed the PE for two days to consider this issue. On 28 March 2019, the Inspector published his report. The Plan, with the Main Modifications he required, was adopted by Guildford BC on 25 April 2019. I shall refer to the adopted Local Plan as the LPSS.
2. The Claimants were all participants in the PE, Mr Cranwell as a member of Guildford Green Belt Group. They opposed the principle and extent of land which the submitted Plan proposed to release from the Green Belt, as well as the allocation for development of specific sites proposed for release from the Green Belt. The four Interested Parties were also participants at the PE, supporting the release of Green Belt sites in which they were interested, as well as contending that Guildford BC was proposing to make insufficient provision for housing needs.
3. The three Claimants have brought these challenges to the adoption of the LPSS, under s113 of the 2004 Act. The language of s113(3) is in familiar terms; a challenge can be brought on the grounds that the local plan is not within the appropriate powers or that a procedural requirement has not been complied with. The three claims were heard together, with argument and evidence produced for one being admissible and applicable in all three.
4. All Claimants challenge, with degrees of difference but on wide bases, the release of sites from the Green Belt and their allocation for development, with Mr Cranwell’s contentions ranging the widest. His case was argued by Mr Kimblin QC and Mr Harwood QC in conjunction with the various points they were making on behalf of the Parish Council each represented; Mr Cranwell’s

advocate of choice was not available on the dates fixed for the hearing, but he was not let down by his substitutes. Compton Parish Council, represented by Mr Kimblin, in addition to the general arguments about the release of land from the Green Belt, focused on the removal from the Green Belt of the site known as Blackwell Farm, just west of Guildford town. Mr Harwood for Ockham Parish Council, likewise, focused on the former Wisley airfield site, its removal from the Green Belt and its allocation for a new settlement.

5. Mr Findlay QC for Guildford BC defended the LPSS from the challenges, supported by Mr Honey for the Secretary of State, taking a more active role than is common. They were supported by Mr Maurici QC for Wisley Property Investments Ltd which was promoting the allocation of the former Wisley airfield for development, Mr Turney for Blackwell Park Ltd, a company owned by the University of Surrey which was promoting the allocation of the Blackwell Farm site for residential and research park use, Mr Parkinson for Martin Grant Homes Ltd which was promoting the allocation of a site at Gosden Hill Farm for residential purposes, and Mr Young QC for Catesby Estates Ltd which was promoting the allocation of a site for residential purposes north of Horsley railway station. The site specific oral arguments focussed on Wisley and Blackwell Farm. The Interested Parties' advocates adopted the submissions of Mr Findlay and Mr Honey, which were themselves in harmony if not unison, with limited additions.
6. I am grateful to all the parties for the way in which they agreed the statement of facts, and in effect agreed chronologies, and legal propositions, and in argument adhered to the case timetable so that it was completed within the allotted three days. The various grounds of claim were usefully distilled into issues.
7. The main general issue (numbered 2 in the list used by the parties) was whether the Inspector had erred in law in his approach to what constituted the "exceptional circumstances" required for the redrawing of Green Belt boundaries on a local plan review. This had a number of aspects, including whether he had treated the normal as exceptional, and had failed to consider rationally, or with adequate reasons, why Green Belt boundaries should be redrawn so as to allow for some 4000 more houses to be built than Guildford BC objectively needed. The scale of the buffer did not result, it was said, from any consideration of why a buffer of such a scale was required but was simply the sum of the site capacities of the previously allocated sites. There were two other general issues (1) and (7): (1) had the Inspector considered lawfully or provided adequate reasoning for not reducing the housing requirement, leaving some needs unmet to reflect the Green Belt policy constraints faced by Guildford BC? (7) Did Guildford

BC breach the Environmental Assessment of Plans and Programmes Regulations 2004 SI No.1633, in deciding not to reconsider what might be reasonable alternatives to the proposed Plan when, in 2018, the objectively assessed housing needs figure was reduced from 12,426 to 10,678, with housing land supply allocations totalling 14,602. It was submitted that it ought to have considered alternatives such as removing the development allocation in the Green Belt from one or more of the contentious large sites.

8. The site specific considerations at the former Wisley airfield and at Blackwell Farm formed part of the attack on the Inspector's general approach to the release of land from the Green Belt.
9. But there were also site specific grounds of challenge. The first site specific issue, (4), relating to the former Wisley airfield, was the adequacy of reasons given by the Inspector in his report on the PE for reaching conclusions which, it was said, were inconsistent with the views expressed by an Inspector, accepted by the Secretary of State, on an appeal against the refusal of planning permission for a major residential development at the former Wisley airfield, taking up most of the Local Plan allocation there. The appeal Inquiry began before the PE and the decision emerged in the course of the PE. The second site specific issue at Wisley, (5a), concerned the extent of land removed from the Green Belt yet not allocated for development, termed "white land"; issue (5b) concerned the lawfulness and effect of the submission of the 2017 version of the Plan, when the further consultation on it was restricted to the 2017 changes, and did not encompass unchanged aspects of the 2016 version, upon which there had already been consultation in 2016. The third issue, (8), concerned the lawfulness of the approach by the Inspector to the air quality impact of the Wisley allocation on the Thames Basin Heaths Special Protection Area, the SPA. It was initially said that the Conservation of Habitats and Species Regulations 2017 SI No.2012 required the decision-maker to leave mitigation and avoidance measures out of account; but the argument was refined so that it attacked the assessment that there would be no adverse effects, on the basis that there would still be exceedances of critical thresholds, even though the baseline levels of pollution would have reduced.
10. The site-specific issues raised in respect of the Blackwell Farm allocation were, (3), that the local exceptional circumstances relied on by the Inspector were not legally capable of being regarded as "exceptional", and that strategic and local "exceptional circumstances" overlapped, leading to double counting of exceptional circumstances. The other issue at Blackwell Farm was, (6), whether the Inspector erred in law in the way he considered the new access road. This would have to climb the escarpment

to link to the A31, and a section of which would pass through the part of the Surrey Hills Area of Outstanding Natural Beauty, the AONB, which lay to the north of the A31. Should he have concluded that this would be “major development” in the AONB and so face a policy obstacle to its approval which could put the allocation at risk, or even prevent its being delivered? He should at least have taken this risk into account.

The legal framework for the public examination

11. The statutory functions of the PE, Inspector and plan-making authority are set out in s20 of the 2004 Act. The lawfulness of the steps taken before the PE were not generally at issue, but one earlier provision became relevant to issue (5b) and another to issue 7. I shall pick up those provisions when I come to those issues, and including the Town and Country Planning (Local Planning) (England) Regulations 2012 SI No.767, the 2012 Regulations.
12. S20(1) requires the local planning authority to submit every development plan document for examination, but (2), not to do so unless it considers that the relevant requirements have been complied with and that the document is ready for independent examination. That has a bearing on issue 5(b).
13. By s20(5), the purpose of the independent examination is to determine (a) whether the submitted Plan satisfies various statutory requirements, including having regard to national planning policies, (b) whether it is “sound”, a term which has no statutory definition, but which is explained in the National Planning Policy Framework, NPPF, as set out later, and (c) whether any duty in s33A had been complied with. This is the duty of co-operation between local planning authorities “in maximising the effectiveness” with which local plans are prepared in relation to “strategic matters”, that is “sustainable development... of land... which would have a significant impact on at least two planning areas...” This duty has superseded the provision of housing numbers for planning authorities through regional strategies.
14. There are provisions for those who make representations to be heard, and enabling the Secretary of State to consider particular matters and to control procedure. S20(7) requires the Inspector, if satisfied that the Plan is sound and that legal requirements have been met, to recommend that the Plan is adopted and “to give reasons for the recommendation.” If not so satisfied, he must recommend that the Plan is not adopted and give reasons for the recommendation; s20 (7A). S20(7B and C) applied here. If the Inspector does not consider that the Plan is “sound”, as it stands, or that the various

legal requirements of s20(5)(a) have been met, but that the duty to co-operate has been complied with by the local planning authority, he must recommend modifications to the document which would make it sound, and satisfy the requirements of s20(5)(a), if the submitting authority asks him to do so. These are known as Main Modifications.

15. If that course is followed, the reasons obligation in s20(7) applies to the final recommendation. The recommendation and reasons must be published. Minor modifications can be made by the submitting authority; they do not need to go through that Main Modifications process.
16. In fact, after the initial 12 days of hearings, Guildford BC prepared a schedule of Main Modifications which it was to ask the Inspector to recommend to it. These were the subject of public consultation; the responses were provided to the Inspector, before the resumed PE hearing in February 2019.
17. The NPPF provides an explanation of soundness, which Inspectors routinely apply. I set it out from [182] of the applicable 2012 version, in view of the debate before the Inspector, and before me about the release of Green Belt land to meet Guildford BC's own housing needs, and a portion of those from Woking BC's area:

“Positively prepared - the plan should be prepared based on a strategy which seeks to meet objectively assessed development and infrastructure requirements, including unmet requirements from neighbouring authorities where it is reasonable to do so and consistent with achieving sustainable development;

Justified - the plan should be the most appropriate strategy, when considered against the reasonable alternatives, based on proportional evidence;

Effective - the plan should be deliverable over its period and based on effective joint working on cross-boundary strategic priorities; and

Consistent with national policy - the plan should enable the delivery of sustainable development in accordance with the policies in the Framework.”

18. The judgment as to whether a plan is sound or not is plainly a planning judgment, unlawful only on the basis of general public law principles. A plan is not to be judged unsound by an Inspector simply because there might be a better way of dealing with an issue, or because the Inspector would have preferred a different approach, after hearing representations.

19. I described the inquisitorial nature of the process of the public examination, and its significance for the reasons which an Inspector has to give, in *Cooper Estates Strategic Land Ltd v Royal Tonbridge Wells BC* [2017] EWHC 224 (Admin) at [26-29]. A similar issue on reasons was also considered in *CPRE Surrey v Waverley BC* [2019] EWCA Civ 1826 in [71-72], observing the distinction between the task of an Inspector on a public examination, considering soundness, the duty to co-operate and legal compliance, and on an appeal.
20. The conduct of this PE, including the number of participants and the preparation by the Inspector of question papers and agendas, amply bear out these different functions.
21. Before turning to the issues before me, it is necessary to set out some of the Inspector's Report.

The Inspector's Report

22. The first issue addressed in the Inspector's Report, IR, was whether the Plan made adequate provision for new housing, an issue which was at the heart of the need for Green Belt releases and of almost all the issues before me. The calculation of the objectively assessed housing need, the first topic under that heading, was not itself controversial before me. The variations in those figures over time were more relevant to the justification for the degree of "headroom" between the need figure and the capacity of the sites allocated to meet the need.
23. The Inspector's task was to judge the soundness of the Guildford BC's calculation of its Objectively Assessed Housing Needs, the OAN or OAHN. The outcome, after allowing for the change in September 2018 through the 2016-based household projections, was a requirement of 562 dwellings per annum, dpa, or 10678 dwellings during the Plan period; IR24. He decided not to make a further upwards adjustment for affordability, though recognising that there was a pressing affordability problem, as the figure of 562 dpa was already a 79% uplift over the demographic starting point of 313 dpa, and a significant increase above historic delivery rates. That uplift could be expected to improve affordability and to boost the supply of housing; IR 30.
24. He also decided not to increase the 562 dpa figure further by way of allowance for further affordable housing. Meeting the need for such housing of 517 dpa would require 1300 dpa, if 40% of every site were affordable housing. That level of housing would not be practicable, nor would an increase above 562 dpa be appropriate, IR31, "but it is further

evidence of a pressing housing need and it lends strong support to the figure of 562 dpa rather than a lower requirement.” The wider context supported 562 dpa; he referred to the importance of Guildford, its University, the successful science park and the “significant incursion” of students into the housing market, IR 33: “These factors, together with a seriously poor and deteriorating housing affordability and the very high level of need for affordable housing make a compelling case for a supply of housing significantly above historic rates.”

25. The Inspector also saw 562 dpa as realistic in comparison with the housing requirements of the two other authorities in the West Surrey Strategic Housing Market Area, SHMA, Woking and Waverley BCs. He was well aware of their circumstances, having been the Inspector in the Waverley Local Plan PE, which found its way to the Court of Appeal on the challenge by CPRE Surrey, above.
26. He continued in IR 35, that the 562 dpa OAN figure was consistent with the characteristics of Guildford, its district and the wider context. A lower housing requirement, such as the 361 dpa put forward by some local participants:

“would not have regard to the reality of Guildford’s characteristics or its context, would pose a risk to local economic prospects and plans, would not adequately address housing affordability or the availability of affordable housing, would potentially increase the rate of commuting, and would be inconsistent with the assessed housing need of the other authorities in the housing market area. A higher requirement would imply a scale of uplift which would start to become divorced from the demographic starting point and from the context of the housing market area described above.”
27. Although the Inspector is here considering the first stage in the assessment of the housing requirement, that is what the need figure is before the application of any policy constraints, the so-called “policy-off” figure, and is using those factors to support the soundness of 562 dpa, those factors are also relevant when he comes to consider whether a policy constraint should be applied, the so-called “policy-on” stage, to reduce the housing requirement figure, leaving an unmet need.
28. Finally, the Inspector analysed the unmet need from Woking BC’s area. Various allowances had been made for it over the evolution of the Plan, including an allowance of 42 dpa in a proposed Main Modification. Although, after September 2018, Woking BC no longer claimed an unmet need, the Inspector considered that there probably was still an ongoing unmet need from Woking, not all of which would be accommodated by the

allowance in Waverley. But it was unnecessary to make a specific allowance in Guildford's housing requirement on that account because the likely residual amount of unmet need could be accommodated within the Plan's "headroom", that is the difference between the requirement of 562 dpa, (10,678), and the number of dwellings that could be delivered from all sources over the life of the Plan, (14602).

29. The second topic which the Inspector had to consider in his Issue 1 concerned the delivery of an adequate supply of homes, providing a rolling five-year housing land supply throughout the Plan period. Guildford BC had accumulated a significant shortfall, amounting to some 66 dpa if spread evenly over the Plan period. This had to be met. NPPF [47], seeking to "boost significantly the supply of housing", required local planning authorities to:

"use their evidence base to ensure that their Local Plan meets the full objectively assessed needs for market and affordable housing in the housing market area, as far as is consistent with the policies set out in this Framework, including identifying key sites which are critical to the delivery of the housing strategy over the plan period."

30. The housing trajectory is important; it is required by NPPF [47] to illustrate the expected rate of housing delivery, showing when sites may come on stream, how much each is expected to produce each year of production, and when they are expected to cease production. This enables a planning authority to show whether it has or lacks a five-year housing land supply, what sites may be brought forward to cope with any shortfall, and how the rolling 5 year supply can be maintained over the plan period. This is concerned therefore with the delivery of the housing requirement. In the case of Guildford BC, its persistent shortfall in meeting housing needs meant that its five-year housing land requirement, together with the accumulated shortfall of 66 dpa, was increased by 20%, under the NPPF, for the purposes of calculating whether it had a five-year housing land supply.

31. The difference between the OAN of 10,678 homes over the plan period, and the potential to deliver 14,602 homes over that period was a central topic which the Inspector addressed under his Issue 5. But he introduced the need for that level of housing in IR 42-46. I set it out:

"42. The housing trajectory indicates that there is potential to deliver 14,602 homes over the plan period. The difference between this and the total housing requirement of 10,678 homes has been raised during the examination in the context of whether there are exceptional circumstances to release land from the

Green Belt. This is dealt with in more detail under Issue 5. But purely in terms of housing supply, there is enough headroom to ensure that the Plan remains robust in the event that there is slippage in the delivery of housing from the allocated or committed sites, avoiding the need to allocate reserve sites; and enough headroom to provide for the anticipated level of unmet need from Woking, bearing in mind that there would be a continuing level of undersupply over the period of Woking's newly reviewed plan. The overall plan provision would also provide more affordable housing and go further to address serious and deteriorating housing affordability.

43. The reduced housing requirement in MM2 enables the plan to proceed without the [4] additional sites allocated by [Main Modifications], but it is not of an order that would justify the deletion of any of the strategic sites which, in addition to their substantial housing contributions, bring other significant benefits to the Borough through their critical mass and well-chosen locations. Again, this is discussed in more detail under Issue 5.

44. No further sustainability appraisal is required in respect of the requirement of 562 dpa because the overall housing delivery figure of 14,602 homes falls within the range of eight delivery scenarios that were considered as reasonable alternatives, ranging from 13,600 homes to 15,680 homes and the housing allocations remain the same as in the submitted Plan except for [one].

45. The trajectory indicates a 5 year housing land supply on adoption of 5.93 years rising to 6.74 years in year 5. The 5 year supply calculation includes a 20% buffer for past persistent under-delivery and uses the Liverpool method [spreading the catchup evenly over the plan period] in recognition of the contribution made by the strategic locations which typically have a longer lead-in time. These are the Council's figures and it is recognised that slippage could reduce this supply, but there is enough flexibility built in to the trajectory to maintain a rolling 5 year housing land supply.

46. In conclusion, whilst the submitted plan's figure of 654 dpa is not sound because it does not reflect the most recent evidence, the Council's calculated housing requirement of 562 dpa, or 10,678 dwellings over the life of the plan, as set out in the revised version of MM 2 is sound. It reflects the latest evidence and is based on sound analysis. The overall level of housing delivery, currently calculated at 14,602 homes, will ensure that an adequate 5 year supply of land will be maintained and will ensure that the plan is robust; it will deliver sufficient housing to help address the pressing issues of affordability and affordable

housing need, and contribute towards addressing unmet housing need in the housing market area.”

32. Mr Findlay put considerable weight upon the housing trajectory, appended to the IR. This showed that the sequentially less preferred housing allocations around villages, to the north and west of West Horsley, near to Horsley Railway Station, at Send, Send Marsh/Burnt Common, and amounting to 945 dwellings, were required in the early part of the Plan period, in the first five years from adoption. They could not be omitted without Guildford BC failing to provide for the five year housing supply with the 20% buffer for past underperformance, and the 66 dpa contribution to meeting the shortfall. The larger contentious Green Belt sites, at the former Wisley airfield, Gosden Hill Farm and Blackwell Farm, were all required for their contribution to supply after the initial 3 or so years from adoption. They came on stream together, at a low rate, building up over the next five years, and increasing markedly in years 11-15, i.e.2029/30-2033/34, and continuing beyond the plan period in the case of the latter two.
33. The reasoned justification to Policy S2, the spatial strategy for 562 dpa and “at least” 10678 new homes, as modified, states at 4.1.11, in the language of the Inspector’s Main Modifications:

“National policies require that we meet objectively assessed housing needs, including any unmet needs from neighbouring authorities, where it is practical to do so and consistent with achieving sustainable development. Guildford’s objectively assessed housing need has been based on a consideration of the latest 2016-based population and household projections. Applied to this demographic housing need is a necessary uplift to take account of market signals and affordable housing need, assumptions of future economic growth, and an increase growth in student population.”
34. The total supply over the plan period amounted to 14,602 dwellings. The reasoned justification at 4.1.14, as modified, identified the national policy requirement for a demonstrable rolling 5 year housing land supply from the date of adoption, taking account of the accrued deficit with a 20% buffer. The expected phasing of sites was set out in the housing trajectory, in the form in which it had been appended to the IR.
35. The Inspector’s Issue 2 concerned whether the Plan adequately addressed the identified housing needs “of all the community.” The strategic housing allocation policies mattered in this context because the needs of gypsies, travellers and travelling showmen was to be addressed on sites of 500 homes or more.

36. His Issue 3 dealt with employment and business. This issue is relevant to these challenges because the Inspector said, IR60, that the larger residential-led allocated sites in the Green Belt “make substantial contributions towards meeting employment needs,” including Gosden Hill Farm (10,000 sq.ms), Blackwell Farm (about 30,000 sq.ms of B1 use as an extension to the Surrey Research Park), and the former Wisley airfield (4,300 sq.ms). For some, including Gosden Hill Farm and former Wisley airfield, “the amounts of employment floorspace are an integral part of these residential-led mixed schemes. They are necessary to create balanced, sustainable development.” Blackwell Farm contained a much larger business component, of a nature encouraged by the NPPF, and, he said at IR61: “Building on the success of the existing Research Park by allocating further land close to it for similar uses represents the best opportunity in the Borough to meet these objectives.”
37. I have referred to those two issues because Mr Findlay was at pains to emphasise that the exceptional circumstances for the contentious Green Belt allocations included not just the provision of housing but provision for other uses as well, and that that was how the Inspector saw them, as I shall come to.
38. Issue 5 raised by the Inspector is critical to the challenges. It was entitled “Whether at the strategic level there are exceptional circumstances which justify altering Green Belt boundaries to meet development needs and whether the Plan’s Green Belt policy is sound.”
39. Before turning to the IR, I need to set out what the NPPF said about this subject since it provides the frame of reference for the Inspector’s approach. NPPF [14] contains the presumption in favour of “sustainable development.” This means that, in plan-making, authorities: “should positively seek opportunities to meet the development needs of their area; Local Plans should meet objectively assessed needs, with sufficient flexibility to adapt to rapid change, unless:…specific policies in this Framework indicate development should be restricted.” Designated Green Belt is one such restricting policy, in footnote 9. It is a core planning principle, NPPF [17], that planning should make every effort objectively to identify:

“and then meet the housing, business and other development needs of an area...Plans should take account of market signals, such as land prices and housing affordability, and set out a clear strategy for allocating sufficient land which is suitable for development in their area, taking account of the needs of the residential and business communities.”

40. The NPPF in section 9 set out the Green Belt policies. The fundamental aim was to prevent urban sprawl by keeping land permanently open; “the essential characteristics of Green Belts are their openness and their permanence.” It identified in [80] the familiar five purposes of the Green Belt, pointing out that their general extent was already established. At [83] and following, it said:

“83. Once established, Green Belt boundaries should only be altered in exceptional circumstances, through the preparation or review of the Local Plan. At that time, authorities should consider the Green Belt boundaries having regard to the intended permanence in the long term, so that they should be capable of enduring beyond the plan period.

84. When... reviewing Green Belt boundaries local planning authorities should take account of the need to promote sustainable patterns of development. They should consider the consequences for sustainable development of channelling development towards urban areas inside the Green Belt boundary, towards towns and villages inset within the Green Belt boundary or towards locations beyond the outer Green Belt boundary.

85. When defining boundaries, local planning authorities should ... define boundaries clearly, using physical features that are readily recognisable and likely to be permanent.”

41. The Inspector set his consideration of his Issue 5 firmly in the context of whether exceptional circumstances existed, as required. Under the subheading “The need for housing” he said at IR79:

“This has already been discussed under Issues 1 and 2. Guildford has a pressing housing need, severe and deteriorating housing affordability and a very serious shortfall in the provision of affordable homes. There is additional unmet housing need from Woking. There is no scope to export Guildford’s housing need to another district; the neighbouring authorities in the housing market area are significantly constrained in terms of Green Belt and other designations and both have their own significant development needs. The overall level of provision will address serious and deteriorating housing affordability and will provide more affordable homes. The headroom can also accommodate the likely residual level of unmet need from Woking.”

42. Likewise, at IR80, the Inspector found that land available for additional business development in the Guildford urban area was very limited, and it was unrealistic that much extra capacity could be obtained on existing sites such as the existing Surrey Research Park:

“The ability to meet the identified business needs therefore depends on making suitable new land available and there is no realistic alternative to releasing land from the Green Belt. Exceptional circumstances therefore arise at the strategic level to alter Green Belt boundaries to accommodate business and employment needs.”

43. The Inspector also concluded, at IR81, that it was not possible to rely on increasing the supply of housing within the urban areas so as to obviate alterations to the Green Belt boundary. Development opportunities in those areas had been thoroughly investigated and assessed; he referred to the identified constraints in the urban areas. Having canvassed various possibilities, he concluded that any extra yield from such sites “would fall a long way short of making the scale of contribution towards meeting overall development needs that would enable the allocated sites in the Green Belt to be taken out of the Plan.”
44. The fourth subheading went to the heart of the issue underlying the argument before me: “Whether the difference between potential supply of 14,602 dwellings in the latest MM2 housing requirement of 10,678 implies that the plan should allocate fewer sites and release less Green Belt land.” I need to set out almost all of it, in view of the Claimants’ submissions. The passage is relevant to local exceptional circumstances and to the spatial distribution strategy which underlay the choice of sites.

“83. The first point here is that the plan must be considered as a whole; it contains an integrated set of proposals that work together. As is discussed below in Issue 6, the strategic locations operate to deliver a range of benefits which cannot be achieved by smaller dispersed sites. A25 *Gosden Hill* provides a park and ride facility and part of the sustainable movement corridor and contributes towards a new railway station; A26 *Blackwell Farm* provides land to enable the expansion of an important research park, together with part of the sustainable movement corridor and it contributes towards a new railway station. They work together to provide housing, employment and sustainable movement across Guildford. Site A35 *Former Wisley airfield* provides the A3 slip roads and bus services and cycle network that benefit the allocations at Send, Send Marsh/Burnt Common and Ripley and feed into local stations; in turn, Burnt Common provides an employment facility for the Borough. The large sites also make an important contribution towards meeting the needs of gypsies, travellers and travelling showpeople. The sites all work in concert to deliver a sound, integrated approach to the proper planning the area.

84. Secondly, the plan needs to be robust and capable of meeting unexpected contingencies such as delivery failure or slippage on

one or more sites. It needs to be borne in mind that the housing requirement is a minimum figure, not a target. A robust strategy is particularly relevant for Guildford where longer term housing delivery is largely by means of large strategic housing sites. There is also uncertainty about the timing of the A3 RIS [road improvement strategy] scheme ... ; The headroom provides some flexibility over timing and ensures that if a degree of slippage does occur, the Plan is not vulnerable. The amount of headroom between potential housing provision and the housing requirement means it is not necessary to create safeguarded land which would have to be removed from the Green Belt to meet longer term development needs, or to identify reserve sites to be brought forward should sites fail to deliver as expected. In any case, if it had been necessary to identify reserve sites, they would almost certainly have had to be on land removed from the Green Belt.

85. Thirdly, that Plan needs to be effective over its life and have regard to potential changes in circumstances. To that end it contains a balance of short- and long-term sites. This can be seen in the housing trajectory ... ; The permitted and commenced sites and smaller allocations deliver the 5 year supply. These include for example the allocations at West Horsley, Send, Send Marsh/ Burnt Common and Ripley and on land at the inset villages. Land needs to be released from the Green Belt to allow these sites to be developed, in order to meet housing needs in the first 5 year of the Plan. When delivery from these sites starts to diminish, that from the strategic sites builds up. But large strategic sites have long lead-in times and development periods - their timespan may cover a number of plan reviews and housing requirement re-calculations. Circumstances may change, and new strategic sites cannot be brought forward quickly to meet revised housing requirements; they have to be planned well in advance. Therefore, by making the allocations now, the Council have aimed to future proof the Plan. This is in accordance with the NPPF which says that plans should have sufficient flexibility to adapt to rapid change. The Plan clearly demonstrates a flexible, integrated and forward-looking approach towards meeting present and future needs in the Borough and towards encouraging more sustainable modes of travel. Removing one or more sites would significantly diminish the Plan's ability to meet these objectives."

45. IR86 specifically dealt with whether development should be restricted having regard to the Green Belt, as raised by footnote 9 to NPPF [14]. The Inspector said:

"86. Subject to the proposed Green Belt alterations, the Plan is capable of meeting objectively assessed needs with adequate flexibility. The alterations to the Green Belt boundary would

have relatively limited impacts on openness as discussed in Issues 10 and 11 and would not cause severe or widespread harm to the purposes of the Green Belt. The allocations at A25 *Gosden Hill Farm* and A26 *Blackwell Farm* would be planned urban extensions rather than sprawl. Site A25 together with the allocations at Send and Burnt Common/Send Marsh would be visually and physically separate, as discussed in Issue 7 and would not add to sprawl or coalescence. A35 *Former Wisley airfield* would include a substantial amount of previously developed land and is separate in character from its wider Green Belt surroundings. The other Green Belt sites would be adjacent to settlements and would have very localised effects on openness. There is therefore no justification for applying a restriction on the quantity of development. Considerations in respect of the Surrey Hills Area of Outstanding Natural Beauty (AONB) and the Thames Basin Heaths Special Protection Area (SPA) do not alter this conclusion; see issue 7.”

46. All this, concluded the Inspector in IR 89, amounted “to strategic-level exceptional circumstances to alter the Green Belt boundary to meet development needs in the interests of the proper long-term planning of the Borough.” Local-level exceptional circumstances were considered later.
47. The soundness of the Plan’s overall distribution of development was relevant to the Green Belt issues, and to “exceptional circumstances”. The Inspector considered this next under Issue 6. At IR91 onwards, the Inspector accepted that the urban areas, inset villages and identified Green Belt villages could accommodate 4600 houses but not all Guildford BC’s development needs. Land had therefore been identified for development beyond the Green Belt, in urban extensions to Guildford, in a new settlement at the former Wisley airfield, and in development around villages. Strategic and non-strategic sites were spread across the middle of the Borough, constrained by the SPA to the north and the AONB to the south. Five strategic sites, including Gosden Hill Farm and Blackwell Farm, both extensions to Guildford, and the freestanding Wisley site close to the junction of the A3 and M25, delivered a significant proportion of the housing and employment land needed. Gosden Hill Farm and the Wisley site were residential-led mixed-use allocations supporting a range of housing types and employment, social and community facilities, which would help provide improved highway and sustainable transport links. Blackwell Farm would deliver a large number of homes and a large employment allocation next to the Surrey Research Park.
48. At IR95, the Inspector summarised the “considerable advantages” of this spatial strategy:

“Firstly, it allocates the largest amounts of development to the most sustainable locations, or those which can be made sustainable; secondly, it achieves a satisfactory spatial balance in a variety of locations and types of site; and thirdly, the strategic sites will accommodate a significant amount of the Borough’s housing and employment needs whilst at the same time meeting their own social needs and contributing towards transport improvements that have wider benefits. The advantages of the last of these points is recognised by the Sustainability Appraisal and it justifies the inclusion of the larger sites including Gosden Hill Farm, Blackwell Farm and the former Wisley airfield.”

49. Allocating more sites to the villages would risk eroding their character without achieving the social and transport benefits of the larger sites; further development beyond the Green Belt would risk creating a sprawl and could exacerbate highway problems. The inclusion of the strategic sites made for an effective plan meeting the sustainable needs of the Borough, IR97:

“Their size facilitates the delivery of social, transport and other facilities that would be more difficult to achieve by spreading the same amount of development around on smaller sites. They serve housing, employment and social needs in different parts of the Borough, yet are well positioned in relation to Guildford. They are in locations where they do not significantly affect areas important for landscape and diversity.”

50. The Inspector continued his analysis of the spatial strategy by considering, among other matters, the allocation of sites for growth in villages such as East and West Horsley, Send, Send Marsh/Burnt Common, and Ripley. He regarded the allocations as proportionate extensions to these medium-sized villages, with access to their facilities, and with the opportunity to assist or take advantage of transport or highway improvements associated with the strategic sites. They would make an important contribution towards the delivery of sites in the early years of the Plan. Subject to the Main Modifications, the Inspector concluded that the overall spatial development strategy was sound in every respect.
51. Issue 10 concerned whether various strategic allocations including Gosden Hill Farm, Blackwell Farm and the former Wisley airfield, were sound; and relates to the extent of housing allocations above the OAN figure of 10678. The Inspector had dealt with the justification for the location of the strategic sites and the strategic level exceptional circumstances for moving the Green Belt boundaries when dealing with the Spatial Strategy. Issue 10 concerned the local impacts of the larger allocations and the effectiveness

of these specific policies for their development. The Inspector was here considering local “exceptional circumstances”.

52. The Inspector considered Gosden Hill Farm at IR156 onwards. He introduced the issues in this way:

“Policy A25 [the site] is located in the submitted Plan for a residential-led mixed-use development delivering about 2000 homes with a minimum of 1700 homes during the plan period, as well as gypsy and traveller pitches, retail and service facilities and primary and secondary schools. The delivery trajectory for the site is consistent with the assumed delivery of A3 improvements, but MM35 reduces the overall site capacity to about 1800 dwellings based on more recent master planning with a consequent reduction in the number of gypsy and traveller pitches to 6. The key issues are whether there are local-level exceptional circumstances to alter Green Belt boundaries, and whether the allocation is acceptable in terms of highway impact.”

53. He made the following points about the Green Belt at IR 157:

“...the site is adjacent to the built-up area of Guildford and its development would appear as a natural urban extension rather than a major incursion into the Green Belt. The Green Belt and Countryside study considered it to be a medium sensitivity land parcel. The landscape is not subject to any designation and is not crossed by any public right of way. The local topography and tree cover ensure that the site is not widely prominent, and it would be possible to establish a new defensible Green Belt boundary. As discussed above under Issue 7, in respect of openness and countryside impact, the cumulative impact of this allocation in combination with allocations to the east of Guildford is acceptable. MM35 responds to concerns about the visual impact by including a new requirement for increased landscaped buffer/ strategic planting with frontage development set back from the A3 and other measures to mitigate the visual impact. The selection of this site is therefore appropriate on the basis of its local characteristics, and exceptional circumstances exist at the Local-level to alter the Green Belt boundaries to facilitate the allocation.”

54. Measures to cater for the increased traffic, including that brought about by the necessary improvements to the A3 junction, would promote sustainable travel options, including a new park-and-ride facility, plus assistance with the proposed Sustainable Movement Corridor, and a contribution towards a new railway station. Having considered other matters, the Inspector concluded that the allocation was sound.

55. The Inspector then turned at IR 164, to Blackwell Farm. This too was a residential-led mixed use allocation, for about 1800 homes of which all but 300 would be delivered in the plan period. A Main Modification raised the B1 floorspace extension to the Surrey Research Park to 35,000sm, of which 30,000 would be delivered in the plan period. There would be specialist and self build plots, 6 gypsy and traveller pitches, a primary and a secondary school, retail and community uses. “The key issues are whether there are local-level exceptional circumstances to alter Green Belt boundaries, the effect on the Surrey Hills AONB and the Area of Great Landscape Value, and whether the allocation is acceptable in terms of highway impact.” He dealt with the Local-level exceptional circumstances as follows, at IR165:

“As regards the local circumstances, the Green Belt and Countryside study identifies the site as a potential development area. It is on gently sloping land on the edge of Guildford adjacent to the Research Park and is well-enclosed by woodland and hedgerows which visually separate the allocation from the more open land to the west and would form good defensible boundaries. The site is well separated from the historic centre of Guildford by extensive development and does not contribute to the setting of the Cathedral or its historic core. It would appear as a logical addition to Guildford rather than an obtrusive extension into the wider Green Belt. It would make an important contribution towards meeting housing, employment and educational needs and has obvious locational advantages, firstly in terms of its position immediately adjacent to the Research Park presenting a unique opportunity to further enhance this already successful business cluster, and secondly in its ability to contribute towards sustainable transport including a new station. There are therefore exceptional circumstances at the Local-level to justify moving the Green Belt boundary to accommodate this site allocation.”

56. I deal with what the Inspector said about the AONB, the access to the A31 and “major development,” when I come to that ground. The Inspector considered other issues, including transport sustainability, before concluding that, subject to certain main modifications, the allocation was sound.
57. Next, the former Wisley airfield, Ockham; Policy A35. This was a residential-led development for about 2000 homes, plus about 100 sheltered or extra care homes, gypsy and traveller pitches, employment land, retail facilities services, community uses and a new primary and secondary school. The Inspector identified the key issues as being whether there were Local-level exceptional circumstances to alter the Green Belt

boundary to accommodate the allocation, transport impacts and the effect on biodiversity.

58. The PE Inspector first dealt with the decision of the Secretary of State, accepting the recommendation of the appeal Inspector, dismissing the developer's appeal against the refusal of planning permission for up to 2068 dwellings on land included in the allocation, but which was not as extensive as the allocation. I set out what the PE Inspector had to say about it here, as objectors to the allocation understandably exploited its conclusions. The Inspector said, IR 181:

“The principal reasons for refusal concerned Green Belt, the strategic road network and the character and appearance of the area. Many other issues were examined during the course of the inquiry, including the effect on the Thames Basin Heaths Special Protection Area, the local road network and air quality, but were not cited as reasons for refusal. The harm to heritage assets was considered less than substantial and was outweighed by the public benefits. It is important to note that this appeal decision was made in the context of the background of the saved policies of the Guildford Borough Local Plan 2003, against which the scheme was unlikely to be considered anything other than inappropriate development in the Green Belt and development affecting the character of the countryside. However the conclusion of this report is that there are compelling strategic-level exceptional circumstances to make significant alterations to the Green Belt boundary to accommodate the Borough's assessed housing, employment and other needs to 2034.”

59. The Inspector then turned to the local-level exceptional circumstances at IR182, saying:

“... the Green Belt and Countryside Study considered the site to be of medium Green Belt sensitivity. It shares little of the character of the countryside around it; most of the site is flat, rather featureless, contains a runway and hard surfacing and can be regarded in part as previously developed land. It is separated from much of Ockham by a valley and a small knoll. Development here would be fairly self-contained visually and would not add to the appearance of sprawl.

183. The allocation has the ability to deliver a significant contribution towards the Borough's housing requirement, helping to meet a pressing housing need as well as providing homes to meet the needs of particular groups. Its size means that it can support a suitable range of facilities to meet the needs of the new residents, creating the character of an integrated large new village with its own employment, schools, shops and community facilities, and it can support sustainable transport

modes. This would avoid putting pressure on other areas of the Green Belt of greater sensitivity, and would avoid pressure on other communities too, because alternative smaller sites would be less able to deliver such a comprehensive range of facilities to serve the development. For all the above reasons there are exceptional circumstances at the Local-level to alter Green Belt boundaries to accommodate this allocation.”

60. He noted that, at the time of the appeal, Natural England had been satisfied that the appeal proposal would not have a significant effect on the SPA, and it had confirmed that it had no objection in principle to the larger allocation site as there was sufficient land available to create additional Suitable Alternative Natural Greenspace, SANG. Then he concluded, after considering other topics, that the allocation was sound.
61. Next, transport. The transport impacts of the development strategy were relevant both to the selection of the sites and the overall extent of the allocations. The assumption behind the Plan had been that the A3 Guildford Road Investment Strategy (RIS) scheme would be delivered. The Inspector, IR 128, pointed out that planned development in the later stages of the plan period could be affected by the delivery of the A3 improvement scheme, which had implications for the delivery rates at Gosden Hill Farm, Blackwell Farm and one other major site.
62. There was also a link between additional A3 slip roads to deal with the development at Wisley airfield, which would relieve Ripley of some through traffic, and would also serve development at Send, Send Marsh and Burnt Common. New Guildford stations, as part of broader rail network improvements were to be funded by development contributions including from Gosden Hill Farm and Blackwell Farm; IR 137. Those two, and other site allocations, contained measures contributing to the provision of sections of the multi-modal Sustainable Movement Corridor; IR138. This Corridor linked new sites, new rail stations, a new park and ride site at Gosden Hill Farm, Guildford railway station, and town centre and Surrey University. Gosden Hill Farm, Blackwell Farm and Wisley airfield all had to provide a significant bus network.

Issue 1: did the Inspector consider and provide legally adequate reasons for his conclusion that the objectively assessed need for 10678 dwellings should be met in full, notwithstanding the consequent need for the release of land from the Green Belt?

63. Mr Kimblin submitted that the two stage process of establishing the housing requirement figure had not been followed. The first stage was the establishment of the objectively assessed housing needs without the

application of any policy constraint. The second stage was to consider whether policy constraints, of which Green Belt was the one principally deployed here, required a housing requirement figure below those needs to be adopted. 89% of the area of Guildford Borough was covered by Green Belt policy.

64. The Inspector had only asked whether there should be a restriction on the 14602 figure. His task was to consider whether soundness required releases from the Green Belt for housing, bearing in mind that the NPPF itself recognised that the Green Belt was one of those constraints, applicable at the second, or policy-on, stage. Its application could mean that the OAN would not be met. The Inspector's approach, in any event, did not identify lawfully, or with adequate reasoning, the "exceptional circumstances" warranting release of land from the Green Belt to meet housing needs.
65. In addition to the large sites removed from the Green Belt, Mr Cranwell challenged the removal of other sites under this head. They included land north of Keens Lane (150 dwellings and a 60-bed care home within 400m of the SPA), the various sites making up the 945 dwellings in allocations around villages such as Send, Send Marsh/Burnt Common, the Horsleys, and land for new north facing slip roads to the A3 at Send Marsh. The challenge to them all is based on the general contention that there were no exceptional circumstances to warrant releasing land from the Green Belt generally, even if the application of that policy restraint meant that Guildford BC housing needs, as expressed in the OAN, would be unmet.
66. I accept that the two stage process, "policy-off" and "policy-on", is well known and applicable; the analysis comes from *St Albans CC v Hunston Properties Ltd* [2013] EWCA Civ 1610, and *Gallagher Estates v Solihull MBC* [2014] EWCA Civ 1610.
67. The NPPF itself recognises that the OAN at the policy-off stage may not be met by the conclusion of the policy-on stage. NPPF [47], set out above, accepts that the OAN is to be met "so far as is consistent with the policies set out in this Framework." NPPF [14] puts it slightly differently but to the same effect: those needs should be met "unless specific policies in the Framework indicate that development should be restricted." Those include Green Belt policies. But importantly for Local Plans, NPPF [83] recognises that the preparation or review of a Local Plan is the mechanism whereby Green Belt boundaries can be altered in "exceptional circumstances," and, as altered, should be capable of enduring beyond the plan period.
68. There is no definition of the policy concept of "exceptional circumstances". This itself is a deliberate policy decision, demonstrating that there is a

planning judgment to be made in all the circumstances of any particular case; *Calverton Parish Council v Nottingham City Council* [2015] EWHC 1078 at [20], Jay J. It is deliberately broad, and not susceptible to dictionary definition.

69. The parties agreed that whether a particular factor was capable of being an “exceptional circumstance” in any particular case was a matter of law; but whether in any particular case it was treated as such, was a matter of planning judgment. That does not take one very far, in my judgment, because a judicial decision that a factor relied on by a planning decision-maker as an “exceptional circumstance” was not in law capable of being one is likely to require some caution and judicial restraint. All that is required is that the circumstances relied on, taken together, rationally fit within the scope of “exceptional circumstances” in this context. The breadth of the phrase and the array of circumstances which may come within it place the judicial emphasis very much more on the rationality of the judgment than on providing a definition or criteria or characteristics for that which the policy-maker has left in deliberately broad terms.
70. “Exceptional circumstances” is a less demanding test than the development control test for permitting inappropriate development in the Green Belt, which requires “very special circumstances.” That difference is clear enough from the language itself and the different contexts in which they appear, but if authority were necessary, it can be found in *R(Luton BC) v Central Bedfordshire Council* [2015] EWCA Civ 537 at [56], Sales LJ. As Patterson J pointed out in *IM Properties Development Ltd v Lichfield DC* [2014] EWHC 2240 at [90-91 and 95-96], there is no requirement that Green Belt land be released as a last resort, nor was it necessary to show that assumptions upon which the Green Belt boundary had been drawn, had been falsified by subsequent events.
71. There is however a danger of the simple question of whether there are “exceptional circumstances” being judicially over-analysed. This phrase does not require at least more than one individual “exceptional circumstance”. The “exceptional circumstances” can be found in the accumulation or combination of circumstances, of varying natures, which entitle the decision-maker, in the rational exercise of a planning judgment, to say that the circumstances are sufficiently exceptional to warrant altering the Green Belt boundary.
72. General planning needs, such as ordinary housing, are not precluded from its scope; indeed, meeting such needs is often part of the judgment that “exceptional circumstances” exist; the phrase is not limited to some unusual form of housing, nor to a particular intensity of need. I accept that

it is clearly implicit in the stage 2 process that restraint may mean that the OAN is not met. But that is not the same as saying that the unmet need is irrelevant to the existence of “exceptional circumstances”, or that it cannot weigh heavily or decisively; it is simply not necessarily sufficient of itself. These factors do not exist in a vacuum or by themselves: there will almost inevitably be an analysis of the nature and degree of the need, allied to consideration of why the need cannot be met in locations which are sequentially preferable for such developments, an analysis of the impact on the functioning of the Green Belt and its purpose, and what other advantages the proposed locations, released from the Green Belt, might bring, for example, in terms of a sound spatial distribution strategy. The analysis in *Calverton PC* of how the issue should be approached was described by Jay J as perhaps a counsel of perfection; but it is not exhaustive or a checklist. The points may not all matter in any particular case, and others may be important especially the overall distribution of development, and the scope for other uses to be provided for along with sustainable infrastructure.

73. Mr Kimblin put forward Mr Cranwell’s contention that the supply of land for ordinary housing, even with the combination of circumstances found here to constitute exceptional circumstances by the Inspector, could not in law amount to “exceptional circumstances.” I cannot accept that, and I regard it as obviously wrong. These judgments were very much on the planning judgment side of the line; I do not see how they could be excluded from the scope of that phrase as a matter of law. This contention involves a considerably erroneous appreciation of the whole concept of “exceptional circumstances” and the role of the Inspector’s planning judgment. Mr Kimblin accepted in oral argument that he might be putting it too high, but he said there still had to be something exceptional about the need.
74. It is of a piece with Mr Cranwell’s further contention that the Inspector had ducked the issue of why the circumstances he found to be “exceptional” were “exceptional”. The phrase “exceptional circumstances” should be considered as a whole, and in its context, which is to judge whether Green Belt boundaries should be altered in a Local Plan review. It is not necessary to explain why each factor or the combination is itself “exceptional”. It does not mean that they have to be unlikely to recur in a similar fashion elsewhere. It is sufficient reasoning to spell out what those factors are, and to reach the judgment. There is a limit to the extent to which such a judgment can or should be elaborated.
75. I do not accept Mr Kimblin’s further submissions on the way in which the Inspector considered the issue and reasoned his conclusions.

76. The order of magnitude of unmet need which these submissions contemplate is worth setting out, first. If there were to be no releases of land from the Green Belt in respect of any of those sites contentious to the Claimants in these proceedings, sites with a capacity for 6295 dwellings would not have been allocated; so on any view there would have been a shortfall against Guildford BC's OAN, of 10678, of over 2300, taking 6295 from 14602. The figure of 6295 includes the 945 sites in developments around villages without which the initial rolling 5 years supply could not be achieved, on the housing trajectory approved by the Inspector. If those under challenge were removed, there would have been a shortfall in supply at the end of 5 years. Here too the housing trajectory was essential to understanding the total picture.
77. There were in addition a further 447 dwellings on Green Belt sites which the Claimants in these proceedings did not challenge, but they still have to be deducted from the allocations for proper consideration of this issue. They all require exceptional circumstances to be shown; the distinction drawn by the Claimants between those which they make contentious and other releases from the Green Belt for housing is artificial. The deficit thus rises to over 2700 out of 10678. Mr Findlay did not agree either with the Claimants' calculation that none of the other sites were Green Belt developments; he said that at least 90 and more were Green Belt sites. I do not need to resolve that, because neither the Inspector nor Guildford BC's approach depended on the precise figure and the order of magnitude of need which would be unmet suffices to illustrate the point. Mr Findlay also pointed out that the Claimants' exercise ignored the other uses and infrastructure contributions which were an important part of the thinking behind the allocations; he said that such exercises as the Claimants had furnished me with had been a commonplace of the PE, and were simply grist to the mill of the planning judgment which it was for the Inspector to make. I agree.
78. Second, this issue did not arise at the PE without prior and careful consideration by Guildford BC. I shall deal with Sustainability Appraisals, SA, later but the approach contended for by Mr Cranwell was one of the alternatives addressed in SAs before the PE.
79. In the SA with the 2016 version of the submitted Plan, the options or reasonable alternatives discussed excluded expressly any potential for Guildford "to justifiably undersupply", i.e. provide for housing below the OAN figure. The option for providing no buffer was rejected as it would risk Guildford's OAN not being met in practice. The options with a buffer to help ensure that the OAN was met in practice ranged from OAN + 3% to OAN +14%, the latter including Wisley airfield. Higher buffers would

enable some of Woking's needs to be met but the highest buffer considered was OAN+34%. The underlying figures differed from those in the adopted Plan but the question, whether the OAN should or should not be met, was considered.

80. In the 2017 version of the SA provision of housing below OAN was rejected again. I regard it as clear that the Inspector was to accept the soundness of this approach in his Report. It said:

“Guildford Borough Council is committed to delivering its OAHN figure, having established that there is no potential to justifiably ‘under-deliver’ and rely on neighbouring authorities to meet the shortfall (under the Duty to Cooperate). Whilst Guildford Borough is heavily constrained environment, it does not *stand-out* as relatively constrained in the sub-regional context. This conclusion is reached on the basis of Duty to Cooperate discussions, past SA work (notably spatial strategy alternatives appraisal in 2013/14 ...), an understanding of precedents being set elsewhere, and other sources of evidence. It is evidently the case that under-supplying in Guildford would lead to a range of socio-economic problems, given that Woking is already under-supplying within the HMA.... There is an argument for under-supplying to be preferable from an environmental perspective; however, this argument is far from clear-cut given an assumption that unmet needs would have to be met elsewhere within the HMA (i.e. within Waverley, which is heavily constrained) or elsewhere within a constrained sub-region. For these outline reasons, lower growth options- i.e. options that would involve planning for a level of growth below that necessary to meet OAHN - were determined to be unreasonable.”

81. The Inspector, third, was satisfied that the duty to co-operate had been met; he had also been so satisfied when considering the Waverley Local Plan. The strategic housing market assessment, SHMA, involved the three Councils. Woking BC had insufficient capacity to meet its own needs, its boundaries tightly constraining the urban area. The duty to co-operate included consideration of Waverley and Guildford BCs providing part of the strategic housing area land supply for Woking BC's needs. There was no question of the duty to co-operate being invoked to ask either of those to meet Guildford BC's needs. There was no challenge to the lawfulness of his conclusion on the duty to co-operate.
82. Fourth, the Inspector's Report concludes that the allocations, involving releases from the Green Belt, taking the total supply of land up to 14602, with headroom over the 10678 OAN of 4000 dwellings, are justified by exceptional circumstances, strategic and local. Mr Kimblin accepted that,

were I to conclude, as I explain later I do, that the challenge, under Issue 2, to the lawfulness of that later conclusion failed, it was inevitable that that lawful conclusion would also constitute a lawful and adequate explanation for why the OAN had not been restrained at the policy-on stage.

83. However, fifth, specific consideration was also given to that point by the Inspector; it was not just all swept up in the larger justification for the overall level of allocations. It was evident from the PE agenda that it was specifically identified as an issue, and was considered over a whole day. It was also related to the Inspector's Issue 9, the spatial strategy and whether there were exceptional circumstances for the amount of Green Belt releases, which was considered about two weeks later. As Mr Findlay and Mr Honey submitted, consideration of exceptional circumstances for the release of Green Belt land necessarily involves consideration of the application of restraint policies at the policy-on stage.
84. IR 22-38 are essentially dealing with the objective assessment of housing needs, stage 1, policy-off. But IR 35 is relevant to both stages. The policy-on stage was clearly considered in IR35. It also sets out why the OAN needs to be met by Guildford BC, apart only from the question of any contribution towards meeting unmet needs from Woking BC. The circumstances point clearly to the serious problems which would arise from a lower housing figure, such as 361dpa. That is the first reason why the policy restraint was not applied; there was a significant need which had to be met. The implication of Mr Kimblin's submission was that the Inspector ought to have explained why needs from Guildford BC could not simply be left unmet, to be picked up if at all in some unspecified place yet further afield than the Strategic Housing Market Area. But that is what IR35 explains.
85. IR79 is also relevant; it describes the pressing housing needs; the absence of scope to "export Guildford's housing need to another district". The "overall level of provision", 14602, "will address serious and deteriorating housing affordability and will provide more affordable homes." If that is true for 14602, it is obvious that the Inspector considered that a lesser figure would not address those pressing needs. IR 42 and 46, and 83-85 also address the need for flexibility above the OAN.
86. Mr Kimblin submitted that IR86 was irrelevant to this Issue because he submitted that it dealt only with the headroom. I disagree. IR86 addressed the question of "Whether the quantity of development should be restricted having regard to Footnote 9 of the NPPF", one of the passages in the NPPF in which the role of restraint policies, such as the Green Belt, is recognised to be a basis upon which the OAN might not be met in full. On the face of

it the paragraph, even if also relevant to another purpose, covers the very point Mr Kimblin raised. The Inspector, in this section of the Report, is considering the strategic case for altering any of the Green Belt boundaries, and not just for strategic sites, nor just to the extent necessary to accommodate the headroom over 10678, or even the 10678. It is dealing with the very point which the “policy-on” stage raises. In my judgment, it is directly to the point.

87. The Inspector has already considered the pressing needs, and the consequence of them not being met. Here he considers whether the consequence of those needs being met, through releases of Green Belt land, mean that they should nonetheless not be met. His conclusion is clear: there is no justification for applying a restriction on the quantity of development. His reasoning is clear and adequate: land can be found within the Green Belt, through boundary changes, with relatively limited impacts on openness, elaborated elsewhere in the Report, and without causing severe or widespread harm to its purposes. He also considered whether further land could be made available in the urban areas; IR 81-2; these had been thoroughly investigated; significant constraints existed; any extra yield from sites which could have potential not yet earmarked, “would fall a long way short of making the scale of contribution towards meeting overall development needs that would enable the allocated sites in the Green Belt to be taken out of the Plan.”
88. I reject the Claimants’ first ground of challenge. This issue and whether a policy restraint should be applied to the OAN was considered and the Inspector’s conclusion that there should be no restraint below OAN was supported by ample reasoning.

Issue 2: Was the conclusion that there were exceptional circumstances justifying the allocations of housing land, released from the Green Belt, to provide headroom of over 4000 dwellings above the 10678 OAN lawful, and adequately reasoned?

89. This is the major issue in the challenge and permeates most of the grounds. I have already dealt with some general propositions about “exceptional circumstances”.
90. The gravamen of Mr Kimblin’s and Mr Harwood’s submissions on this ground concerned the headroom of 4000 dwellings or “excess” over OAN as they put it. The matters relied on by the Inspector in that respect were said not to be exceptional. As the argument developed, led on this point by Mr Harwood, and the more so in reply, it became clear that the attack was not on the fact that there was some supply beyond the 10678, but concerned

the extent of the headroom. Mr Harwood recognised that the delivery of the initial and the rolling 5 year housing land supply would require provision for a 20% buffer, at least initially. Land had to be allocated which could be brought forward throughout the plan period. He acknowledged that this was reflected in two of the strategic level factors behind the Inspector's acceptance that the strategic sites, which created the headroom, should be released from the Green Belt; IR 84-5.

91. However, in my judgment, once meeting the OAN is accepted as a strategic level factor contributing to "exceptional circumstances", as it has to be for the purpose of this Issue in the light of my conclusions on Issue 1, it follows that the provision of headroom against slippage and for flexibility to meet changes, "future-proofing" the Plan, as the Inspector put it, would also contribute to such circumstances. The challenge is to the scale of the headroom which it is said goes beyond that level; the headroom should have been judged to be sufficient at some lower level, between 10678 and 14602, enabling fewer Green Belt releases.
92. An impression of where the submissions go can be gleaned from adding 20% to the 10678, to give a rough idea of what in reality is contentious in this Issue. This issue comes down in practice to the inclusion of one or more of the three large strategic sites in the allocations. It is one or two of the former Wisley airfield site, and the sites at Gosden Hill Farm or Blackwell Farm which are at stake in this challenge. (The housing trajectory shows that the 945 dwellings on land around the villages are needed for the early years of the adopted Plan.) I accept that the unquantified unmet need from Woking BC would not be more than a small component of the total headroom, in view of the way the Inspector expressed himself in IR38 and 79. It could have been added to the OAN, but providing for it in the headroom is reasonable, and either way meeting that need is equally capable of being an exceptional circumstance.
93. The housing trajectory showed that the largest Green Belt contributors are the three large sites to which I have referred, and which come on stream after the initial years from Plan adoption and build up over time. The Inspector considered whether that should be reduced, but did not reduce it, although the reduced OAN, after September 2018, meant that four additional sites in the proposed Main Modifications were deleted following the February 2019 resumed hearing.
94. Mr Kimblin challenged the logic of the exceptional circumstances relied on by the Inspector for the release of land from the Green Belt to supply land for 4000 dwellings over OAN. The housing land supply figures, during the Plan period, were the sum of the allocations, in so far as they are

judged to produce dwellings during the Plan period. This leads to the figure of 14602. They were not allocated in order to provide a figure of 14602, because headroom of 4000 had been judged to be necessary by some form of assessment outside of the allocations. The precise headroom, though not the principle that there should be some, was the product of the specific allocations. This was said to be circular reasoning. The quantification of the need for the releases was calculated by reference to the releases to meet the quantified need.

95. Both advocates for the Claimants pointed to the way in which the headroom had varied, but had not reached 37% until the final adopted version of the Plan: 2016: 15,844 supply for 13,860 OAN; 2017: 14191 for 12,426; 2018: 15107 for 12,600; 2019: 14602 for 10,678.
96. First, I see nothing illogical in the Inspector's thought process, requiring a buffer of some significance and treating the total of the allocated sites as creating an appropriate buffer. There was no need to calculate a spuriously precise headroom figure, and then match it with sites. Sites do not present themselves or come forward in precisely matching dwelling numbers either. The headroom figure was a judgment based on the sites which were available to meet a requirement figure somewhat over 10678, and to do so in such a way that, over the initial and subsequent years of the plan, the rolling five year housing supply, with a 20% buffer for some years, would be maintained. The three would provide assurance that the requirement would be met, not just in total, but over the five year rolling periods. As the IR showed, the scale of the headroom was in part required because the sites to be released were themselves large, and could face delays on that account.
97. The Inspector asked, as part of the soundness judgment, whether those sites provided, not just the housing required, but did so with a good balance of location, size, meeting other needs such as for employment land, creating a coherent spatial distribution strategy. He asked whether there were significant advantages if more housing was provided than the OAN, in view of the pressing housing needs in Guildford, in terms of affordability and affordable housing. The way in which the buffer can meet the needs matters. The larger sites permitted other needs to be catered for, without peppering the area with Green Belt releases, or releases in more sensitive areas. The question that then arose, in view of the extent of the headroom which those sites created, was whether there should be a reduction in release. This was specifically addressed in the IR. That is a logical approach.

98. The IR's analysis of the need to release land from the Green Belt considered the need for housing, IR79, the need for land for business uses which could not be met other than by Green Belt releases, IR80, the lack of scope for increasing housing on land within the urban areas, IR82, the need for a sound and integrated approach to the proper planning of the area, IR83, and the need for flexibility, IR84-5, along with the Local-level exceptional circumstances in relation to the major sites and issues. The question was then asked whether that was too much and one or more sites should be removed from the allocations. It was not a simple question of defining a need and then deciding where to meet it; the process was in reality more iterative. The number of dwellings for which land supply was allocated, was determined in the first place by the OAN, but in addition a buffer had to be provided and a satisfactory delivery trajectory provided for; the selection of sites was affected by where the needs could best be met, with least impact on the Green Belt, catering for other needs, and making a coherent strategy; the land thus allocated yielded the total supply, adjudged to be a sufficient buffer but not so much larger as to require the removal of sites from the allocations. In all of this, the Inspector would obviously have been aware of the function of the Green Belt, and the importance of keeping land permanently open and free from development. That permeates his whole consideration of exceptional circumstances; it is why he is considering them.
99. Second, having read the strategic and Local-level exceptional circumstances, which have to be taken together, I had no sense of having read something illogical or irrational, or which strained the true meaning of "exceptional circumstances." I can see that a different approach to the quantity of headroom might have commended itself, but that was plainly a matter of planning judgment.
100. I now turn to the specific points made by Mr Harwood in relation to IR83-89, headed "Whether the difference between potential supply of 14602 dwellings and the latest MM2 housing requirement of 10678 implies that the plan should allocate fewer sites and release less Green Belt land." IR 83 said that the plan had to be considered as a whole as it contained an integrated set of proposals which worked together, with strategic allocations delivering a range of benefits which could not be achieved by smaller dispersed sites. This was not in principle said to be irrational, and it could not be so described. This latter point was also foreshadowed in IR43.
101. It was however, irrational, submitted Mr Harwood in relation to Wisley airfield: Wisley's allocation helped with A3 slip roads, bus services and cycle network which benefited allocations around villages such as Send

and Send Marsh/Burnt Common; Burnt Common provided an employment facility for the Borough. Most of this was to mitigate the impact of the allocation and so could not itself help justify it. The sites around the villages were sequentially less preferable than Wisley itself; facilitating unnecessary schemes could not be exceptional circumstances. Put in that way, Mr Harwood has a point on both fronts. But that way of putting it, is not the whole picture. The fact that mitigation at Wisley assists the development of other sites, that is to say, it functions beyond mitigation at Wisley, goes to the important point in the context of this topic, that the allocations work together as an integrated whole. The contention that the sites benefited were unnecessary anyway, rather depends on the case for their release, accepted by the Inspector. The Inspector considered these village site releases in the context of the housing trajectory. They may be sequentially less preferable than the strategic sites, but they were necessary allocations in order to provide the initial five year housing land supply, as the trajectory showed, and as the Inspector was entitled to conclude. So, benefiting their development was a further aspect of the integration of the allocations. I do not accept Mr Harwood's submission. Mr Kimblin made a similar point in relation to Blackwell Farm which I consider under Issue 3, but a railway station is relevant in an area of transport difficulties.

102. Nor do I accept Mr Harwood's submission that business needs were not relevant to exceptional circumstances at the former Wisley airfield, because it was not an employment-led site. The employment land there served a variety of purposes: the allocation itself, advancing the sustainability of the new settlement, both on the site and as part of a sound strategic distribution of new employment land. I also accept Mr Findlay's point about the extent of Green Belt and AONB constraining development opportunities, the restrictions on further development in the urban areas, and the need for work to the A3, an important road for infrastructure in Guildford BC.
103. He next attacked IR84: the Inspector erred in law in saying, in the Green Belt context, that the housing requirement figure was a "minimum not a target." Policy S2 expressed it as a requirement for "at least" 10678 dwellings. The error of law was that an opportunity to provide more than the requirement was not a "need", such as was required to constitute "exceptional circumstances." There was nothing "exceptional" about a desire to provide housing additional to any need. The NPPF did not call for the requirement to be exceeded at the expense of the Green Belt.
104. Again, I do not think that Mr Harwood is grappling with IR84 read as a whole, in which context that particular sentence has to be read. The real thrust of IR84 is that the Plan has to be robust and capable of meeting

unexpected contingencies: reliance on large sites made that particularly important, and there were various uncertainties about them. In those circumstances, the Plan ought to provide more than the bare minimum of supply in allocations; if that led to more than the minimum, that was not a reason not to make the provision; see also IR79. Besides the headroom meant that safeguarded or reserve land did not have to be provided; its provision would still have meant that land would “almost certainly” have been removed from the Green Belt. I do not accept that submission of Mr Harwood either.

105. Moreover, the prospect that a level of housing in excess of the OAN might be achieved can contribute to exceptional circumstances. I have set out under Issue 1, the pressing nature of the housing problems in Guildford BC. This is not just a question of totals. There would plainly be significant benefits, as the Inspector was well aware in this context, in terms of affordability, and affordable housing if more were provided. Taken as part of the whole group array of exceptional circumstances, there is nothing unlawful about that being seen as a useful even significant advantage, in line with NPPF housing policy, and as a contributor to exceptional circumstances. I accept that the OAN figure makes some allowance for those problems, but recognises that the problems are of a degree and scale that they cannot be resolved to a large extent. However, that does not mean that the advantage of a higher level of housing supply cannot contribute to exceptional circumstances. Once land is to be removed from the Green Belt for housing allocations, and a suitable buffer, the exceptional circumstances for their capacity can include the planning soundness of choosing sites which contribute most to the other requirements of the Plan.
106. Mr Harwood’s third point relied upon reading IR85 as envisaging that the allocations would endure well beyond the plan period, perhaps for decades. The reference to the timespan of the larger sites covering a number of plan reviews is, in context, a reference to the reviews during the plan period rather than to the review towards the end of or after the plan period. This trajectory also shows that the larger sites were expected to be built out within a couple of years of the end of the plan period.
107. Accordingly, I reject the Claimants’ submission on Issue 2.

Issue 7 Sustainability Appraisal.

108. I take this issue here, because it concerns the overall approach to the housing allocations. The essence of the point is closely related to Issue 2. The Claimants contended, through Mr Harwood, that once the OAN was reduced from 12426 to 10678 as a result of the publication in September

2018 of the 2016 household projections, there should have been a further SA examining reasonable alternatives which matched allocations to the OAN figure of 10678, with the Wisley airfield allocation in mind in particular however. There was no challenge to any aspect of the SAs which actually were carried out.

109. SAs are governed by the Environmental Assessment of Plans and Programmes Regulations 2004. SAs include the Strategic Environmental Assessment which those Regulations require. An environmental report is required for an environmental assessment, by Regulation 12. By Reg 12(2), the report has to:

“identify, describe and evaluate the likely significant effects on the environment of (a) implementing the plan or programme; and (b) reasonable alternatives taking into account the objectives and the geographical scope of the plan or programme.”

110. There are various consultation obligations. There is no specific provision dealing with when an updated SA is required, or when material changes of circumstances require an update. The question will always be whether the likely significant effects on the environment of the adopted Plan had been evaluated, and whether reasonable alternatives have been evaluated. Whether the work done is sufficient is for the reasonable judgment of the decision-maker, here Guildford BC; that judgment is reviewable on normal public law grounds, and indeed was also assessed by the Inspector.
111. By the time of the SA with the original submission local plan of 2016, the former airfield at Wisley had featured in five of the eight options for meeting a range of OAN between 13844 and 18594, brought in, when considering an OAN of 15844, or more, as a key supply variable. In the 2017 version of the SA, submitted to the Secretary of State, Wisley airfield was present in all eight options, with OANs ranging from 13,600 to 15680 dwellings. There was an Addendum Report SA in 2018, produced to deal with the fact that it was then thought that sites for a further circa 550 homes would be required to meet needs in the first five years of the plan after adoption.
112. In the 2017 SA, with the 2017 submitted version of the Plan, various plan objectives were set out: these included sufficient sustainable development to meet all identified needs, expressed later as providing sufficient housing of a suitable mix taking into account local housing need, affordability, deliverability, the needs of the economy and travel patterns. The plan objectives were described similarly in the 2018 SA update.

113. The 2017 SA also described how the spatial strategy alternatives were arrived at in 2016. The 2016 growth quantum options were considered: the OAN for the Borough was increased by the need to plan for a buffer, and the possibility of planning to meet Woking's unmet needs was considered. The distribution options were then considered, using a ten tier hierarchy of places with the most suitable, Guildford town centre at the top and development around Green Belt villages at the bottom. From that work, the eight reasonable spatial strategy alternatives were arrived at, leading to the 2016 preferred option, 4, OAN plus buffer, with high growth at Wisley airfield, enabling low growth elsewhere, 15844 dwellings.
114. The possibility of meeting unmet need from Woking was considered. The reasonable alternatives ranged from 13,600 – 15680, which all represented OAN+ buffer, ranging from 9.4% to 26.2%. The unreasonable options rejected were any lower or higher figure outside that range, at each end. An option involving no Green Belt release would be unreasonable as it would involve very low growth. While a smaller buffer than in the 2016 SA was reasonable at the lower end, as the delivery assumptions for two large sites had been revised downwards, any lower option would be too small. The preferred option then emerged, Option 1: 13,600, OAN +9.4% buffer. This had been described in the SA as “a reasonable low growth option.” A buffer needed to be planned for “given the likelihood of some sites (particularly large sites) not delivering or delivering at a slower rate than anticipated.” The advantages and drawbacks of Option 1 were then discussed at some length.
115. I do not need to deal with the 2018 SA update which was undertaken to deal with the anticipated release of four further sites to meet the then increase anticipated in OAN.
116. The Inspector's December 2018 Note for the resumed PE in February 2019, following publication of the 2016-household projections, and Woking BC's acceptance that it now had no unmet need, identified five issues which needed to be addressed. These included the overall housing requirement in the housing trajectory. But the Inspector noted that he would not be discussing the spatial strategy, strategic sites and constraints, which had already been thoroughly discussed.
117. His January 2019 Note, accompanying the Agenda, reiterated that consideration of the merits of allocated sites was not being reopened. The sole purpose was to look at whether there should be a change to the OAN or to the housing requirement. He had however read all the material submitted for the hearing.

118. Guildford BC opened its comments at the resumed hearing by pointing out that it accepted there was a genuine housing crisis in the Borough. It had not sought to reduce the number of sites originally proposed, “notwithstanding ostensible changes in circumstances which might have given scope for such an approach. It has not advocated the necessary minimum approach.”
119. Guildford BC produced a Note (“Initial Submission Whether Further Consultation and Sustainability Appraisal Is Necessary”) for the second day of the resumed hearings of the PE. Guildford BC’s position was that the OAN should be reduced to 10,678 and that the additional Green Belt sites in the proposed main modifications to assist with early delivery were no longer required. It disavowed a reduction in overall housing supply. It asserted that the buffer remained necessary to take account of the need for flexibility to adapt to rapid change, “to boost significantly the supply of housing”, uncertainty as to the future position in relation to Woking’s need, the need for infrastructure improvements because of development, ensuring the longevity of the plan, and other factors. It concluded that no further consultation was required, because all those affected by the reduction in OAN or the deletion of the four additional sites had had every opportunity to make representations as part of the additional hearing sessions. That specific point is not at issue.
120. The Note also expressed Guildford BC’s view that no update to the SA was required. It referred to Planning Practice Guidance, PPG, from the Department for Housing, Communities and Local Government, which advised that SAs should only focus on assessing likely significant effects of a plan. An update was to be considered only “where appropriate and proportionate to the level of change being made to the Local Plan.” A change to the plan was only likely to be significant, if it involved a substantial alteration to the plan, or was likely to have significant effects, or if the changes had not previously been assessed and were likely to have significant effects. Changes that were not significant would not usually require further SA work.
121. The Note stated:

“GBC has not considered further alternatives, but has maintained the approach of providing OAN with a “buffer”. Whilst the size of that “buffer” has varied throughout the process (SA2017 9.4%, 14% at submission and at 26% on main mods in respect of which the Inspector was content but now at 37%) that does not constitute a different alternative. Our understanding of the Inspector’s comments [informally made at the end of the summer and on the first day of the resumed PE] (and in GBC’s

view) it would not be sound or reasonable to have a buffer that was materially lower. GBC are not advocating any growth option. We are maintaining the approach of meeting OAN with an appropriate buffer.”

122. The changes, reducing the housing requirement figure and deleting proposed additional Green Belt sites, could not give rise to likely significant effects which had not already been considered. Eight different housing delivery scenarios had been considered as reasonable alternatives catering for the range of 13,600 to 15,680 dwellings over the plan period; the likely significant effects of each been evaluated. It would be inappropriate and disproportionate for further SA to be undertaken.
123. Mr Findlay also pointed out that participants such as Compton PC and Guildford Green Belt Group had made further written representations to the Inspector, among those responding to his specific questions for the resumed hearings in February 2019, to the effect that one or more strategic sites released from the Green Belt could be omitted from the allocations.
124. The Inspector, in the final section of his Report, assessed the legal compliance of the Plan. One issue was compliance with the legal requirements for SA. He concluded that what had been done was adequate. No further SA was required in relation to MM2, since the level of housing provision was within the range of options already tested by the SA, and the housing sites were the same as those in the submitted Plan; IR219. MM2 was the modification providing for 10,678 new homes during the plan period 2015-34, or 562 dpa, reduced from 12,426 in the 2017 submitted version of the Plan. The allocations to provide a supply of 14,602 dwellings were not reduced, although a modification, proposed before the 2016 household formation figures became available in September 2018, and introducing a further 4 sites with a capacity of 550 dwellings, was not proceeded with. I have set out IR 44 above in which the issue is also considered.
125. Mr Harwood submitted those paragraphs in the IR were wrong, although the error that mattered was that of Guildford BC. It was required by the Regulations to assess reasonable alternatives to the plan, taking into account the objectives of the plan, which by the time of adoption included 10678 dwellings. Alternatives which it was obviously reasonable to have considered were meeting that need and no more, and meeting a lesser need than 14602. The reasonable alternatives were not only in the range of 13600 to 15680 dwellings, with the supply figure in the middle. Reasonable alternatives to the 14602 figure had to be considered, since the dwellings requirement was 4000 fewer. There had also been material changes in

circumstance, with Woking BC announcing that it had no unmet need, and Waverley taking some 82 dpa of Woking's need. In 2017, the option preferred by Guildford BC had provided headroom 9.4% above the then OAN, but it was now 37% above the present and final OAN. It was not possible to say what the outcome of an assessment of reasonable alternatives might have been. Indeed, he went so far as to submit that there had been no SA of the requirement finally adopted, 10,678, or anything like that number, or of an "overprovision", as he put it of 4000. Guildford BC and the Inspector had simply refused to consider a housing figure at or near 10678, which refusal had fed into the decision that no further SA was required.

126. I cannot accept these arguments. No complaint is made of the SA process before the effect of the 2016 household projections was considered. First, the objectives of the Plan had not changed; the objective was not the provision of 10,678 dwellings; it was not simply the provision of the OAN plus an appropriate buffer. I have set out how the objective was phrased in the earlier versions of the SA. An updated SA, confining itself to the provision of 10,678 dwellings, omitting any buffer, would not have been a reasonable alternative, as previous SAs concluded, and would have been for an objective other than that of the Plan.
127. The judgment that an OAN without any buffer was not a reasonable alternative, was a reasonable judgment for Guildford BC to make. It could only be attacked on rationality grounds; see *Spurrier and Others v Secretary of State for Transport and Others* [2019] EWHC 1070 (Admin) at [434]. That would be untenable.
128. Second, whether the effective increase in the headroom or buffer, but without change to the level of housing allocation, was a significant change or one likely to have significant effects was a matter for the judgment of Guildford BC, as the decision-maker. It is clear that the overall level of housing supply was within the range already considered. All the housing allocations had already been evaluated. The judgment that the change was not significant or likely to have significant effects which had not already been considered, was reasonable.
129. Third, the only point in considering further alternatives would have been whether one or two large sites should be removed from the allocations. The smaller, sequentially less preferable Green Belt releases around villages, totalling 945 dwellings, could not have been omitted from any reduced buffer because of their importance in meeting the five-year housing supply in the early years of the Plan after adoption. Guildford BC and the Inspector did in fact consider whether the increased level of buffer in the same total

supply, with a reduced OAN, was appropriate. They each concluded that it was, and that no large Green Belt site allocation should be now omitted. The arguments for deleting one or more of the 3 large sites were raised; indeed there was an obvious issue about whether that would be an appropriate response. Guildford BC and the Inspector considered it. Guildford BC was entitled to conclude that a further round of SA was quite unnecessary. The Inspector agreed, in his Report. There was no misdirection as to the law; it was for Guildford BC to judge whether there had been a change in circumstances or in the plan which warranted a further SA. This judgment can only be challenged on public law grounds; the only one available would be irrationality. There was no irrationality in the decision.

130. The history of the extensive SAs and updates make it impossible to say that there had been no SA of the effect of the allocations, or of the OAN plus buffer. There were no further reasonable alternatives to be discovered; the alternatives would have involved the omission of one or more of the three large sites released from the Green Belt. In reality it had already been considered.
131. Even if there had been an error, and assuming that the omission of one or two of the large sites would have been a reasonable alternative to consider, it is perfectly obvious that the allocations in the adopted plan would have been the preferred choice. That issue was considered by both Guildford BC and by the Inspector. Omission of a further SA would have been a procedural error causing no prejudice, let alone substantial prejudice to anyone. Even if one going to vires, I would have exercised my residual discretion to take no action, given that it is perfectly obvious that it could have had not the slightest effect on the outcome of the Plan.
132. I reject this basis of challenge.

Issue 3: unlawful finding that exceptional circumstances existed.

133. Mr Kimblin submitted, focussing on Blackwell Farm, but making a wider point, that at IR165, the Inspector had included the “important contribution towards meeting housing, employment and educational needs” that the site would make, among the Local-level exceptional circumstances justifying the release of the site from the Green Belt. Mr Kimblin submitted that as any residential allocation anywhere would meet housing needs, meeting them could not be an exceptional circumstance. This is wrong. This was not an example of a site being released simply because it was suitable for housing. First, as I have already explained, meeting a general housing need by the release of land from the Green Belt, is not legally irrelevant to the

concept of “exceptional circumstances.” Second, meeting any housing needs beyond a figure somewhat below the OAN would entail the release of land from the Green Belt. Third, the release would be an effective contribution to meeting that housing need, but it would do so in a way which enabled other needs to be met, creating a sustainable pattern of development. This supports both meeting the need, and meeting it through the release of that particular allocation.

134. Mr Kimblin also submitted that housing needs were counted both in the strategic and Local-level exceptional circumstances, which he contended was illegitimate double counting. It is not surprising that, given the way in which the Inspector considered the strategic level exceptional circumstances and the local-level exceptional circumstances, both of which he needed to consider, that housing need would be referred to in both. The former focused on the strategic level need but the Inspector also had to consider the overall impact of the various Green Belt releases as a matter of strategy; the Local-level circumstances dealt with the practical nature of the contribution to housing and other needs which such a site allocation would yield, and the spatial distribution of development which the particular sites allocate would achieve. I cannot see that there is some flaw in logic, or that he has counted a factor twice in such a way that he has given the same factor, in reality but unconsciously, weight twice over.
135. In so far as the “double-counting” alleged was of the existence of a need, and the ability of a site to meet that need, they are different though related aspects of the “exceptional circumstances.” The way in which a site can meet the need, not just in numbers but in location, and as part of a sound spatial distribution, with other uses, and help bring forward infrastructure, can all fall within the concept of “exceptional circumstances.”
136. Mr Kimblin also took issue with IR165 over the inclusion, as part of the exceptional circumstances which Blackwell Farm offered, of its contribution to sustainable transport, including a new station. He submitted that these financial contributions were “necessary to meet the impact” of development, and legally irrelevant; contributions necessary to make a development acceptable were either immaterial or not exceptional. This echoes the earlier argument I dealt with in relation to the contributions which development at Wisley airfield would make to sustainability at other sites. In principle, I accept that mitigation measures are not a reason for granting permission, and would not be factors adding to the exceptional circumstances favouring the release of land from the Green Belt, other than as a means of choosing between competing sites where the potential for mitigation affected the choice. That can be important where, as here, Guildford BC and the Inspector had to undertake a comparative exercise in

choosing which combination of allocations would constitute a sound spatial distribution of development, contributing also to more widely beneficial infrastructure.

137. In my judgment, Mr Kimblin's submission has not fully taken on board the significance of the contribution to the infrastructure. This is clearer from IR137. As with other forms of infrastructure, the contribution assists the achievement of a facility, here a new station, which is obviously of wider importance than simply providing for the allocation site users. It can provide for existing users in its vicinity. That wider aspect is plainly material. But there is a more general point: this is a sustainable site on which various needs can be met. The overall qualities of the site can contribute to local exceptional circumstances.
138. I do not know if Mr Kimblin is right to say that the contribution would be seen as "necessary" to make the development acceptable, but the contribution would still be a material consideration favouring development, even if it were not necessary for acceptability. His point is not made out in relation to this Plan; he is substantially taking issue with a reasonable and lawful planning judgment.
139. I turn now to the grounds relating to the individual sites, starting with the former Wisley airfield.

Issue 4: the Wisley airfield appeal decision and the way in which the Inspector dealt with it.

140. I have set out above what the Local Plan, LP, Inspector said about this decision. Mr Harwood contended that, although Guildford BC had refused permission for the development on the former airfield, on a site smaller than the allocation, and had opposed the appeal, it had sought to do so in a way which protected its allocation, but in reality has failed. The refusal had been on the grounds that there were no "very special circumstances" to justify this inappropriate development in the Green Belt, even though Guildford BC lacked a 5 year housing land supply, and there would be harm to the character of areas to the north and south of the site. This, Guildford BC had contended, would be avoided by the inclusion of the areas in the allocation which lay to the south of the appeal site, but which were not part of the appeal site. There was no strategic highways objection.
141. The Inquiry lasted 21 days in 2017; the decision was dated 13 June 2018, coming out during the PE. Mr Harwood submitted that the appeal Inspector's conclusions and recommendations, and the Secretary of State's decision accepting them, went rather wider than the issues raised at the

appeal by Guildford BC. His submissions to me were very similar to those sent to the Secretary of State dated 18 April 2019, by Ockham PC after publication of the LP Inspector's Report. Ockham PC asked the Secretary of State to prevent Guildford BC adopting the Plan until he had been able to decide whether to call in the Plan or to direct its modification. The letter complained in strong terms about the extent of land removed from the Green Belt. It contended that the Plan reversed key findings made in the appeal, without recognising it was doing so, or providing any reason for doing so. The decision, it was said, condemned, in reality, not just the appeal proposal but also the allocation.

142. The Secretary of State refused either that request, or more probably another request to the same effect, in a short letter to the Leader of Guildford BC. The Secretary of State said that the LP Inspector "has taken the issues raised into account when considering the allocation of the former Wisley Airfield site for development, and that the plan provides appropriate mitigation of the impacts of development on this site." He was pleased that the Plan contained a requirement for a master plan for the site; he would also consider calling in applications in relation to the development of Wisley airfield, on their individual merits.
143. The appeal Decision Letter, DL, agreed that the development was inappropriate for the Green Belt and that it could only be permitted in very special circumstances. It would conflict with two of the five purposes of the Green Belt: it would not assist in safeguarding the countryside from encroachment nor in the regeneration of urban land. It would reduce the openness of this part of the Green Belt. The harm to the Green Belt would be "very considerable", in conflict with the development plan and paragraph 79 of the NPPF. The DL went on to consider whether there were very special circumstances which clearly outweighed the harm.
144. The DL gave limited weight to the Wisley airfield allocation in the emerging Local Plan. It was the development plan policies which were of most relevance. Significant weight was given to the significant shortfall in the 5 year housing land supply, which then amounted to only 2.36 years. Significant weight was also given to the affordable housing, 40% of the proposed total.
145. The DL agreed that a suitable quantity and quality of SANG would be provided, and that subject to conditions and a planning agreement, "the development would not have an unacceptably likely significant effect on the SPA." There would be a severe and harmful strategic highway impact to which significant adverse weight was given, although unacceptable harm to the local road network was unlikely, with certain works being

undertaken. On transport sustainability, the DL agreed that “...overall, the proposals go a long way towards making the location more sustainable... [but] the proposal would not be in full accord with [the] emerging Policy A35... as it would fail to provide the required cycling improvements...” Limited weight was given to that, as it was to the concerns of the local education authority that the site was not suitable for an all-through school for the wider community. Although some of the harmful impacts on the appearance of the area could be partially mitigated by extensive landscaping, “this would not disguise the basic fact that a new settlement in a rural area would, inevitably, cause substantial harm to both its character and its appearance.” This would be irreversible, contrary to development plan policy, and carried significant adverse weight. Other factors were considered as well. The Secretary of State agreed that many of the purported benefits were little more than mitigation, while the benefits for the wider community, outside the appeal site, were rather more limited. The loss of some 44ha of best and most versatile agricultural land was accorded considerable weight. The harm to heritage assets was less than substantial.

146. On 13 June 2018, the Secretary of State rejected a request from Wisley Property Investments Ltd to delay issuing his decision on the appeal, concluding that:

“in view of the range of factors remaining to be resolved, the most satisfactory approach is to decide this appeal in the context of the current development plan. This reduces the uncertainty for all parties and leaves the way open for further applications to be considered (by the Council in the first instance) once there is an up-to-date planning framework for the Borough.”

147. Mr Maurici QC for Wisley Property Investments Ltd submitted that this showed that the Secretary of State did not regard the appeal decision as ruling out the allocation or a further application. That is true, but its significance can be overstated. He also drew my attention to the decision of the Inspector, accepted by the Secretary of State, to refuse an application for costs against the developer after the appeal. The application was made on the grounds that the pursuit of the appeal was unreasonable in view of the absence of any solution to the highways issues, and the unmet housing need was “unlikely” to outweigh harm to the Green Belt and provide very special circumstances. The emerging local plan could not add sufficient weight to amount to very special circumstances. The appeal Inspector found that the appellant had always intended to pursue a plan-led scheme, and had done so in the reasonable expectation that the emerging Local Plan would have been adopted in July 2016 in time for the decision on the

application lodged in December 2014. But it had been delayed; the allocation boundaries had varied. The highways issue turned on the slip roads; it was not an objection in principle but went to whether they could in fact be provided. On Green Belt, the appeal Inspector said that the lack of suitable housing sites remained acute and some land would probably need to be released from the Green Belt to meet any identified need. He continued:

“I do not consider that it is inevitable that this appeal would fail on Green Belt grounds or that its location within the Green Belt, in advance of any determination on whether it should be taken out of the Green Belt, made the appeal hopeless. The Appellant put forward a credible case for the development in the Green Belt including a raft of matters that were, when taken together, considered to comprise the necessary VSC.”

148. It is worth noting, in the context of the arguments which I have heard, that neither the appeal Inspector nor the Secretary of State regarded the scope of “very special circumstances” as limited to individual circumstances which were, taken by themselves, not very special, in the sort of language which Mr Kimblin deployed in relation to the concept of “exceptional circumstances.” The need for general housing was capable of contributing to those circumstances.
149. I note these further points from the appeal Inspector’s Report, AIR. Guildford BC’s Green Belt and Countryside Study, part of its Local Plan preparatory work, recognised that any large non-urban site in a Borough where 89% of the land lay within the Green Belt, would conflict with the Green Belt purpose of assisting in the regeneration of urban land; and it was only being contemplated because there was insufficient suitable urban land within the Borough. At 20.71, AIR, the appeal Inspector considered transport sustainability. Without changes, the appeal site was not in a sustainable location, with little public transport in the immediate vicinity, and narrow winding lanes, without footways or lighting, which were not conducive to walking or cycling. The proximity of the A3 and the strategic road network would encourage travelling by car. Various significant interventions were proposed to deal with this. The maintenance of the level and cost of the bus services would be “quite challenging”, but would go “some way to improving the public transport options.” The off-site cycle network required, by the emerging Local Plan, to key destinations including railway stations at Ripley and Byfleet was not provided; the roads were of insufficient width and rather demonstrated that they were not conducive to cycling other than by experienced and confident cyclists. The long linear shape of the site did not assist sustainability as buses would be needed by some residents to reach the village centre, notably from the

housing which could be up to 1500m, as the crow flies, from the centre. The scheme failed to meet even the minimum requirements for cycling in the emerging Local Plan. However, AIR20.81, the proposals went a long way towards making the location more sustainable but fell short of the full cycling improvements required by the emerging Local Plan. Weight would be given to that shortfall because that was the plan which Guildford BC intended to submit for examination.

150. The appeal Inspector accepted, AIR20.87, that some landscape and visual harm was inevitable with development in the countryside: the character and appearance of the site would change significantly; the character of the wider area would also be affected. Guildford BC accepted some harm was inevitable, wherever new housing was provided in the Borough, given the severe constraints it faced. But there would still be a very substantial change to the character of the area; the form of the proposed settlement would be wholly at odds with the loose, informal nature of the settlements that had grown up organically in the area over the years. The site was on a long east-west ridge, rising to the east, so “any development on the site would inevitably stand out in the surrounding landscape making it prominent and potentially dominating.” The inclusion of the additional land in the allocation to the south of the appeal site, with the same amount of development, “would allow a less dense and linear development, as envisaged in the eLP.” As it was, AIR 20.94, all the development was squeezed from the north, by the SPA, and the south:

“forcing the development upwards and resulting in a highly urban character this is partly a consequence of the site being considerably smaller than the site that GBC intends to allocate in eLP Policy A35. While any development of this scale on this site would appear out of keeping with its surroundings, the additional constraint imposed by a smaller site seems to exacerbate the harm to the character of the area.”

151. The overall impact “would result in substantial harm to the character of the immediate area”, eroding the historic pattern of the settlements to the detriment of their character. He agreed with residents that this impact “would be catastrophic on their rural way of life.”
152. The impact on the appearance of the area would be rather less severe than on its character, as much of the site was quite well screened from off-site public viewpoints. The existing runway was a stark concrete feature that failed to make a positive contribution to the appearance of the area; but there would be a harmful impact on public rights of way. There would be a change from travel through an open largely agricultural landscape to an urban walk, with urban sights and activity. Off-site views would be fairly

long distance as the site was quite well screened by existing trees and, from nearby, but the ridge would be visible from as far afield as the AONB. It would appear as a linear, urban feature, although careful use of materials would soften its visual impact. Its impact would be exacerbated by its village location, with 3- to 5-story buildings along the central spine road making the full 2.4km of the development visible from highly sensitive locations on public rights of way in the AONB. In time, some of the impacts on the appearance of the area could be mitigated by extensive landscaping.

153. The appeal Inspector also considered nitrogen and nitrous oxide levels in the SPA. He rejected the extreme position put forward by Wisley Action Group and Ockham Parish Council, for whom Mr Harwood appeared at the appeal Inquiry, that because the critical level for NO_x and the critical load for nitrogen were already being exceeded, not one single vehicle movement could be generated without infringement of EU law, so planning permission would have to be refused. He summarised the detailed assessment carried out by the Appellant, AIR 20.140:

“This shows that the part of the SPA where the 1% increase is exceeded is limited to strips of land adjacent to the A3 and M25 ... Surveys show that beyond 200m there is no discernible effect; the impacts are thought to be greatest within the first 50-100m but the area where the appeal scheme makes a greater than 1% contribution is much more limited. ...20.141 [M]ost of the SPA that falls within even 200m of the A3 and M25 comprises woodland; there are only small areas of heath. It also shows that by 2031 none of the heathland would fall within an area exceeding critical levels for NO_x with the appeal scheme and other future development... This woodland provides a shelter belt and possibly nesting opportunities for the Woodlark but does not offer ground nesting sites. This type of buffer is advocated in DBRM as best practice. The evidence, which was not challenged, shows that some Nightjar territories have been within the 200m distance but none within the 140m distance from these roads.”

154. Natural England had raised no objections on air quality grounds. There was no evidence demonstrating that changes in air quality, individually or in combination with other developments, were likely to have significant effects or undermine the conservation objectives for the SPA; an Appropriate Assessment was not required.
155. The appeal Inspector accepted that the runway and hard standings, amounting to almost 30ha, was the largest area of previously developed land in the Green Belt in the Borough, and its beneficial reuse contributed

- to very special circumstances, and to Guildford BC's justification for seeking to release it from the Green Belt. This had to be tempered by the fact that a larger area of agricultural land including well over 40ha of the best and most versatile would be lost.
156. In his overall conclusions, the appeal Inspector said that the proposals were "largely, but not completely, in accordance with the eLP but, for the reasons set out above, it carries only limited weight as there are unresolved objections to the relevant policies. The unresolved objections are significant in content and quantity and this limits the weight that can be accorded to the eLP." He understood the frustration of the Appellant who could reasonably have expected the eLP to be more advanced and therefore weightier than it was.
 157. The proposals did not fully accord with the eLP, seeking to accommodate roughly the same amount of development as sought by the eLP, on a smaller site. Other requirements in Policy A35, such as the provision of an off-site cycle network to key destinations and sensitive design at site boundaries would only be partly met by the appeal scheme. The failure to provide adequate infrastructure, in the form of north facing slip roads at Burnt Common, was a major and fatal failing of the scheme. The proposals would not protect or enhance the natural, built or historic environment and could result in a high level of car-dependency. The inevitable harm from such development in a rural setting would be particularly noticeable in the midst of a cluster of hamlets. Its linear form, in part a consequence of the smaller site, and its location on a ridge meant that there would be longer views of the proposals; from the AONB, the new settlement would be seen to impose itself on the landscape without regard to the established settlement pattern or form.
 158. Mr Kimblin's contention was that the LP Inspector had not grappled with the thrust of the reasons which led the Secretary of State to accept the appeal Inspector's recommendations for the dismissal of the appeal. They reached different decisions on the same issues, and it was not possible to understand why he differed from the appeal decision. Mr Kimblin highlighted the contrasting language about the harm to the Green Belt, the loss of best and most versatile agricultural land, the degree of prominence and visual self-containment, the sustainability of the location, including the provision of bus services and the difficulty of accommodating facilities for the average cyclist.
 159. Mr Kimblin made some complaint, without alleging any separate error of law, that the Inspector had sought a note from Guildford BC on the appeal Decision but had refused to accept written representations from other

participants, on whatever side of the Wisley airfield allocation debate. The Note pointed out that an appeal decision and the decision on a Local Plan allocation were decisions of a different nature, with different statutory tests. The approach to development in the Green Belt necessarily differed. It has always been the intention of Guildford BC that the site should come forward via the plan-making process. There would be no substantial harm to the Green Belt if the site were removed from it. The important highways objection had largely been resolved and Highways England expected to be able to withdraw its objection. The harm alleged to the character and appearance of the landscape had been considered, in that process, in the context of longer -term housing need, and where else the need could be met with less harm. The allocation in the emerging Local Plan had been given limited weight. The residue of the allocation outside the appeal site, could have come forward for further housing, had the appeal succeeded. The appeal Inspector accepted that the difference between the allocation and the appeal site had exacerbated the harm caused by the development.

160. First, in my judgment, this issue is different from some cases where an appeal decision has been prayed in aid of an objection to an allocation, but has not been dealt with by the LP Inspector. This appeal decision concerned the larger part of an allocated site, rather than a calculation of some more generally applicable nature, or some unallocated site. It was contemporaneous. Here, the LP Inspector did treat the appeal Decision as relevant in considering the soundness of the allocation, as it obviously was; and he set out to deal expressly with its significance for his Report. If he had not done so, there could have been a lively debate as to whether he ought to have done so, but that is not the case here.
161. Second, the decision on the appeal was not a decision on the soundness of the allocation, nor vice versa. It would not have been for the appeal Inspector to trespass on the functions of the LP Inspector and the former, and the Secretary of State, would have been well aware of the need not to do so. The framework for the respective decisions was markedly different, as IR 181, the subsequent discussion, and the earlier discussion of strategic Green Belt exceptional circumstances in IR86, showed.
162. The appeal was concerned with whether the proposal was consistent with the existing development plan; the PE was concerned with whether the emerging Local Plan was sound, in making changes to the Green Belt boundary, and in making housing provision for the period to 2034. “Very special circumstances” had to be shown for this inappropriate development in the Green Belt, as opposed to “exceptional circumstances”, a lesser test, for varying Green Belt boundaries.

163. Third, the Local Plan was emerging but the appeal Inspector was aware of the objections to the Wisley allocation and did not afford it much weight on that account; the LP Inspector had the task of judging its soundness, and not its weight as an emerging Plan. The LP Inspector also had not just the immediate housing land supply shortfall, but also the future allocations to meet the OAN with a buffer to deal with. He had to deal with a long-term plan, covering the whole of Guildford BC's area, so that a coherent strategy for that period was provided, within which development control and infrastructure decisions could be made. He necessarily had to consider whether there were any non-Green Belt sites which could be released instead, and, if Green Belt sites were to be released, which were the best locations overall, including not just their effects on the Green Belt, but also their ability to form a coherent spatial distribution strategy, meeting other needs, and being made sustainable, as a whole. This was a comparative exercise, and not a decision about a single site. This was all part of the LP Inspector's consideration of "soundness". The consideration of "soundness" was no part of how the appeal Inspector had to approach his Report, and the Secretary of State, his decision.
164. Fourthly, there were also more development/allocation specific considerations: one of the most important was the sustained highways objection to the absence of practical solution to the necessary north-facing A3 slips, which was sufficiently resolved by the time of the LP IR for that major objection not to be a factor against the allocation's soundness. The second was the difference between the appeal site and the allocation, with the implications which that had, whether for further development on the residue of the allocation, or on the way in which the height of the buildings, particularly with the ridge running west-east, would make development prominent. Necessarily, the detail of the boundary treatment would be different. These are all part of IR186, and the way in which the allocation is analysed by the LP Inspector.
165. I do not consider that it was necessary for the LP Inspector to take the AIR and analyse all its views against his views on the various topics. There is perhaps a difference in emphasis in the LP IR comments on the Green Belt releases in general "relatively limited impacts on openness" and their not causing "severe or widespread harm", and the AIR comment that there would be "very considerable harm" to the Green Belt from the Wisley allocation. However, as IR 182 makes clear, on a comparative basis, the Wisley site was of medium sensitivity. Its development would avoid putting pressure on other Green Belt areas of greater sensitivity. This comparative exercise, underpinned by the Green Belt and Countryside Study, was not a task which the appeal Inspector could undertake or

attempted to undertake; but was essential for the LP Inspector. The same applies to the assessment of the degree of visual prominence: the LP IR comments on the allocation as “fairly self-contained visually,” being on a plateau and not prominent, whereas the AIR thought it visible along its length to highly sensitive receptors, though quite well screened in certain respects. But the sites they consider differed in an important respect and with an adverse effect for the appeal scheme. It is obvious from the AIR that the narrowness of the appeal site exacerbated the prominence of the appeal development. The LP Inspector also considered that specific design objectives, should be in the Plan, via a Main Modification, Policy A35. The effect on the character of the area is referred to in IR 181, but is a factor outweighed by the compelling strategic-level exceptional circumstances. The LP Inspector obviously considered the appeal decision, but found the circumstances he had to deal with, compelling.

166. At the strategic level, the allocation can support sustainable modes of travel. It was not necessary for the LP Inspector to point out how the comments of the appeal Inspector in relation to the cycle network in the appeal scheme could be varied so as to provide what the allocation envisaged. The Secretary of State had already agreed that the appeal proposals went a long way towards making the location sustainable. The appeal Decision could not and did not conclude that the cycle network could not be provided or provided with a larger site, or that the bus services could not be provided. The shortcoming was only given limited weight. The LP Inspector was not required to deal with best and most versatile agricultural land explicitly in order for adequate reasons to have been given for his conclusion on the soundness of the allocation of this site; limited weight was given to that aspect by the Secretary of State.
167. Accordingly, I reject the contention that it is not possible to see why the LP Inspector reached the conclusion he did, having considered, as he obviously did, what the AIR and Secretary of State had to say. In the circumstances known to all participants about the differing tasks, the reasons are sufficient. There was no need to identify, issue by issue, where the LP Inspector did or did not, to some degree, agree or disagree with the appeal Inspector. Such differences as there may be are explained by the different focus of their tasks and the different cases they were considering. I have referred earlier to the authorities on reasons which are most to the point. The instant case calls for no further elaboration of the law. I add *Dylon 2 Ltd v Bromley LBC* [2019] EWHC 2366 (Admin) to the authorities on reasons, already referred to because it deals with reasons and their relationship to earlier appeal decisions, though in a different set of circumstances.

Issue 5A: the “white land” at the former Wisley airfield

168. This relates to the allocation at the former Wisley airfield. There are three areas where land around the allocation was taken out of the Green Belt but left unallocated, termed “white land”. That expression is convenient in this context even though other policies applied to restrict development on the areas in question, and it is not reserved or safeguarded for future development, as would normally be the purpose of “white land”. The major area of white land lies between the Wisley allocation and the new Green Belt boundary to the north along the SPA; it is part of the buffer zone for the SPA. The second is to the south with allocated land on three sides. The third is at the south-east corner of the allocated site, and was removed from the Green Belt in the 2017 changes to the Plan.
169. Mr Kimblin submitted that, once it had been accepted by the Inspector that there was no need for land to be safeguarded for development or treated as reserve land, there was no need for land to have been removed from the Green Belt, and left as white land. His complaint was that the Inspector, though no longer it appeared Guildford BC, had provided no justification for those areas to have been removed from the Green Belt.
170. The reasons for exclusion from the Green Belt of the area north of the allocation were the establishment of new defensible Green Belt boundaries, and because some development, such as small car parks, board walks and the like, which would or could be inappropriate in the Green Belt, was proposed in connection with the new SANG, as essential mitigation for the development on the allocation, as agreed with Natural England. It was not included in the area allocated because it was not suitable for development in general. The need for that land to be excluded from the Green Belt so as to create a suitable Green Belt boundary was raised in the Green Belt and Countryside Study, part of the evidence base for the Local Plan. IR115 referred to the buffer between residential development and the SPA boundary. Policy P5 resisted a net increase in residential units within 400m of the SPA boundary and sought avoidance and mitigation in respect of residential development between 400m and 5km from the boundary.
171. The test of “exceptional circumstances” cannot simply be applied to the whole of the area of change to the Green Belt boundary without acknowledging that the new boundary has to follow defensible lines. The rather wavy line bounding the north of the Wisley allocation was plainly not as defensible a boundary as that adopted. It is not necessary for separate exceptional circumstances to be shown. The necessary exceptional circumstances justify the Wisley allocation; defensible boundaries to the Green Belt may not always align with the allocation boundary, but

defensible boundaries have to be provided as a necessary consequence; see NPPF 85, above.

172. The second area was near the Bridge End Farm. This was not available for development so it was not allocated. But the need for defensible boundaries to the Green Belt make its exclusion from the Green Belt clear. This was also explained in the Green Belt and Countryside Study.
173. The third area, at the south east corner of the site, was not included in the allocation because it is not available; the owner is opposed to the allocation. Yet the boundary of the Green Belt, if it followed the allocation boundary hereabouts would not follow defensible features. The previously redrawn boundary followed the airfield boundary and a field boundary. It was now to follow the two roads, Ockham Lane and Old Lane, which bounded the south-east corner site on the south and east sides. This was explained in the “Summary of key changes to the Proposed Submission Local Plan: strategy and sites (2017)”. The airfield is no more; defensible boundaries are permanent hard features, of which roads are a paradigm. Field boundaries are not so permanent. This is a simple matter of planning judgment.
174. The explanations by Guildford BC are sufficient. This is a matter of planning judgment for Guildford BC. It was not necessary for the Inspector to address each area where the proposed new Green Belt boundary was contentious between Guildford BC and others making representations. He had the local authority evidence base. He had to consider the allocations for soundness, but not their precise boundaries, unless in some way a boundary issue itself went to the major issues on soundness, legal compliance and policy consistency. That is not alleged here. As I have said, there was no further test of “exceptional circumstances”, at least not normally, to be applied to such areas of land as might lie between an allocation and a defensible new Green Belt boundary, where they are not reserved or safeguarded sites and simply result from a sensible boundary drawing exercise. The exceptional circumstances come from the very allocation of the site.

Issue 5B and the consultation on the 2017 version of the submitted Plan

175. This point is of no real moment according to Mr Harwood who fashioned it: it was a technical but readily correctable error, on his analysis. The 2017 changes to the allocation area and Green Belt deletions could not be made without the Inspector determining that the 2016 plan was unsound if they were not made, which he did not do. So, there was no power to make them on the part of either Guildford BC or the Inspector.

176. This is how his argument proceeds. The 2016 proposed submission version of the Plan was published for representations to be made under Regulation 19 of the 2012 Regulations. Representations were received in large number. That version was not however submitted to the Secretary of State. The 2016 version proposed the removal of the Wisley allocation from the Green Belt, along with the land to the north of the allocation which was a buffer to the SPA, and the southern part of the unallocated land.
177. The Plan was altered in 2017. So far as the Wisley area was concerned, three fields towards the south-east of the centre of the allocation were included for the first time, and the area to the south-east corner was removed from the Green Belt but not placed in the allocation.
178. A further round of representations was sought, but this was confined to the changes from the 2016 version, and it was only representations on the 2017 Plan about the changes which would be passed on to the Inspector. He would however also receive all the representations on the 2016 version. General comments about the changes could be made, and Guildford BC was also seeking specific comments on legal compliance, the duty to cooperate and soundness. Guildford BC described this as a “targeted Regulation 19 consultation”.
179. The 2017 version was submitted to the Secretary of State and was the subject of the PE, and proposed modifications. None of the changes to the 2017 version from the 2016 version were themselves the subject of any modification proposed by Guildford BC to the Inspector or by him directly.
180. Mr Harwood submitted that regulation 19 required the consultation in 2017 to have been on the whole plan and not just on the changes. Regulation 19 states:
- “Before submitting a local plan to the Secretary of State under section 20 of the Act, the local planning authority must-(a) make a copy of each of the proposed submission documents and a statement of the representations procedure available in accordance with regulation 35...
181. By regulation 20(1): “Any person may make representations to a local planning authority about a local plan which the local planning authority propose to submit to the Secretary of State.” It is those representations which have to be submitted to the Secretary of State. “Proposed submission documents” are defined in regulation 17: they include “(a) the local plan which the local planning authority propose to submit to the Secretary of State.” By s20(2) of the 2004 Act, no development plan document can be submitted by a local authority to the Secretary of State, unless the

requirements of various regulations have been complied with, and the submitting authority thinks that the document is ready for independent examination for, amongst other matters, its soundness. The examining Inspector must recommend that a plan that is not sound or which does not satisfy statutory requirements should not be adopted, unless he considers that there are modifications that would make it sound and satisfy the statutory requirements, provided that the duty to cooperate has been met, and the submitting authority asks the examining Inspector to make the necessary modifications.

182. The powers of the Court under s113 of the 2004 Act extend beyond a quashing of the document, and by s113(7A) and (7B), permit it to remit the document to the planning authority with directions as to the action to be taken. Directions may require specific steps in the process to be treated as having been taken or not taken, and require action of unspecified scope to be taken by the plan-making body. Those powers can be exercised in relation to the whole plan or part of it.
183. Mr Harwood submitted, as had the Wisley Action Group in its response to the 2017 submission draft, that the plan intended to be submitted was the 2016 version; the changes in the 2017 version could not lawfully be made until the Inspector had found that the Local Plan was unsound without them, and modifications had been sought by the Council or recommended by the Inspector to make the plan sound. The 2017 changes were no different in law from any other changes intended to remedy unsoundness; this was all because there had not been consultation on the 2017 plan as a whole. He submitted however that the consequence was that it was only the inclusion of the changes made in the 2017 draft which were unlawfully included in the Plan.
184. I did not find this persuasive at all. I note that Planning Practice Guidance, PPG, contemplates that there can be such a targeted consultation, though that cannot be determinative of the law. The PPG states that the Inspector should consider whether the changes resulted in changes to the plan's strategy, whether there had been public consultation and a SA where necessary. If those points were satisfied, the addendum could be considered as part of the submitted plan. If not, he would usually treat those proposed changes as any other proposed main modifications, which would need to satisfy the statutory terms of s20(7B) and (7C). I regard that as practical advice, which does not assist Mr Harwood's rather technical legal submission. But I do not necessarily accept that the PPG is a complete statement of the circumstances in which, before submission, modifications can be made, with a targeted consultation, to a plan which had already been consulted on. It may not be necessary for the plan to be regarded as

unsound before the changes can be made, in view of the obligation to submit what the local authority considers to be a sound plan.

185. It starts with Regulation 19. I see nothing in that Regulation on its own or with Regulation 20 which prevents a Local Plan being amended before submission so that in the judgment of the local planning authority it is sound when submitted. The contrary is not contended. There has to be consultation on the submitted Plan, and all the representations have to be submitted to the Secretary of State. All aspects of the Plan submitted in 2017 were the subject of consultation and all the representations were submitted. That is all that the language requires. The authority must submit a plan which it believes is sound. If it considers that changes are necessary after consultation but before submission, Mr Harwood would require that the whole Plan is subject to further consultation. I cannot suppose that all those who had previously made representations would realise that they had to repeat them, even if they merited no change, for them to be forwarded to the Secretary of State, or would have the stamina to do so. Were they not to repeat themselves, it is hard to see on what basis their consultation responses to an earlier plan should be forwarded to the Secretary of State.
186. I cannot see what language or purpose of the Regulations means that amendments cannot be the subject of a targeted or restricted consultation at all. The opportunity to provide further comments would be pointless. I can see that if a further round of consultation was limited in its scope with the result that an aspect of the Plan, or some interaction between the various parts or some discontinuity arising from the fact that the alterations came later in time, was not consulted upon, that would be a breach of the Regulations, but that is not contended here. Mr Harwood was unable to point to an aspect of the 2016 Plan which was affected by the alterations in 2017 from which further representations were excluded. His point had no substantive contention behind it. If it did, he would have been able to argue that the Regulations had been breached, not because of form but because of the substance of the consultation.
187. If Mr Harwood is right about a breach of a procedural requirement, falling short of the submission of the wrong plan, it is difficult to see what useful remedy there should be. The alleged breach of a procedural requirement prejudiced no one and had no effect on the Plan at all. I could require the consultation step to be treated as having been taken in relation to the whole plan, but that is not the purpose of his argument. I was unable to follow his submission that, if a procedural remedy were required, some limited solution confining itself to the Wisley allocation would suffice.

188. I agree with Mr Findlay that the essence of Mr Harwood's argument is that the consultation requirement was breached, and unless it is repeated on the Plan as a whole, and the 2017 version recognised as not having been submitted and examined, no useful remedy can be granted. If the consultation process had to be repeated, the flaw could not be remedied without a repeat of the whole consultation exercise, with updated representations and the whole PE starting again. Yet that was what Mr Harwood disavowed.
189. I find it impossible to see how Mr Harwood's submission that it was in fact the 2016 version which was must be treated as having been submitted to the Secretary of State for examination can possibly be right. But, if right, I can see no sensible basis upon which the whole Plan could avoid reversion to a pre-submission stage. Mr Harwood, understandably, did not wish to go so far. It rather illustrated the lack of merit in this whole submission.
190. I reject this ground of challenge.

Issue 8: The air quality impact of the allocation at the former Wisley airfield

191. The Inspector considered this issue under Issue 7, sub-heading "Biodiversity." The SPA consisted of fragments of dry and wet heath, deciduous wood land, gorse scrub, acid grassland and mire, and conifer plantations. The public had access to about 75% of it, as common land or designated open country. It supported populations of European importance of nightjar, woodlark and Dartford warbler during the breeding season. These species nested on or near the ground, which made them susceptible to predation and disturbance. A Special Area of Conservation, SAC, overlapped the SPA, but did not feature separately in the submissions to me.
192. Regulation 105 of the Conservation of Habitats and Species Regulations 2017 SI No.2012 requires an appropriate assessment to be made of the implications of a land-use plan, on its own or in combination with other projects or plans, "likely to have a significant effect" on an SPA. The assessment examines the implications for an SPA in view of its conservation objectives. The appropriate nature conservation body, in this case Natural England, had to be consulted, and the opinion of the general public was also to be taken. However, the land-use plan could only be given effect in the light of the assessment, if the authority had ascertained that the plan would "not adversely affect the integrity of the" SPA. Were it to do so, the plan could only be given effect, if there were no alternative

- solutions and there were “imperative reasons of overriding public interest;” reg. 107.
193. Guildford BC’s Local Plan Habitats Regulations Assessment, HRA, in November 2017, and updated in June 2018, considered first the likely significant effects of the Plan on the SPA, and then carried out an appropriate assessment, at which stage mitigation was considered. The “pathways of impact” included air quality. This approach accorded with the later CJEU judgment in “*People over Wind v Coillete Teoranta* C323/17 [2018] PTSR 1668”, the “*Sweetman*” case. The 2018 HRA was updated specifically to address this case. This case held that mitigation should only be taken into account at the appropriate assessment stage, and not at the earlier stage of considering whether the plan was likely to have significant environmental effects; the approach of the November 2017 HRA update had in fact accorded with the law as pronounced in the *Sweetman* case. Certain of the language of that update, in relation to appropriate assessment, had been made more precise but without changes in substance.
194. The guideline annual mean level of NO_x concentrations, for the protection of vegetation, is 30 ug/m³ (micrograms per cubic metre), the Critical Level. Above that level, nitrogen deposition should be investigated. Appendix D to the 2018 update to the HRA, taking 2033 as the year for comparing the positions with and without the Local Plan development, showed that that Critical Level would be exceeded with development somewhere in the range of between 1 and 50 m from the M25, (the range of concentrations was from 40.5 reducing to 23.4 over that distance). The Local Plan development would have contributed between an additional 2.5ug/m³ and 1 ug/ms to that figure again reducing over that distance. With or without the Local Plan development, there would be an exceedance for part of the band within that distance; the width of the area of land in which there was an exceedance would be increased with Local Plan development. On the A3 link, the levels of NO_x concentrations, with Local Plan development, reduced from 29.7 to 20.2 over 1 to 50m from the road, and the increase brought about by Local Plan development, was between 2.5-1ug/ms, so that there would be an exceedance over part of that band with the Local Plan development.
195. The annual mean deposition Critical Load for nitrogen, which varies with the habitat at issue, in (kN/ha/yr-(kilos of nitrogen per hectare per year) was 10. That figure was exceeded with Local Plan development in 2033 in the area 1-50 m back from the edge of the M25, at levels of 10.42 reducing with distance to 9.64. Without the Local Plan development, there would

still have been more than 10 kN/ha/yr close to the M25. The position on the A3 was similar though the exceedances were a little less.

196. The assessment in the 2018 update said:

“10.4.4. Within 50m of the M25 NO_x concentrations are still forecast to be above the critical level ‘in combination’ (the only link for which this is forecast to be the case) but the main role of NO_x is as a source of nitrogen and the improvement compared to the baseline is forecast to be substantial enough to bring nitrogen deposition rates down by 5kgN/ha/yr even with the Local Plan in place. Since nitrogen deposition rates are predicted to decline to the critical load, NO_x concentrations in themselves are less important because the primary role of NO_x is as a source of nitrogen. As NO_x exceedances alone is unlikely to result in a significant adverse effect on vascular plants except possibly at very high annual average concentrations of 100 µg/m³ or more, which is not predicted by the end of the plan period along any link.”

197. In reality a substantial improvement in NO_x concentrations and nitrogen deposition rates was expected by 2033, which would be barely affected by the development proposed in the Plan. Even where slowing down of improvement was at its highest, within 50m of the M25, nitrogen deposition rates would still be considerably better than now.

198. Guildford BC produced an Addendum HRA in January 2019 in the light of the CJEU rulings in November 2018 in *Holohan v An Bord Pleanala C-46/17*, and in *Cooperatie Mobilisation for the Environment and others v College van gedeputeerde staten van Limburg C293/17, C294/17*, the *Dutch Nitrogen* case. It had been submitted by Mr Harwood that reliance on anticipated reductions in background air quality was wrong in principle because those improvements were entirely independent of the Local Plan. It was not in the end at issue but that improvements to the baseline against which likely significant or adverse effects would be measured were relevant, if sufficiently certain. Those later CJEU decisions made that clear. The Addendum HRA demonstrated why there was sufficient certainty for the baseline to be adjusted, along with the April 2019 response updated HRA.

199. The 2019 Addendum described the specific habitats required by woodlark, nightjar and Dartford warbler. Their foraging areas were close to their nesting territories. Key habitats were heathland and early stage plantation, not dense bracken, mature plantation or permanent deciduous woodland. All three species were highly sensitive to disturbance. Surveys indicated that the nearest SPA bird territories to the M25 and A3 were approximately

300m from the roadside. Even where suitable habitat was present, Dartford warbler territories were not found within 70m of the motorway; nightjar and woodlark territories were even more distant, the closest were 200m away, with the majority more than 500m away, even when ample suitable habitat existed much closer. The 2019 Addendum continued:

“3.1.3 There is therefore strong reason to conclude that nightjar, woodlark and Dartford warbler (particularly the first two species) would be unlikely to successfully establish nesting territories, will undertake much foraging activity, within at least 50m of either the A3 dual carriageway or M 25 motorway. This is probably partly a function of habitat distribution (since the majority of the habitat within 200m of the A3/M25 junction is mature plantation, bracken and permanent deciduous woodland which are generally unsuitable for nesting or foraging) and partly a noise -related displacement effect of the very large volume of traffic movements in this area meaning that the birds settle in more tranquil locations.

3.1.4 The parts of the SPA closest to the A3/M25 junction still serve an important function through buffering and protecting those areas of the SPA which do support bird territories and foraging habitat. However, the low likelihood of SPA birds actually using the area closest to the dual carriageway and motorway is clearly an important factor when determining the likelihood of roadside atmospheric pollution negatively affecting the ability of the SPA to support the relevant bird species and thus the integrity of the SPA. The modelling undertaken for the Local Plan in 2016 clearly indicates that the area that will be most subject to elevated nitrogen deposition due to the presence of the A3 and M25 is also the area least likely to be used for nesting or foraging by the birds for which the SPA is designated....

3.1.7 Even with RHS Wisley included therefore, the modelling forecasts total nitrogen deposition rates to have fallen to the critical load at the roadside and below the critical load by 15-30m from the roadside by the end of the plan period. This would mean that the atmospheric nitrogen (irrespective of source) would cease having an influence on vegetation composition/structure except possibly within a narrow band along both the A3 and M25 which, as has been established, is the area of the SPA least likely to be functionally used by SPA birds. Moreover, the NOx critical levels and nitrogen critical loads are based primarily on protecting floristic vegetation characteristics such as species-richness and percentage grass cover. The ability of the ... SPA to support nightjar, woodlark and Dartford warbler is based far more on habitat structure and appropriate management. It is the broad structure of the vegetation that is relevant to the ability of the area to support SPA birds ...”

200. The presence of heathland and traditionally managed plantation within and beyond the SPA boundary was important as nesting and foraging habitat for the birds species which had led to the designation of the SPA. It had not been designated for the habitats in their own right. The impact of the allocation on those habitats was considered but as none of the proposed development sites would cause the loss of significant areas of those habitats outside the SPA and no adverse effect on integrity was expected, the *Holohan* case required no change to the HRA.
201. This Addendum was criticised by Ockham PC and Wisley Action Group. They contended that the HRA was deficient because any additional nitrogen deposition above the critical load should inevitably lead to a conclusion that there were adverse effects on the integrity of the SPA, a contention no longer pursued. It was also contended that the foraging value of roadside habitat to SPA birds had been ignored.
202. It was clear that Guildford BC had not simply relied on the reduction of nitrogen deposition, with and without the Local Plan development, to support the conclusion that there would no adverse effect on the integrity of the SPA. Its response to the further contentions was to point to [3.1.7], from the 2019 Addendum, which I have set out above. It commented:

“The information in [3.1.7] is fundamental to the overall conclusion of no adverse effects on integrity because it indicates that a) the critical load for heathland is not projected to be breached and b) even if the improving trends in nitrogen deposition were slower than predicted in [the] modelling (such that deposition rates at the roadside remained above the critical load for heathland) the affected area consists almost entirely of common and widespread habitats of low value to the SPA birds for nesting or foraging, and this is highly likely to remain the case.

3.1.7 ... the strip of habitat within 15-30m of the roadside of the A3/M25 junction will not be of high significance as foraging habitat [for SPA birds] because ... it consists primarily of habitat that is of relatively low foraging value for the three species ... and which is abundant in the wider area within and outside the SPA... Moreover, it is very unlikely to be reverted to heathland as this would remove the useful buffer the woodland currently provides between the A3 and M25 and the SPA. Therefore this band of vegetation is of very limited significance to sustaining or increasing the SPA population... Invertebrate diversity and abundance... is certainly not expected to decline. As such, it is considered that effects in this 15 to 30m zone will not ‘affect the ecological situation of the sites concerned’ (in the words of the European Court of Justice) or materially retard the ability of the

SPA to achieve its conservation objectives. This is reflected in the fact that Natural England has never objected to the Local Plan or its HRA.”

203. The Inspector concluded that the Plan was based on a lawful and adequate HRA and Appropriate Assessment. The Inspector set out the air quality position in IR113:

“The air quality modelling shows that NOx concentration and nitrogen deposition rates within 200m of the ... SPA are expected to be better at the end of the plan period than they are at the moment, due to expected improvements in vehicle emissions and Government initiatives to improve background air quality. The Design Manual for Roads and Bridges [DMRB] guidance for air quality assessments recommends reducing nitrogen deposition rates by 2% each year between the base year and assessment year. [The Inspector then set out the actual annual average rate of improvement over the 10 years to 2014]. This reduction occurred despite increased housing and employment development and traffic growth, and is most likely to be attributable to improvements in emissions technology in the vehicle fleet. Consequently, allowing only a 2% year improvement in nitrogen deposition rates represents a precautionary approach. The approach taken towards improvements in baseline NOx concentrations and nitrogen deposition rates is in line with [DMRB] guidance for air quality assessment and does not conflict with the “Dutch Nitrogen” CJEU ruling. “

204. Mr Harwood did not pursue his original contention that the HRA was unlawful because it relied on improvements to the background level of emissions, and did so although the outcome with development would be worse than if there were no development. It was rightly pointed out that what Guildford BC and the Inspector were considering was not related to mitigation of the Local Plan development but related to the accurate and soundly based future changes to the baseline against which the impact of the development had to be considered. The scientific reliability of the future emission reductions was not at issue.
205. Instead Mr Harwood relied on the fact that the development would add to exceedances of critical levels which meant, therefore, that the development was bound to have an adverse effect on the integrity of the SPA. A contrary conclusion, as reached by Guildford BC and the Inspector, was unlawful. He submitted that the LP Inspector had relied on the benefit of anticipated reductions in vehicle emissions to offset those from additional traffic generated by development. This was wrong in principle because it ignored the fact that the outcome would still be worse with the development than

without. There was no headroom for further development, because there would still be exceedances of the critical level and load for NO_x and nitrogen respectively. The increase would still be harmful.

206. Mr Harwood also submitted that as the critical level for NO_x emissions, and the critical load for nitrogen deposition, would still be exceeded at the SPA, Guildford BC and the Inspector ought to have but failed to consider whether the effect of the increased pollution due to the development comprised in the Local Plan would, individually or in combination with other sources, have no adverse effect on the integrity of the SPA.
207. It is perfectly clear, in my judgment, that Guildford BC, whose task it was to undertake the HRA, did consider whether significant adverse effects were likely from the development proposed in the Local Plan; it then undertook an appropriate assessment to see whether there would be no adverse effect on the SPA. That could not be answered, one way or the other, by simply considering whether there were exceedances of critical loads or levels, albeit rather lower than currently. What was required was an assessment of the significance of the exceedances for the SPA birds and their habitats. Guildford BC did not just treat reductions in the baseline emissions or the fact that with Plan development, emissions would still be much lower than at present, as showing that there would be no adverse effect from the Plan development. The absence of adverse effect was established by reference to where the exceedances of NO_x and nitrogen deposition would occur, albeit reduced, and a survey based understanding of how significant those areas were for foraging and nesting by the SPA birds. The approach and conclusion show no error by reference to the Regulations or CJEU jurisprudence. I have set out the 2019 HRAs at some length. The judgment is one for the decision-maker, as to whether it is satisfied that the plan would not adversely affect the integrity of the site concerned; the assessment must be appropriate to the task. Its conclusions had to be based on “complete precise and definitive findings and conclusions capable of removing all reasonable scientific doubt as to the effect of the proposed works on the protected site concerned”; *People Over Wind*. But absolute certainty that there would be no adverse effects was not required; a competent authority could be certain that there would be no adverse effects even though, objectively, absolute certainty was not proved; *R (Champion) v North Norfolk District Council* [2015] UKSC 52 at [41], and *Smyth v Secretary of State for Communities and Local Government* [2015] EWCA Civ 174 at [78]. The same approach applies, following the *Dutch Nitrogen* case, to taking account of the expected benefits of measures not directly related to the plan being appropriately assessed.

208. This is how it was approached. Guildford BC's conclusion was reasonable, and was based on a lawful approach. Both the 2019 update and response were considered by Guildford BC before the Plan was adopted. I reject this ground of challenge.

Issue 6: The access road at Blackwell Farm and major development in the AONB

209. NPPF [116] states:

“Planning permission should be refused for major developments in [AONB] except in exceptional circumstances and where it can be demonstrated they are in the public interest. Consideration of such applications should include an assessment of: the need for the development, including...the impact of permitting it, or refusing it, upon the local economy; the cost of, and scope for, developing elsewhere outside the designated area, or meeting the need for it in some other way; and any detrimental effect on the environment, the landscape and recreational opportunities, and the extent to which that could be moderated.”

210. The PPG, applicable with the 2012 NPPF, offered this help: whether or not a development was “major development” was for the decision-maker, taking into account the proposal and the local context. Great weight had to be given to conserving the landscape and scenic beauty of AONB, whether development was “major development” or not. The 2019 version of the NPPF added that the nature of a development, its scale, setting and the significance of its impact on the purposes of the designation as AONB were relevant. I do not read *R(JH and FW Green Ltd v South Downs National Park Authority* [2018] EWHC 604 (Admin) at [27] as supporting a proposition that whether development was “major” should be determined solely by its degree of impact on the qualities of the AONB. That is obviously an important factor, and it may be decisive. But the PPG and 2019 version of the NPPF are correct in their approach to the meaning of “major development.”.
211. It was not disputed but that NPPF [116] only applied in terms to development control decisions, but Mr Kimblin submitted that that did not mean that it had no ramifications in plan-making when assessing the deliverability of allocations. The soundness of the Plan required the allocations to be deliverable. The Inspector needed to recognise that Guildford BC or the Secretary of State might take the view that the access road was “major development” and conclude that the harm did not warrant the road or therefore the development allocation. Mr Kimblin pointed to the £20m cost of the link, what he described as the “very challenging topography” which the road had to cross; it was not simply a development

access road but was intended to provide relief to the A31/A3 junction. (Perhaps this was an example of the wider benefits of the infrastructure brought by the allocations).

212. The issue before me was whether the Inspector reached a conclusion on whether the access road was “major development” in the AONB, to which NPPF [116] applied; a contrary conclusion was said to be irrational. If he had reached no conclusion, he ought to have considered the risk to the allocation, and hence to its deliverability, which would arise when a planning application was made, and a decision could be reached that it was indeed “major development”, with all the weight, adverse to the development, which would have to be given to such a conclusion.
213. The Inspector expressed some of his views under Issue 7 headed “Whether the Plan’s approach towards the protection of landscape and countryside, biodiversity, flood risk and groundwater protection is sound.” At IR107, he referred to the Blackwell Farm site’s proposed access “which passes through a small part of the AONB... But the allocation would not have a significant impact on [this area].” Policy P1 aims to conserve the AONB, “and contains a presumption against major development within it except in exceptional circumstances where it can be demonstrated to be in the public interest.” Subject to a modification, immaterial for these purposes, “the plan’s approach to the AONB is sound.” The spatial strategy successfully accommodated substantial development whilst avoiding significant landscape harm; the impacts in relation to the needs met did not justify accepting a lower level of development. Indeed Policy P1 adopts the language of NPPF [116]. Its reasoned justification at 4.3.6 adopts as relevant factors the essence of those in NPPF [116].
214. He elaborated on the access when dealing with the site-specific allocation under Issue 10. There was no issue before me about the effect of the development itself, because the Inspector had concluded that it would have very little impact on the character of the AONB or its setting. He said at IR167:

“However, the access road from the site to the A31 would pass up the hill through part of the AONB. Cutting and grading together with junction and vehicle lighting would have some visual impact. With carefully designed alignment, profiling and landscaping, the effect is capable of mitigation, but the submitted Plan does not allow for adequate land to find the best road alignment in highways and landscape terms or to mitigate its impact through landscaping. [Accordingly, Main Modification 37 was required, which introduced a new allocation for the access road; Policy 26a.] This is a site allocation which seeks the

best landscape and design solution, taking into account the topography, the existing trees, the need for additional landscaping, and the needs of all users, including walkers and cyclists as well as vehicles entering and leaving the site. It also requires mitigation measures to reduce the landscape impact including sensitive lighting and buffer planting. This modification allows for an appropriate design solution to be developed. Subject to MM37, the scenic beauty of the AONB would be conserved.”

215. I reject this ground of challenge.
216. I can see the force in the argument from Mr Findlay and Mr Turney that the Inspector has in substance concluded that, with the Main Modifications, the means have been provided for the access road to be constructed in such a way that it would not constitute “major development.” However, he has not expressly so concluded, and it would not have been for him to express the decisive view on the point, or to do so in advance of the detailed design of the road. He has reached the view that the road would not inevitably be “major development”, and that it could be designed and landscaped so that the risk of a significant hurdle to the delivery of the allocation is minimised. I do not consider that he needed to go further. In effect, the degree of risk, with the modification, was not such that it made him find the allocation to be unsound. He considered the issue; his language makes his view clear that he sees no significant risk, and is adequately reasoned.
217. But it cannot be ignored that he has included an extent of headroom, complained of by the Claimants, in part because he recognised the difficulties which larger sites face. This issue was not expressly part of his consideration of the justification for the headroom, but hurdles and delays in the way of approving infrastructure would have been well within his contemplation of the sort of problems which larger sites face.

Overall conclusion

218. I reject all the grounds of challenge. The three claims are dismissed.



Appendix 2a Highways engineer Colin McKay's proof of evidence to the Wisley Airfield Appeal Inquiry

Document Reference: WPI/4/1

Planning Inspectorate Reference: APP/Y3615/W/16/3159894

Local Authority reference: 15/P/00012

Proof of Evidence of Colin McKay

On behalf of Wisley Property Investments Limited

Town and Country Planning Act 1990

**Town and Country Planning (Inquiries Procedure) (England)
Rules 2000/1624**

**Appeal against refusal of planning permission for
development of land at Wisley Airfield, Hatch Lane, Ockham
GU23 6NU**

August 2017

Final

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1 Introduction

Reason for the Appeal

- 1.1 This Proof of Evidence has been prepared by Colin McKay on behalf of Wisley Property Investments Limited (“the Appellant”).
- 1.2 This Proof of Evidence has been prepared in support of a planning appeal made by the Appellant under section 78 of the Town and Country Planning Act 1990 and in accordance with the Town and Country Planning (Inquiries Procedure) (England) Rules 2000/1624.
- 1.3 This appeal is submitted in response to the refusal by Guildford Borough Council (“GBC”) on 8 April 2016 of an application for planning permission (local authority reference 15/P/00012) submitted by the Appellant on 16 December 2014. The application, as amended, sought permission for:

“the phased development of a new settlement of up to 2,068 dwellings incorporating up to 60 sheltered accommodation units and 8 Gypsy and Traveller pitches and associated infrastructure including accesses onto the A3 (Ockham Interchange), Ockham Lane and Old Lane and revised access to Elm Corner, a secondary school, a primary school, community provision, nursery provision, health facility, a local centre (incorporating food & drink, retail, a visitor centre and offices), employment area, sports and recreational facilities (incorporating a floodlit sports pitch and pavilion). Sustainable Drainage Systems and an area of Suitable Alternative Natural Greenspace (SANG) incorporating a landform feature and car parking. The erection of associated utilities infrastructure. The development proposal to incorporate the demolition/ removal of the runway and VOR Beacon (and any associated outbuildings). Outline application, matter for determination access (matters reserved scale, appearance, landscaping and layout”

Experience and Qualifications

- 1.4 I am Colin Angus McKay. I am instructed by the Appellant in respect of the transport aspects of the Proposed Development on land at Wisley Airfield, Hatch Lane, Ockham in the county of Surrey.
- 1.5 I hold a BSc Honours degree in Civil Engineering. I am a member of the Institution of Civil Engineers and a Chartered Engineer. I am also a Member of the Chartered Institute of Logistics and Transport. I am a Technical Director at WSP, a global engineering consultancy which offers a broad range of professional services to the private and public sector. I have been employed by WSP for almost three years and prior to that was Director of Development at MVA Consultancy (now Systra) for 5 years. Overall I have 34 years’ experience in Civil Engineering of which the majority of time has been spent acting for developers on sites across the UK.
- 1.6 I have acted on the Appeal site for approximately 2 years although WSP has been instructed on the site since April 2013. I am familiar with the Appeal site and surrounding area, and with relevant national and local policies regarding transport.

- 1.7 I have appeared at a number of planning inquiries, local plan Examinations in Public (EiPs) and at the High Court. Most recently, I appeared for the applicant at a planning inquiry into a site for 425 dwellings at Cranleigh, Surrey, where the appeal was allowed. I also appeared recently at the EiP in Corby, Northants, to support the promoters of an allocation for 4500 dwellings in a proposed Sustainable Urban Extension, as a result of which the allocation and its transport mitigation were confirmed in the Adopted Local Plan.

Scope of Evidence

- 1.8 My proof of evidence addresses matters concerning Transport issues and in particular Reasons for Refusal 3 and 4. Reasons for Refusal 3 and 4 are given below:-

RfR 3. It has not been demonstrated that the development proposed would not give rise to a severe adverse impact on the safe and efficient operation of the strategic road network (A3/M25), nor that it would not give rise to a severe impact to the efficient operation of the local road network, in particular in Ripley and the junction of Newark Lane / Rose Lane. As such, the application is contrary to the objectives of chapter 4 of the National Planning Policy Framework.

RfR 4. In the absence of a suitable legal agreement, the application fails to deliver the transport sustainability measures required to enable sustainable travel choices such as walking, cycling and public transport. Accordingly, the development is contrary to the policies M4 and M6 of the Guildford Borough Local Plan 2003 (as saved by CLG Direction dated 24/09/2007) and the objectives of chapter 4 of the National Planning Policy Framework

- 1.9 In terms of the Main Issues set out and agreed at the Pre Inquiry Meeting on 5th July, my Evidence addresses the following ones:-

4. The effect of the proposed development on the safe and efficient operation of the strategic and local road networks; and

5. Whether the proposals would deliver the required transport sustainability measures necessary to enable sustainable travel choices.

- 1.10 It also addresses the transport concerns of Rule 6 Parties. This includes those of Highways England (HE) who were confirmed as a Rule 6 party on 02 August 2017, although discussions were still underway with HE as I wrote this Evidence.

Declaration

- 1.11 The evidence which I have prepared and provide for this appeal reference APP/Y3615/W/16/3159894 in this proof of evidence, is true and has been prepared and is given in accordance with the guidance of my professional institution and I confirm that the opinions expressed are my true and professional opinions.

2 Policy Background

2.1 In this section, I summarise the relevant parts of national and local policy as it relates to the transport aspects of this development. I specifically review the following as having the greatest relevance to this Appeal:-

- National Planning Policy Framework (NPPF) (CD ref. 9.1)
- National Planning Policy Guidance (NPPG) (CD ref. 9.2)
- DfT Circular 02/2013 The Strategic Road Network and the Delivery of Sustainable Development (CD ref. 13.32)
- Surrey County Council (SCC) Local Transport Plan (CD ref. 8.38)
- Saved Guildford Borough Local Plan (CD ref. 8.1)
- Emerging Guildford Borough Local Plan (GBLP) (CD ref. 8.24) and relevant supporting evidence on transport.

National Planning Policy Framework (NPPF) (CD ref. 9.1)

2.2 I set out below a review of this core national policy document, published by the Department for Communities and Local Government (DCLG) in March 2012.

Policy Context	Relevance for this development
<p>Key to the NPPF is the following statement: <i>“At the heart of the National Planning Policy Framework is a presumption in favour of sustainable development, which should be seen as a golden thread running through both plan-making and decision-taking.” (Paragraph 14)</i></p> <p>Paragraph 7 of the NPPF notes three ‘dimensions’ of sustainable development: Economic; Social; and Environmental.</p>	<p>The proposed development comprises a mix of land uses and makes the fullest possible use of sustainable modes. It will be a self-sustaining settlement in terms of facilities and provides public transport and non-motorised transport infrastructure to link it to existing major employment areas and facilities in surrounding settlements.</p> <p>Transport is able to contribute significantly to a development’s adherence to the sustainable development ‘dimensions’ through means such as providing infrastructure to support economic growth, enhancing accessibility to services, fulfilling the social needs of people and providing solutions which minimise pollution and environmental impact. There is also the contribution to economic growth resulting from the creation of new dwellings and the significant employment opportunities.</p>
<p>Transport forms one of the 12 core planning principles set out by the NPPF (Paragraph 17).</p> <p>Within paragraph 30, 37 and 38 emphasis is put on encouraging solutions that support the reduction in greenhouse gas emissions and reduce congestion, and that within larger scale residential developments a mix of land-uses should be promoted in order to provide opportunities for day-to-day activities, including</p>	<p>This principle directs that locations which are sustainable, or which can be made sustainable, should become the focus for development. Opportunities to utilise sustainable modes to their fullest, such as public transport, walking and cycling should be actively taken up. This principle is followed in the transport strategy for the development.</p>

Policy Context	Relevance for this development
work, on site.	
<p>Paragraph 32 of the NPPF states;</p> <p><i>All developments that generate significant amounts of movement should be supported by a Transport Statement or Transport Assessment. Plans and decisions should take account of whether:</i></p> <p><i>-the opportunities for sustainable transport modes have been taken up depending on the nature and location of the site, to reduce the need for major transport infrastructure;</i></p> <p><i>-safe and suitable access to the site can be achieved for all people; and</i></p> <p><i>-improvements can be undertaken within the transport network that cost effectively limit the significant impacts of the development. Development should only be prevented or refused on transport grounds where the residual cumulative impacts of development are severe.</i></p>	<p>The NPPF enables positive decision-making to be reached for sustainable development, whose residual impacts are not considered to be severe.</p> <p>My Evidence describes how the Appeal proposal will take up the opportunities for sustainable modes namely public transport and cycle access to and from external destinations as well as internal transport by bus, walking and cycling.</p> <p>I demonstrate how safe and suitable means of access to the Appeal proposal has been achieved.</p> <p>My Evidence also describes the way the development's accessibility via sustainable travel is achieved and sets out the expected travel demand and how this is mitigated to result in traffic impact on the local highway network that is less than severe.</p>
<p>Paragraphs 29 and 42 comment on the value of technology and the internet, stating that “<i>Smart use of technologies can reduce the need to travel.</i>” The NPPF accepts that “<i>...different policies and measures will be required in different communities and opportunities to maximise sustainable transport solutions will vary from urban to rural areas</i>”</p>	<p>The masterplan proposals include a community hub, incorporating a café and business suite, forming part of the community governance and delivering a tele-working centre and offices for the community to exploit the potential of remote working practices.</p> <p>The NPPF also acknowledges that in predominantly rural planning authority areas such as Guildford Borough, different opportunities to maximise sustainable transport will exist compared with other more densely settled urban locations. My Evidence demonstrates the opportunities available for sustainable transport are taken up to the fullest possible extent through a combination of bus services and cycle routes.</p>

National Planning Policy Guidance (NPPG) (CD ref. 9.2)

- 2.3 On 6 March 2014 the Department for Communities and Local Government (DCLG) launched a web-based planning practice guidance resource to provide guidance in a usable format that can easily be linked to the NPPF.
- 2.4 Amongst other topics, the NPPG resource provides information about Travel Plans, Transport Assessments and Statements, albeit in a very general format without specific guidance on assessment methodologies. The information in the NPPG is directly linked

to the relevant paragraphs in NPPF enabling easy cross-referencing. I do not explore further the contents of this document in my Evidence.

DfT Circular 02/2013 - The Strategic Road Network and the Delivery of Sustainable Development (CD ref. 13.32)

2.5 Circular 02/2013 explores how capacity enhancements will be considered in conjunction with new development and, supporting the NPPF which requires development to exploit sustainable transport options, suggests a staged approach to the selection of appropriate mitigation with development affecting the trunk road and motorway networks. In order of preference it looks to the following mitigation:

1. Travel Plan
2. Demand Management
3. Capacity enhancements

2.6 Hence, only after travel plan and demand management have been explored will capacity enhancements be considered.

2.7 In addition the Circular is more restrictive about forming new junctions and access onto the strategic road network than on improving existing junctions. HE have already indicated in discussions that the form of mitigation being proposed by adding additional slip roads to the existing junction at A247 Burnt Common amounts to improvement of an existing junction, not the creation of a new one. The meeting notes dated 6 May 2016 with HE representatives (in Appendix A) record positive discussions about a policy exception being made for the slip roads as part of a wider economic case even if treated as a new junction.

2.8 The Circular places importance on capacity enhancements and infrastructure required to deliver strategic growth being identified at the local plan stage. In this case that is exactly what has happened, with the Burnt Common slip roads being identified in the Evidence Base modelling for the Emerging GBLP and consequently included in the Infrastructure Delivery Plan as items SRN9 and SRN10 and the Emerging GBLP as Policy A43a. Policy A35 on the new settlement at Wisley Airfield also includes these as required mitigation. HE has no in-principle objection to these slip roads, as explained later in my Evidence.

Surrey County Council Local Transport Plan (LTP3) (CD ref. 8.38)

2.9 The SCC Local Transport Plan (LTP3) covers the period to 2026. In the Introduction to the Executive Summary, it states:-

“Tackling transport problems in Surrey relies on partnership working and shared responsibility involving many organisations, businesses, Transport operators and individuals, together with the County Council. The County Council has an important role as the Local Highway and the Transport authority, but does not have the resources to address all the problems without close partnership working and sharing responsibility”

2.10 The Appellant has maintained a constant dialogue throughout the lifetime of the application, including in the pre-application period, with Transport Planning officers of SCC and HE. It has taken its responsibility seriously in terms of addressing the transport impacts that the Appeal proposal generates and this is evidenced by the extent of mitigation measures proposed to meet the aspirations of both SCC and HE.

2.11 The LTP3 Executive Summary sets out its 4 objectives as being:-

- Effective transport: To facilitate end-to-end journeys for residents, business and visitors by maintaining the road network, delivering public transport services and, where appropriate, providing enhancements.
- Reliable transport: To improve the journey time reliability of travel in Surrey.
- Safe transport: To improve road safety and the security of the travelling public in Surrey.
- Sustainable transport: To provide an integrated transport system that protects the environment, keeps people healthy and provides for lower carbon transport choices.

2.12 The Appeal proposal contains a wide range of measures that assist in meeting these objectives. It provides and enhances the existing public transport network with a range of new services with in-perpetuity funding. It provides highways infrastructure that improves journey times and meets road safety design standards. It also promotes lower carbon transport choices through the design of the proposal as a residential site with education and local services integrated into the development, as well as providing for cycling to local employment and services in adjacent settlements. The proposal is also subject to a Travel Plan with its own range of measures.

2.13 I therefore conclude that the Appeal proposal complies with the Objectives of the LTP3. In addition, the mitigation measures proposed meet the aspirations of officers of SCC.

The saved Guildford Borough Local Plan (2003) (CD ref. 8.1)

2.14 Mr Collins of Savills gives more detailed evidence on the wider elements of the saved 2003 Guildford Local Plan that are relevant to the Appeal proposal. However, much of it is now expired and out of date. For example, it talks about the “current” SCC Local Transport Plan being the one submitted in July 2000. The guidance on parking refers to parking standards set out by SCC in 1999 whereas Government has now effectively scrapped setting prescriptive standards in favour of site specific assessments of need for parking.

- 2.15 Notwithstanding this, policies relating to transport are still well-reflected in the development proposals. Movement Policy M4 requires major new development to be designed to allow access to bus services and this is reflected in the illustrative Masterplan for the Appeal proposal. In the supporting text to Policy M5 the Plan recognises the key part played by the rail network and the Appeal proposal makes specific provision for access by rail to the two local rail stations by bus, as well as allowing for the construction of a suitable scale of bus-rail interchange facility at Horsley station.
- 2.16 In addition Policy M6 sets out the need for residential developments to make provision for cyclists and link to existing routes. This policy is complied with through the provision of the cycle route to Byfleet and the enabling of connections to the existing route to Ripley. Contributions to improving other local cycle routes to other destinations are being made, although no desired cycle routes are present in the vicinity of the Appeal Site in this Local Plan.

Emerging Guildford Borough Local Plan (CD ref. 8.24)

- 2.17 The Emerging GBLP gives specific requirements for transport measures to support the proposed allocation of land at the Airfield Appeal site for a new settlement. In particular these are spelled out in Policy A35, with the relevant measures also set out in the Infrastructure Delivery Plan (CD ref. 8.16). These specific requirements are set out below along with the means by which the Appeal site complies with them:-

Policy A35 Transport Measure	As included in the Appeal Proposal, approved plans, proposed conditions or draft S.106 Heads of terms
Primary vehicular access to the site allocation will be via the A3 Ockham interchange	Yes
A through vehicular link is required between the A3 Ockham interchange and Old Lane	Yes
Mitigation schemes to address issues on the A3 and M25 and at the M25 Junction 10/A3 Wisley interchange	Yes, via the proposed improvements at M25 Junction 10 should the M25 RIS scheme not go ahead or be significantly delayed

Policy A35 Transport Measure	As included in the Appeal Proposal, approved plans, proposed conditions or draft S.106 Heads of terms
Mitigation schemes to address issues on B2215 Ripley High Street	Yes, via Burnt Common slip roads
Mitigation schemes to address issues at the junctions of Ripley High Street with Newark Lane/Rose Lane	Yes, via Burnt Common slip roads
Mitigation schemes to address issues on rural roads surrounding the site	Yes, by means of contributions towards cycle routes, drainage mitigation at Ockham Roundabout, improvements at key locations namely Send Roundabout, Effingham Junction crossroads and traffic reduction on Old Lane through the proposed one-way southbound restriction.
Mitigation schemes to address issues at junction of Old Lane with A3 on-slip (Guildford bound)	Yes, by means of an improved layout that reduces vehicle conflicts
Two new slip roads at A247 Clandon Road (Burnt Common) and associated traffic management	Yes, via a contribution towards or delivery of the works as set out in the S.106 Agreement
Conditions and obligations to planning permission(s) to have regard to the delivery and timing of delivery of the key infrastructure requirements set out in the Infrastructure Schedule in the latest Infrastructure Delivery Plan, or otherwise alternative interventions which provide comparable mitigation.	Other mitigation interventions can be brought forward particularly in terms of the impacts on the SRN if the Burnt Common A3 slip roads scheme is not progressed.

<p>Policy A35 Transport Measure</p>	<p>As included in the Appeal Proposal, approved plans, proposed conditions or draft S.106 Heads of terms</p>
<p>A significant bus network to serve the site and key destinations including Effingham Junction railway station and/or Horsley railway station, Guildford, Woking and Cobham to be provided and secured in perpetuity</p>	<p>Yes, with a funding mechanism that secures in-perpetuity funding in line with the aspirations of SCC</p>
<p>An off-site cycle network to key destinations including Effingham Junction railway station, Horsley railway station/Station Parade, and Ripley and Byfleet</p>	<p>Yes, via proposed contributions towards routes to railway stations, Non-motorised users (NMU) improvements at Ockham roundabout that will enhance the route to Ripley and provision of the route to Byfleet.</p>

2.18 The detail on each of the measures set out above is covered later in my Evidence.

3 Application documents

3.1 In this section I summarise the application documents that have a bearing on the transport aspects of the Appeal Proposal.

Transport Assessment (TA) (CD ref. 2.21)

3.2 The TA (CD ref. 2.21) was submitted with the planning application. It sets out the transport context of the site at the time (December 2014) including the fact that shortly before the application was submitted, Highways England (HE) published its intention to develop plans for improving M25 Junction 10 as part of its Road Investment Strategy¹.

3.3 The TA also set out the assessment of the public transport solution to serve the site. At that time the public transport strategy involved diverting some of the existing bus services (the 515 and 462/463 services) into the site² as well as providing a new service from Guildford to Effingham via the site.

3.4 The access proposals and off site junction improvements shown in the TA reflected the discussions that had taken place with the Highway and Planning Authorities at that time.

3.5 Most significantly, the traffic modelling of the impact of the development on traffic flows was set out in a report of the work carried out (Appendix F of the TA) and this reflected discussions that had been held with the Highway Authorities over the preceding months. The work carried out was aimed at improving the accuracy of the (SCC) SINTRAM traffic model in the vicinity of the Appeal site. However this was done without carrying out a validation and calibration exercise to Department for Transport WEBTAG standard and as such failed to satisfy SCC and HE that the model was fit for purpose. This issue was addressed later in the production of the Transport Assessment Addendum (TAA) (CD ref. 3.14).

3.6 The TA reported on various junction assessments carried out of the junctions within the scope of the TA. These junctions are shown on Figure 2.1 and were as follows:

- M25 Junction 10
- A3/ Old Lane
- Send Roundabout (A247/B2215)
- Ockham Interchange and Western site access
- B2215 Ripley High Street/Newark Lane/Rose Lane
- Forest Road/Old Lane/Horsley Road/Howard Road (Effingham Junction crossroads)
- Eastern site access

¹ DfT December 2014.

² TA Figure 7.3

3.7 The TA showed that a position of no severe impact could be reached with the mitigation measures proposed.

3.8 Whilst much of the work set out in the TA is now superseded, most of the background information on the transport context remains valid and the assessments carried out set a precedent for the subsequent work and discussions with the Authorities. The elements of the previous TA that are current are listed below:-

Chapter	Subjects still current
1 Executive Summary	Most still current except for elements of Table EX1 dealing with Traffic Restrictions on Ockham Lane and Guilehill Lane which are no longer proposed, and reference to new slip roads on the A3 at Ockham as part of GBLP development with Wisley Airfield mitigation, as slip roads at Burnt Common are now being proposed
2 Introduction	Most still current except for references to timescale for development
3 Strategic Policy	Most still current, except that some areas of the Surrey Local Transport Plan were updated during 2016 and there is an updated version of the emerging GBLP in which Wisley Airfield is now dealt with at Policy A35.
4 Existing Transport Environment	<p>Most of the text is still relevant except for:-</p> <ul style="list-style-type: none"> • The 2013 revised film set application was refused. • Some detailed public transport information is out of date³ • Personal Injury Accident data has

³ Updated information on public transport is in Chapter 7 of this Evidence

Chapter	Subjects still current
	<p>been updated⁴</p> <ul style="list-style-type: none"> The methodology on modelling has been updated⁵
5 Development Proposals	Most still current except for the detailed description of the development ⁶ and changes to the traffic management measures proposed.
6 Travel Demand and Distribution	Most still current
7 Accommodating Development Travel Demand	<p>Most still current, except for:-</p> <ul style="list-style-type: none"> some NMU proposals⁷. Bus strategy⁸. Junction mitigation proposals at Ripley and Effingham junction⁹ Results of junction assessments¹⁰
8 Vehicular Impact After Mitigation	<p>Most still current, except for:-</p> <ul style="list-style-type: none"> traffic management proposals, which are no longer proposed Results of junction assessments¹¹

Transport Assessment Addendum (TAA) (CD ref. 3.14)

3.9 The TAA (CD ref. 3.14) was submitted with the Regulation 22 submission to the planning authority in December 2015.

⁴ Updated information on personal injury accidents is in Chapter 12 of this Evidence

⁵ Updated information on Modelling methodology is included in Appendix E the TAA and in Chapter 5 of this Evidence

⁶ Updated detailed description of the development is in Paragraph 1.3 of this Evidence

⁷ Updated information on NMU proposal is contained in Chapters 10 and 11 of this Evidence

⁸ Updated bus strategy is in Chapter 8 of this Evidence

⁹ Updated junction mitigation proposals are set out in Chapter 7 of this Evidence

¹⁰ Updated junction assessments are set out in Chapter 7 of this Evidence

¹¹ Updated junction assessments are set out in Chapter 7 of this Evidence

- 3.10 The TAA covered the significant amount of work that had been carried out in pursuance of the points made in discussions with the highway authorities following submission of the planning application 12 months earlier. In particular it focussed on:-
- Consultations with the Authorities;
 - Highway Impact assessment including revised traffic modelling;
 - Bus services including the appraisal of a new package of services; and
 - Cycle routes, in which the prospect of new routes suggested by SCC was explored.
- 3.11 In addition, a revised transport chapter of the Environmental Statement was submitted which also took account of the new traffic modelling carried out.
- 3.12 The TAA explained how the traffic modelling had been carried out in more detail to arrive at a validated local model, still using the SCC SINTRAM model. This provided a much more robust basis for the forecasting of future conditions than the model used in the TA. The agreement of SCC to the validation of the local model is contained in the email dated 16 October 2015 in Appendix E of the TAA and also in SCC email dated 27 September 2016 attached as Appendix B of my Evidence.
- 3.13 The TAA detailed how the discussions with the authorities had allowed a more refined assessment of the key components of the transport proposals to be carried out. Agreement on certain key issues such as traffic generation and distribution had been achieved, and SCC had collaborated with the Appellant to establish what bus routes and cycle routes it felt should be studied and brought forward as either works to be carried out by the Appellant or funded through a S. 106 Agreement.
- 3.14 More detail on how the proposals in the TAA have evolved is given under each subject heading in my Evidence. However in summary, since the TAA was produced:-
- the GBLP infrastructure delivery plan and Policy A43a proposal for the north-facing Burnt Common Slips has come forward and been incorporated into the Wisley Airfield mitigation package and assessments of impact;
 - as a result of the north-facing Burnt Common Slips coming forward, the monitor and manage proposal for the Ripley High Street/Newark Lane/Rose Lane crossroads and associated traffic management are no longer proposed;
 - a proposal for Effingham Junction crossroads to be upgraded to a mini-roundabout with speed reducing measures on Horsley Road has been incorporated into the Wisley Airfield mitigation package and assessments of impact;
 - the bus service package has been upgraded to incorporate an in-perpetuity funding mechanism; and
 - further detail on the cycle route to Byfleet has been developed

Environmental Statement (Regulation 22 submission) (CD ref. 14.1.14)

- 3.15 The Regulation 22 submission of the ES (**CD ref. 14.1.14**) in December 2015 set out an assessment of the transport impacts of the development in terms of the following:
- community severance,
 - driver stress and delay
 - pedestrian delay
 - pedestrian amenity
 - cyclist delay
 - cyclist amenity
 - fear and intimidation
- 3.16 The ES Transport Chapter considered the associated construction traffic and operational phases of the development relative to the existing transport infrastructure network, including the pedestrian, cycle, public transport and road network. It also compared the existing (or baseline) conditions, identifying those areas where the development impact is likely to be material. It went on to measure the significance of these impacts and where appropriate, identified appropriate mitigation measures.
- 3.17 The guidance used in the assessment of the transport impacts of the development was contained in the following documents:-
- NPPG (DCLG October 2014) (**CD ref. 9.2**)
 - Transport Evidence Bases in Plan Making and Decision Making
 - Travel Plans, Transport Assessments and Statement in Decision Taking
 - Design Manual for Roads and Bridges (DMRB);
 - Making Residential Plans Work (DfT);
 - DfT Circular 02/2013: The Strategic Road Network and the Delivery of Sustainable Development (Sept 2013) (**CD ref. 13.32**); and
 - Institute of Environmental Management and Assessment's (IEMA's) Guidelines for the Environmental Assessment of Road Traffic (1993) (**CD ref. 13.33**).
- 3.18 In line with best practice guidance, the IEMA Guidelines (**CD ref. 13.33**) set out the recommended list of likely environmental impacts which could be considered as potentially significant whenever a new development is likely to give rise to material changes in traffic flows or in the highway network. These include effects on drivers, pedestrians and other road users, including delays, severance and road user amenity or the provision of new road infrastructure or changes to the existing highway network.

3.19 In accordance with the IEMA Guidelines, the following general rules were applied to set the limit and extent of the assessment:

- Rule 1: include highway links where traffic flows will increase by more than 30% (or the number of HGVs will increase by more than 30%).
- Rule 2: include any other specifically sensitive areas where traffic flows have increased by 10% or more.

3.20 In accordance with Rule 2 the IEMA Guidelines suggests that sensitive receptors should be identified close to the local highway network to judge if parts of the highway network could be regarded as sensitive. These include links or junctions at or adjacent to:

- Schools;
- Health facilities (GP surgeries, dental practices, etc.);
- Community facilities; and
- Congested junctions.

3.21 A 'design year horizon' (2031) was agreed as part of the EIA scoping assessment (**CD ref. 14.1.20**). A 2031 'design year horizon' tallies with the GBLP horizon, was agreed with SCC and is when the development would be fully built by.

3.22 For the purposes of consistency and robustness, the local external highway network assessed in the TA and TA Addendum was used as a starting point for the assessment of the likely significant environmental effects. The 22 links considered for assessment are set out below. The Study Area has been established based on professional judgment and has been discussed with SCC Highway Officers.

- 1. M25 (East of Jct 10)
- 2. M25 (West of Jct 10)
- 3. A3 (North of M25 Jct 10)
- 4. A3 (South of M25 Jct 10)
- 5. A3 (South of Ockham Road North)
- 6. A247 Clandon Road
- 7. Portsmouth Road (North of A247)
- 8. Ripley High Street (South of Ripley Crossroads)
- 9. Newark Lane (West of Ripley Crossroads)
- 10. Ripley High Street (North of Ripley Crossroads)
- 11. Guileshill Lane
- 12. Ockham Road North (East of Ockham Lane)
- 13. Ockham Road North (West of Ockham Lane)
- 14. Forest Road

- 15. Effingham Common Road
- 16. Horsley Road
- 17. Ockham Lane (North East of Old Lane)
- 18. Ockham Lane (South West of Old Lane)
- 19. Old Lane
- 20. Rose Lane
- 21. Hungry Hill Lane
- 22. Tithebarns Lane

3.23 The links assessed in more detail were selected by applying the criteria for sensitivity set out above, and then looking at the likely increases in future year traffic. The criteria for assessment are shown below:

- All links with increases less than 10% - not assessed
- Sensitive links with increases greater than 10% - assessed
- Non-sensitive links with increases less than 30% - not assessed
- Non-sensitive links with increases greater than 30% - assessed.

3.24 The six links assessed in more detail in the baseline and operational phase of development were:

- 8. Ripley High Street (South of Ripley Crossroads)
- 11. Guileshill Lane
- 12. Ockham Road North (East of Ockham Lane)
- 13. Ockham Road North (West of Ockham Lane)
- 17. Ockham Lane (North East of Old Lane)
- 18. Ockham Lane (South West of Old Lane)

3.25 The central spine road of the development was also assessed in the operational phase of the development.

3.26 In considering the baseline situation, Volume 11 of DMRB, the Manual for Environmental Assessment (MEA), was used as the basis for assessment areas and methodologies, whilst other parts of the DMRB and WebTAG provide advice on forecasting accident and road safety conditions. These guidance sources offer advice for the estimation of typical and actual accident rates, based on calculations and comparisons of links and junctions of a similar nature.

3.27 The assessment of the construction phase was based on assumed levels of construction on the site. This gave 16 HGV two-way trips on an annual average day (AADT) and 77 car movements (AADT). This includes a car occupancy rate of 1.8 persons per vehicle, which is typical for this type of work based on professional judgement.

- 3.28 The extant in-vessel composting facility which has permission to be constructed on the site was forecast to generate 36 two-way HGV's per day. The temporary medium term impact of HGV construction traffic would therefore be less than half of the long term impact of the extant waste use. A construction environmental management plan is proposed to mitigate construction impacts.
- 3.29 The long term operational impacts were assessed using the accepted methodologies set out in the guidance documents referred to earlier. More detail on the method of assessment of long term operational impacts is given in the Regulation 22 ES Transport Chapter.
- 3.30 The Regulation 22 ES transport chapter concluded that no impacts of significance would take place during construction or operation of the development with the mitigation proposed.

SCC Consultation response (CD ref. 5.12)

- 3.31 The SCC response 5 March 2016 (**CD Ref. 5.12**) to the planning application was very much in the context of discussions ongoing between WSP and SCC to resolve issues. The report listed 4 main detailed reasons for its recommendation to refuse the application. These are set out below with the reasons they are no longer an issue set out in brief following each point.

1. It has not been demonstrated that the net impact of additional traffic from the development can be appropriately mitigated at the junction of Ripley High Street with Newark Lane/ Rose Lane, without leading to a severe impact on the free flow of traffic within the village.

- 3.32 Reason 1 has been dealt with by pursuing a solution based on the provision of scheme for additional slip roads at the Burnt Common junction of the A3 set out in the emerging GBLP, allowing traffic that does not have to pass through Ripley to follow the A3 around Ripley. This is discussed in more detail in section 7 of my Evidence.

2. It has not been demonstrated that the proposals for accommodating development related traffic at the junction of the A3 with M25 will not severely impact upon the operation of the junction of Old Lane with the A3 on-slip (Guildford bound).

- 3.33 Reason 2 has now been dealt with by modifying the proposed junction between the A3 and Old Lane such that the design standards are complied with. This is discussed in more detail in section 7 of my Evidence.

3. The financial sustainability of an acceptable bus network to serve the development has not been demonstrated to be possible within proposed delivery models. Without the certainty that the development can be served in perpetuity by a high level of bus accessibility, the development does not maximise the potential for travel by bus.

3.34 Reason 3 has now been dealt with by formulating, advancing and discussing with the authorities a mechanism by which in-perpetuity funding for the proposed bus services can be provided and secured. This is discussed in more detail in sections 8 and 9 of my Evidence.

4. The opportunities for providing any meaningful off site cycle improvements to a level that would be attractive to the average cyclist, would require substantial financial investment, and significant Compulsory Purchase of privately owned land, which is currently within multiple land ownerships. There is little realistic prospect that the developer or a public authority could secure any beneficial off-site cycle provision, and therefore the development is unable to prioritise or maximise the potential for travel by cycle.

3.35 Reason 4 has now been dealt with by proposing in a S.106 Agreement that the cost of implementing cycle-friendly traffic management on a selection of routes between the site and key destinations be provided, including provision of a cycle route improvement to Byfleet and Brooklands. This is discussed in more detail in section 11 of my Evidence.

3.36 A number of detailed points were also made within the SCC response under the heading Technical Work. I have set out a table in Appendix C to my evidence which explains the current position on each item. In summary, all these technical work items have either now been dealt with, and agreement reached with SCC, or WSP have advanced solutions to meet the aspirations of the authorities.

3.37 It is therefore considered that the consultation response of SCC has been satisfactorily addressed.

HE Consultation response

(i) on the application the subject of the appeal (CD ref. 5.7)

3.38 HE responded to the application in its email dated Fri 18/03/2016 (**CD ref. 5.7**). HE did not object but recommended the application not be determined until remaining issues were resolved. These were set out in the email as follows:-

In spite of these recent communications there are still outstanding issues to be resolved. We are awaiting further critical evidence from the applicant in order to demonstrate that the development will not have a severe impact upon the Strategic Road Network (SRN), namely the A3 and M25. The required evidence covers traffic impacts to the south of the Ockham roundabout along the A3, M25 Junction 10 detailed modelling and proposed mitigation for the A3 and M25 Junction 10. Assuming that the required evidence will be supplied by the applicant there will then be formal procedures to follow for mitigation approval in terms of non-motorised users and road safety audit, plus an agreement

procedure for departures from standard. With all of the information in place this process will take several weeks before a final approval can be given.

3.39 Much of the discussion with HE revolved around the mitigation scheme proposed for M25 Junction 10 as follows:

- HE examined closely the traffic signal capacity calculations submitted to them, including requesting amendments to how the signal analysis software LINSIG¹² represented the changes in lanes allocations as traffic moved around the circulating carriageway of the roundabout.
- HE also looked closely at the widths of the circulating lanes, as in some cases they were considered to be too narrow to allow vehicles in a typical mix of traffic to move smoothly and efficiently from one stop line to the next. As a result of these conversations, WSP reverted to three lanes around the northern circulating section from the 4 lanes originally proposed which allowed the widths of these three lanes to be increased significantly from approximately 3m to approximately 4m. In addition the widths of the 4 lanes proposed for the southern circulating section were increased from approximately 3.5m to approximately 3.75m.
- It is worth noting that the lane widths in the HE design for RIS Consultation Scheme Option 14 (see further below on this) are 5 lanes of 3.65m each, meaning the WSP mitigation scheme for this junction is consistent with or better than the HE design.
- The standard of the Old Lane A3 southbound on slip junction was also discussed and a layout that HE were agreeable to was arrived at which increases the capacity and safety of the slip road arrangement.

3.40 I therefore believe that this scheme of bespoke mitigation is in line with the aspirations of HE at M25 Junction 10.

3.41 At the time of writing this Evidence, HE had only recently been confirmed as a rule 6 party to the Inquiry. As a result, ongoing discussions are being held regarding the impacts on the SRN, namely the A3, M25 Junction 10 and the Burnt Common Slips. I review this further in Section 7 of my Evidence.

(ii) on the emerging GBLP (CD refs 5.9 and 5.10)

3.42 It is relevant to note that HE submitted an objection to the Regulation 19 consultation on the emerging GBLP. The Spatial Planning manager for Area 3 objected to most of the matters that relate to the Strategic Road Network in his letter dated 18 July 2016 (**CD ref. 5.9**), including:-

- Spatial Vision and Policy 12: Supporting the Department for Transport's "Road Investment Strategy"
- The transport model used in the evidence base (the SINTRAM model)
- Policy E4: Surrey Research Park
- Policy A24: Slyfield Area Regeneration Project, Guildford

¹² LINSIG: The industry standard and widely-used software analysis package which allows the signal timings of complex linked signalised junctions to be optimised in terms of queue lengths, capacity and delays.

- Policy A25: Gosden Hill Farm, Merrow Lane, Guildford
- Policy A26: Blackwell Farm, Hogs Back, Guildford
- Policy A35: land at former Wisley Airfield, Ockham
- Policy A43: Land at Garlick's Arch, Send Marsh/Burnt Common and Ripley
- Policy A43a: Land for new north facing slip roads to/from A3 at Send Marsh/Burnt Common and
- Policy A46: Land to the south of Normandy and north of Flexford.

3.43 The HE objection questioned the soundness of the emerging GBLP based on the submitted material in the transport evidence base and suggested means by which the issues raised in the objection could be dealt with.

3.44 Subsequently, following a meeting on the 1 September 2016 between GBC and the HE, a letter dated 5 October 2016 (**CD ref. 5.10**) was issued by HE which superseded the letter dated 18 July 2016. In it, HE withdrew its representations to each of the policies listed above, except that it reserved its position on Policies A43 and A43a and offered to hold further discussions. On Policy A35 Wisley Airfield, the letter states:

"We consider the policies provide a framework to how proposals can only be progressed if they meet the conditional requirements set out in the individual policies alongside requirements set out in Policy 13 [Sustainable transport for new developments]."

3.45 HE, SCC and GBC have been holding discussions with HE regarding the subject of the Policy A43a slip roads at Burnt Common. The latest HE position made available to WSP is set out in the email to GBC dated 9 February 2017 (Appendix D) in which the Spatial Planning manager states:

"Just for clarity, we have no objection to the new slips in principle subject to the demonstration of no adverse impact to the safety of the A3 and its users (which of course includes compliance with DMRB). As you know Highways England have no plans for new slips at Burnt Common, therefore the positive business case (which would include affordability) would need to be developed by the promoters of the slips and accepted by who is funding (or the purse holder). The promoter is expected to secure all necessary consents, and fund all related design and construction works (including commuted sums)."

3.46 HE have also now acknowledged the scheme as one to be assessed further as part of the A3 Guildford to Ripley study area in the March 2017 update of the M25 to Solent Route Strategy. I return to this later in my Evidence.

Emerging GBLP Transport Evidence Base

3.47 As part of its Regulation 19 consultations in June 2016 and again in June 2017, GBC published the following series of transport-related documents, each of which is described in subsequent paragraphs:-

- The Strategic Highway Assessment (and 2017 addendum (**CD ref. 8.34**));
- The Guildford Borough Transport Strategy (**CD ref 8.33**);
- Transport Topic Paper (**CD ref. 8.28**); and
- Model Development Validation Report.

The Strategic Highway Assessment report (CD ref. 8.34)

3.48 The Strategic Highway Assessment report dated 6 June 2016 and addendum in June 2017 were produced by SCC and comprise a review of the input to and conclusions of the strategic traffic modelling that was carried out. It describes the strategic transport model used for the assessment, namely SINTRAM, as being:

“used to aggregate descriptions of traffic such as flow, density, speed and the relationships between them. It is important to note that the model is unable to answer detailed questions regarding traffic interactions, such as queuing and individual driver behaviour. The model can however, provide approximate answers to traffic problems across a vast geographical area. This includes the level of vehicle demand, junctions and stretches of road which will be operating above their theoretical capacity, and highlighting areas where some form of mitigation is likely to be required to reduce the impact of development sites. This makes SINTRAM a suitable tool for assessing the potential traffic impacts of the potential developments and future highway mitigation proposals at this initial review stage.”

3.49 The Strategic Highway Assessment report sets out the future year scenarios tested using SINTRAM. Each scenario including the development sites identified by GBC in their Emerging GBLP incrementally adds highway mitigation schemes so that the impacts and the need for the schemes can be assessed. Each Scenario is described in paragraph 3.2.1 of the Strategic Highway Assessment Report as follows:

“2031 Do-Minimum scenario 1 includes all development sites that have received planning permission within the borough of Guildford to 2015 along with all residential planning permissions and the most likely strategic development sites identified by Waverley Borough Council in their proposed Local Plan in the period to 2032, but with no new highway schemes;

2031 Do-Something scenario 2 is a continuation of 2031 Do-Minimum scenario 1 with the addition of the development sites identified by GBC in their Proposed

Submission Local Plan in the period to 2033, again with no new highway schemes;

2031 Do-Something scenario 3 is a continuation of 2031 Do-Something scenario 2 but with the addition of key highway schemes providing access to large development sites and local highway schemes in both Guildford and Waverley boroughs;

2031 Do-Something scenario 4 is a continuation of 2031 Do-Something scenario 3 with the addition of the M25 Junction 10/A3 Wisley interchange scheme and the M25 Junctions 10-16 scheme, both schemes from the Department for Transport's Road Investment Strategy (RIS) (March 2015), and for both of which construction is anticipated to commence in Road Period 1 (2015/16 to 2019/20); and

2031 Do-Something scenario 5 is a continuation of 2031 Do-Something scenario 4 but with the addition of the A3 Guildford (A320 Stoke interchange junction to A31 Hog's Back junction) scheme, again from the Department for Transport's RIS, and for which construction is anticipated to commence in Road Period 2 (2020/21 to 2024/25). This has been assumed to involve the widening the A3 to dual three lanes between the A31 and A320, together with improvements to the Tesco and Cathedral junctions."

3.50 In summary the Scenarios are described in the diagram below, extracted from the GBC Strategic Highway Assessment Report.

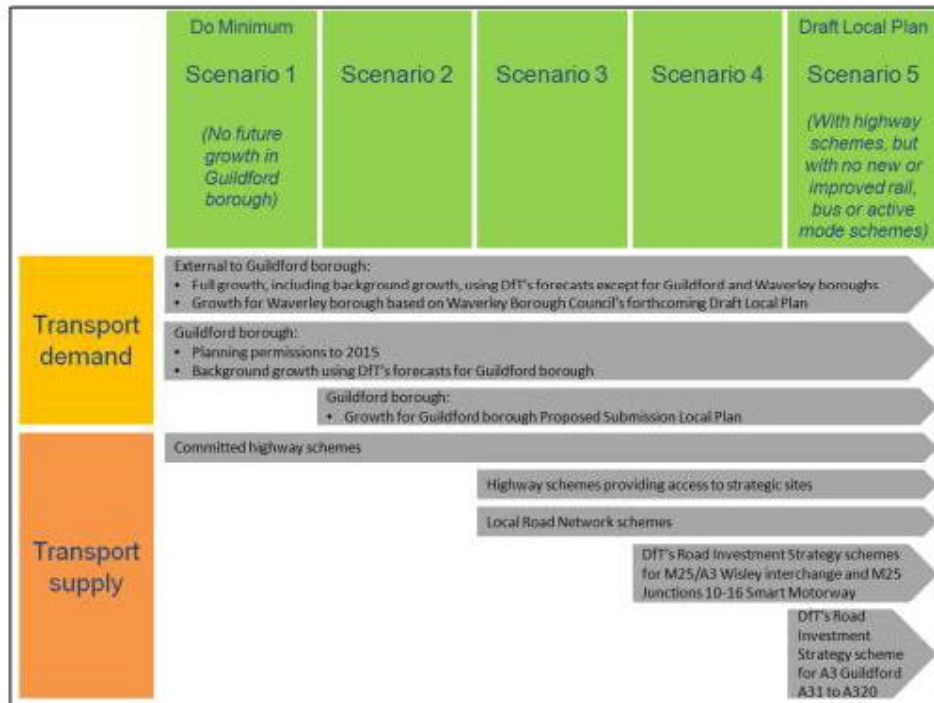


Figure 3.1b: Outline of scenarios

(Source; GBC Strategic Highway Assessment Report)

- 3.51 The Policy A43a slip roads onto the A3 at Burnt Common are included in Scenarios 3, 4 and 5.
- 3.52 The work detailed in the report assumes that in Scenario 3, the bespoke mitigation proposed in the application at M25 Junction 10, in case the RIS scheme at this junction is cancelled or is delayed, is implemented and that in Scenario 4 and 5, the M25 Junction 10 RIS scheme improvements are implemented.
- 3.53 At the time of carrying out the SINTRAM modelling for the Strategic Highway Assessment report, the M25 Junction 10 RIS improvements were not known in any detail. Therefore the junction improvement included in the model was based on the description in the RIS strategy¹³ i.e. “improvements [...] to allow free-flowing movements”. In fact, the options in the RIS Scheme Consultation published in December 2016 did not include free-flow for all movements.
- 3.54 I would like to clarify one aspect of the report that is relevant to the Appeal proposal. Figure 4.6 of the Strategic Highway Assessment report illustrates the routes taken by the Wisley Airfield traffic according to the modelling carried out by SCC. This shows a large amount of traffic on minor roads south of the A3, such as Guileshill Lane.

¹³ London Orbital and M23 to Gatwick – Route Strategy - April 2015



Routes taken by trips with an origin in the Wisley Airfield development weekday average AM peak hour Scenario 3 (includes proposed A3 Burnt Common Slips)

(Source: SCC Strategic Highway Assessment report Figure 4.4)

- 3.55 However the SCC model used in the Strategic Highway Assessment report is not locally validated in as much detail as the WSP version is. The WSP model outputs should therefore be considered to be more robust, and as can be seen below, shows different results. I have therefore set out the same information derived from the WSP validated model and this is shown below.
- 3.56 It can be seen that the pattern of trips is different to that in the SCC version. Very few trips travel along the minor roads south of the A3 with a higher proportion travelling north along Old Lane to access the A3 southbound via the revised Old Lane junction.



Routes taken by trips with an origin in the Wisley Airfield development weekday average AM peak hour Scenario C3 (includes proposed A3 Burnt Common Slips)

(Source: WSP SINTRAM model)

- 3.57 The Strategic Highway Assessment report concludes that the Scenario 5 mitigation is required to avoid severe impact from the emerging GBLP allocated development. However the Strategic Highway Assessment exercise differs from the modelling in the Wisley Airfield TA and TAA, which was aimed at isolating the mitigation required for the Wisley Airfield development. It would accordingly be incorrect to draw conclusions about the specific mitigation required of the Wisley Airfield development from the Strategic Highway Assessment report.

Guildford Borough Transport Strategy June 2017 (CD ref. 8.33)

- 3.58 The Guildford Borough Transport Strategy deals with the transport needs of the whole of the borough in providing for the delivery of the development allocated in the emerging local plan. It sets out not only highways measures (as identified in the Strategic Highway Assessment) but also public transport, “active” modes such as cycling and walking and generic sustainable movement corridors for active modes and buses. These are set out in relation to the timeline for the emerging GBLP period.

3.59 In relation to Wisley Airfield it sets out that certain schemes are anticipated as coming forward:

- SRN 9 and 10 – new north facing slip roads on the A3 at A247 Clandon Road, Burnt Common
- LRN7 – local highways interventions:
 - on the A3 and M25 and at the M25 Junction 10/A3 Wisley interchange
 - on B2215 Ripley High Street
 - at the junctions of Ripley High Street with Newark Lane/Rose Lane
 - at junction of Old Lane with A3 on-slip (Guildford bound) and
 - at junctions of Old Lane, Forest Road and Howard Road.
- BT2 - Bus interchange at Effingham Junction rail station (or alternatively Horsley rail station)
- BT3 - Significant bus network serving the Land at former Wisley airfield site and key destinations including Effingham Junction railway station and/or Horsley railway station, Guildford and Cobham to be provided and secured in perpetuity
- AM3 - Off site cycle network from the Land at former Wisley airfield site to key destinations including Effingham Junction railway station, Horsley railway station/Station Parade, Ripley and Byfleet, with improvements to a level that would be attractive and safe for the average cyclist. Currently, the Appellant is proposing to construct the route to Byfleet, improve the route from the site to Ripley and contribute a significant sum through the S.106 Agreement towards other facilities and measures to promote cycling in the vicinity of the Appeal site.

3.60 A further scheme is set out, labelled “LRN22 - East Horsley and West Horsley traffic management and environmental improvement scheme”. Although this scheme is not linked directly with Wisley Airfield, the Horsleys and in particular the station at East Horsley form part of the linked community that surrounds the Wisley Airfield proposal. Any improvements carried out to improve conditions in these villages will strengthen the linkages between the existing and proposed communities. As set out in Section 8 of my Evidence, the Appellant is already proposing a potential improvement to Station Parade to incorporate a better public realm into a bus turnaround facility. There will also be extensive new bus services that existing residents, as well as new residents on the Appeal site, can make use of.

The Transport Topic Paper (CD ref. 8.28)

3.61 The Transport Topic Paper sets out a summary of all the work carried out in the Strategic Highway Assessment and draws together the strands of transport provision in relation to Wisley Airfield. It looks at the provision of bus services in these terms:

“5.76 Schemes BT2 and BT3 both relate to site allocation Policy A35 ‘Land at former Wisley airfield, Ockham’. This site is allocated for a residential led mixed use development including approximately 2,000 homes. As part of the sustainability

improvements for the site, it is considered a bus interchange at Effingham Junction rail station or alternatively Horsley rail station will be necessary to enable future site residents and visitors to access rail services. This is scheme BT2.

5.77 Scheme BT3 proposes a significant bus network to serve the site and key destinations including Effingham Junction railway station and/or Horsley railway station, Guildford, and Cobham to be provided and secured in perpetuity. As part of the sustainability improvements for the site, the requirement for this scheme is also set out in the site allocation Policy A35. Most importantly, as bus is the most realistic alternative mode of transport to the private car for providing access for the majority of site residents and visitors to and from rail stations, and with the current constraints on public transport budgets, it is essential that the bus services are provided and secured in perpetuity for this site.” [my underlining]

3.62 It is interesting to note the reference I have underlined in paragraph 5.77 to bus services serving local rail stations, which have the potential to replace trips by cycle for these journeys.

Model Development Validation Report

3.63 The Model Development Validation Report dated June 2016 explains the process and results of the exercise to validate the base SINTRAM model used in the Strategic Highway Assessment work outlined above, particularly in the context of being used in the assessment of the Waverley and Guildford Local Plans. A good level of validation was achieved albeit significantly more so in the part of the model representing Waverley Borough than in Guildford Borough.

3.64 The conclusion was that the model met the Department for Transport’s (DfT) validation acceptability guidelines WEBTAG criteria and was therefore fit for purpose.

3.65 It is important to restate that the version of SINTRAM used by WSP in the work in the TAA is validated in more detail than the SCC version for the area surrounding the site. It is therefore regarded by SCC as more accurate than the SCC model for use in the specific assessment of the Appeal proposals.

RIS Consultation Schemes (CD ref. 13.41)

3.66 The Stage 1 RIS consultation schemes for M25 Junction 10 were published in December 2016. The published documents include the consultation brochure, the Technical Appraisal Report (TAR) and the Environmental Study Report. Following a request to the project sponsor at HE, WSP also obtained the following:-

- Local model validation report
- Traffic forecasting report

- Traffic data collection report.

3.67 These reports explained that HE used a different traffic model to SINTRAM for the assessment of the effects of the scheme options. They used a more strategic model known as the M3M4 developed for the M3 and M4 Smart Motorway (SM) schemes. It uses the modelling software SATURN, whereas SINTRAM is based on ONMITRANS software. The TAR explains that the subsequent phases of the M25 Junction10 scheme development may use the South East Regional Model currently under development by HE.

3.68 The level of detail provided in these documents on the effects of the scheme on traffic flows further afield, including Ripley, were not clear, although given the lack of clarity on side road treatment this is perhaps not surprising.

3.69 HE presented two consultation scheme options out of the total of 21 initially examined.

3.70 Option 9 (shown below) is a 4 level interchange which offers free-flow right turns from the A3 to the M25. The left turns and all the movements from the M25 to the A3 would be via the existing roundabout, suitably modified to increase capacity and safety. The scheme had a projected cost of £214.7m, was predicted to save 15 injury accidents per year and had a benefit to cost ratio of 8.3, termed “very high” by HE.



(Source; HE M25 J10 consultation brochure)

3.71 Option 14 (shown below) is a 3-level interchange based on the existing layout but making the roundabout much bigger so that improved capacity could be built into the junction such as segregated left turn lanes on all arms. The scheme had a projected cost

of £152.5m, was predicted to save only 1 injury accident per year and had a benefit to cost ratio of 7.4, termed “very high” by HE.



(Source; HE M25 J10 consultation brochure)

- 3.72 One further option was presented, although not as a formal consultation scheme. Option 16 was a much larger scheme providing free flow connector roads for all turning movements, more in line with the type of scheme envisaged in the RIS Strategy. The existing roundabout would be retained for pedestrians, cyclists and horse riders. The scheme had a projected cost of £339.7m, was predicted to save 20 injury accidents per year and had a benefit to cost ratio of 5.2, termed “very high” by HE. However it exceeded the target budget cost set for the scheme of £250m and was therefore rejected prior to the consultation as not being worth the additional cost and environmental impact.
- 3.73 The RIS Scheme Consultation Options all involve widening the A3 to 4 lanes in both directions from Ockham to Painshill. They also involve closing the existing junctions with Wisley Lane and Elm Lane. Therefore a major aspect of the RIS scheme is how it accommodates these side roads within the scope of the scheme. Old Lane remains open in both options.
- 3.74 Various alternatives for Wisley Lane and Elm Lane are put forward in Appendix D of the TAR (CD ref. 13.41) and I show these in Appendix E to my Evidence. None are committed to at this stage and the views of the public consultation will be a large component of the decision.

- 3.75 The Appellant's Consultation response is set out in Appendix F. It basically supports the implementation of Option 9 over Option 14 because it delivers the best overall return in terms of accident reduction, traffic flow capacity and future network resilience. The caveat placed on this response was that the need to overcome the greater environmental impacts of this option may lead to delays to implementation of a scheme. For this reason, the Appellant also recognised the improvements that could be delivered in terms of traffic flows and network integrity by Option 14, which has less onerous environmental impacts,.
- 3.76 The Appellant's Consultation response also made the following points:-
- It advocated inclusion of traffic from the proposed Wisley Airfield development into the modelling of the options reviewed. Given the advanced stage of the development in the planning process and the possibility that the Appeal proposal could gain planning consent before the RIS scheme, it seemed prudent to design the RIS infrastructure to accommodate it, or at least to assess any differences to the RIS that the traffic arising from the Wisley Airfield development would make;
 - It was noted that the traffic modelling for the Wisley Airfield TA Addendum had been included into the validation of the HE traffic modelling, showing that HE had accepted the basis and robustness of the modelling carried out to support the Wisley Airfield planning application;
 - The Appellant also made clear that the timing of the Wisley Airfield scheme and the RIS scheme meant that the RIS scheme should make provision for the proposals for access via Ockham Park Junction (Ockham Interchange) when considering side road connections. Clearly the Appellant could not take account of the RIS scheme to the same degree as HE had not expressed a preference for which Option for Junction 10 or for the side road connections at that stage.
- 3.77 HE are reviewing the public consultation responses at the time of writing this Evidence and the development of the Stage 2 preferred option scheme is underway.
- 3.78 HE expects to publish the preferred scheme for the junction in late summer 2017. At the time of writing my Evidence, no further indications of the scheme to be published have been given and the assumption has been made that it could be either Option 9 or 14. Construction is programmed to start in 2020.
- 3.79 Notwithstanding there being no preferred route announcement as I write this Evidence, a meeting with HE was held on 4 August, two days after HE were confirmed as a Rule 6 Party. During this meeting HE acknowledged that the modelling and traffic appraisals of the M25 Junction 10 RIS scheme (which excludes new slip roads on the A3 at Burnt Common) had included traffic growth based on the emerging GBLP and therefore the RIS scheme would accommodate the Wisley Airfield traffic generation.
- 3.80 I return to the RIS scheme and its relationship with some of the Wisley Airfield mitigation proposals later in this Evidence.

Guildford Cycling strategy

- 3.81 The position of the Guildford Cycling strategy in the context of Wisley Airfield is broadly set out in the Guildford Borough Transport Strategy (**CD ref. 8.33**). SCC's representation of existing routes has evolved during the period of the Wisley Airfield planning application. Appendix G of my Evidence shows the evolution from showing a large number of routes including many "recommended" routes in January 2016 to fewer routes in 2017, the "recommended" routes having been removed. It is not clear why the recommended routes were no longer supported by SCC.
- 3.82 The suggested routes shown in the 2017 mapping were the result of a consultation by the Guildford local committee of SCC in 2015, also shown in Appendix G. It is noted that the consultation included a proposed cycle path along Old Lane and cycle friendly traffic management along B2039 Ockham Road North. The detail of what schemes were envisaged at the time by SCC is not given. However this does demonstrate that SCC officers had been considering support for cycle facilities in the vicinity of the Wisley Airfield site at that time. The Appellant responded to this consultation offering support for the Guildford Borough Cycling Plan.

4 Transport Strategy

- 4.1 Before giving details on the work carried out it is worth setting out the Transport Strategy in broad terms as background to the following sections of my Evidence.
- 4.2 I have set out the main components below and, where appropriate, show the location on the plan in Appendix H. More detail is given on each component later in my Evidence.
- 4.3 This transport strategy has evolved through discussions with SCC, GBC and HE during the period from pre-application discussions regarding the 2015 planning application up to the present. However, many of the basic elements have remained the same.
- 4.4 The most significant change has been the introduction of north-facing A3 slip roads at Burnt Common into the Emerging GBLP. This was in response to concerns expressed by HE about the capacity of the northbound on slip road at Ockham Interchange and by SCC about the effects of the emerging GBLP growth in Ripley. The change to include these slips in the highway strategy only arose once this land was identified as being available through the local plan process. The slip roads allow traffic to join and leave the A3 before reaching these points on the network, creating headroom for the growth in traffic identified in the SCC Strategic Highway Assessment (**CD ref 8.34**).
- 4.5 The slip roads are being effectively safeguarded under emerging GBLP Policy A43a (**CD ref. 8.24**) and form items SRN9 and SRN10 of the Infrastructure Delivery Plan (**CD ref. 8.16**). They have also been included in Policy A35 as the identified mitigation to address the impacts on Ripley High Street and surrounding rural roads.
- 4.6 **Therefore the Burnt Common slips are the Appellant's preference at this time in the S106, as this implements the emerging GBLP and is agreed with GBC and SCC. Further technical work is being undertaken at the time of writing this Evidence to address the concerns of HE as a recently confirmed Rule 6 Party to this Inquiry. This is to clarify the work already carried out on the slip roads through the emerging GBLP transport evidence base and involves more detailed assessments.**
- 4.7 Another change followed discussions with HE whereby the earlier proposed Elm Corner A3 access closure and connection to the hamlet through the Wisley Airfield site was removed from the strategy, with Elm Corner A3 access remaining open to traffic as at present.
- 4.8 The following is the package of measure that constitutes the Transport Strategy.

Highways strategy (assuming no (or a delayed) RIS scheme)

- New north-facing A3 slip roads at Burnt Common;

- M25 Junction 10 and slip roads bespoke mitigation proposed in the application which includes widening the northern circulating link and introducing 4 lanes on the southern circulating link;
- A3 Ockham interchange partial signalisation including main site access;
- A247/B2215 Send Roundabout safety improvement;
- Effingham Junction Crossroads which is to have a mini-roundabout installed on the southern node and speed reducing measures on the south-bound Horsley Road approach;
- Old Lane site access with a reversal of priorities making Old Lane north the minor arm;
- Old Lane/A3 junction to be improved;
- Banning the southbound Old Lane movement beyond the pond car park; and
- Elm Corner to remain open.

4.9 The package of highway mitigation currently proposed by the Appellant is consistent with the latest version of the emerging GBLP which includes Policy A43a slip road scheme at Burnt Common. However ongoing discussions are being held with HE regarding this element and possible alternative mitigation.

4.10 The Appellant has discussed alternative mitigation schemes with HE in the past. Confirmation of the SRN mitigation will be reported to the Inquiry in Evidence once the position has been finalised.

Public transport

- A new service to Guildford twice an hour Monday to Saturday from 0600 to 2300 hrs;
- A new service to Effingham Junction Station and/or Horsley Station five times an hour Monday to Saturday from 0600 to 2300 hrs; and
- A new service to Cobham twice an hour Monday to Saturday from 0600 to 2300 hrs.; and
- Funding in-perpetuity through an approved funding mechanism;

Cycle connectivity

- New route to Brooklands and Byfleet including improvements to A245 Parvis Road cycling and crossing facilities;
- Improvements to facilities at Ockham Interchange; and
- Contributions to local cycle schemes and Guildford Cycling Strategy.

Residential Travel Plan

4.11 A residential travel plan will be implemented including making best use of the measures listed below. The full text of the current draft of the travel plan is contained in Appendix I of my Evidence. This travel plan will be the means by which travel behaviours can be

influenced and define the monitoring of these behaviours that takes place. It will be funded by the Appellant through the S. 106 Agreement. The measures include:-

- Overall Management;
- Travel Plan Coordinator (TPC);
- Monitoring Surveys;
- Local and On-site Infrastructure;
- New footpaths and cycle ways;
- Secure cycle parking stands;
- Residential broadband connections;
- Travel Plan Marketing and Promotional Measures;
- Promotional material (posters/leaflets) and online sustainable travel information portal;
- Welcome packs for residents;
- Promotion of informal car sharing;
- A £100 voucher towards the cost of a bicycle or bicycle equipment and a £100 voucher towards the cost of a bus, rail or coach season ticket;
- Feasibility Studies;
- Electric vehicle charging points; and
- Car club feasibility study.

4.12 Travel plans, personal travel planning (PTP) and other travel demand management (TDM) can make a significant difference to mode share and the take up of alternatives to single occupancy private car use. In schemes across the country, WSP is aware of the following results

- Work carried out by WSP on the Hampshire Sustainable Transport Towns Programme for the LSTF delivered Phase 1 of the programme covered 4,620 homes in north Basingstoke. The PTP approach showed overall reductions in car use of 11% were achieved and the programme generated positive local media attention and feedback from residents.
- A similar commission for Taylor Wimpey on their Wellington Park Waterlooville development delivered a 16% shift away from single occupancy car travel in 5 years.

4.13 I therefore consider that a significant change in travel mode share away from single occupancy car travel is possible with the Appeal proposal. It should be noted that at present the trip generation used in the traffic modelling of the Appeal proposal takes no specific account of this making the prediction of future effects more robust.

4.14 SCC confirm that the main provisions of the Travel Plan are acceptable, with the exception of the funding role of the WACT for the buses. This aspect is being resolved through the S106 process.

5 Traffic modelling

Traffic generation

- 5.1 The traffic generation of the Appeal proposal was set out within Appendix F of the TAA. The traffic generation rates were agreed with SCC in their consultation response dated 15 March 2016 (**CD ref. 5.12**). The residential trip generation rates are from TRICS¹⁴ and as a result comprise rates derived from single land use residential developments with little in the way of shops, employment, education or local facilities.
- 5.2 As this is a mixed use development proposal with many integrated facilities forming a self-sustaining community, it is to be expected that there will be an amount of internalisation of traffic generation, compared with the single land use residential developments in TRICS. This is separate to the potential change in travel mode shares as a result of travel plan measures that I refer to in paragraph 4.9.
- 5.3 Allowances have been made within the traffic generation used in the modelling to take account of the likely levels of internalisation of traffic within the site. These reductions in traffic generation have been applied to the non-residential land uses and then also removed from the residential traffic generation to fully reflect the fact that these trips will not appear externally to the site.
- 5.4 Appendix J of my Evidence shows how this calculation has been carried out.
- 5.5 The exception to the reductions in traffic is the primary school on the site. Whilst no explicit traffic generation has been included for trips to or from the school, no reductions have been applied to the residential traffic generation either. This means the traffic generation assumed is robust.

Traffic distribution

- 5.6 The distribution of vehicular trips generated by the Appeal proposal is based on 2011 journey to work data for the employment element, and a combination of journey to work data (to account for work related trips) and a simple gravity model (account for other journey purposes) for the residential elements. A summary of the distribution for both residential and employment uses was agreed with SCC and HE as part of the TA scope and is shown in Table 4-2 of the Assessment Approach And Forecast Assumptions Report that forms Appendix F to the TAA (**CD ref. 3.14**).

¹⁴ TRICS – An industry standard database containing traffic generation from surveys of existing development from which representative trip generation can be derived

SINTRAM Modelling

- 5.7 As outlined earlier in my Evidence, the original traffic modelling that was the basis for the traffic flows used in the TA and original ES was improved upon for use in the TAA by including a validation process with respect to WebTAG¹⁵, the standard normally used as a basis for local model validation.
- 5.8 As a result, the modelling for the work in the TAA was based on a model that was fully validated by WSP, which in turn was based on the SINTRAM model for Guildford borough produced by SCC to support the Emerging GBLP evidence base.
- 5.9 SCC provided WSP with a copy of the borough model so that local area validation could be carried out. In the course of carrying out the modelling WSP discovered some anomalies in the representation of the local highway network within the SINTRAM model and sought to rectify these. SCC audited the model at various stages leading up to and following validation and it is now agreed that the model representing the local network is in compliance with WebTAG and is fit for purpose. This agreement is recorded in Appendix E of the TAA and also as reaudited via SCC email dated 27 September 2016 11:23 (see Appendix B of my Evidence)
- 5.10 It should always be borne in mind that no model is a “perfect” representation of the performance of the local highway network. Model calibration is an iterative process that moves closer to an accurate representation of the local network on each refinement. As stated above, significant authority-validated improvements have been made by WSP to SCC’s SINTRAM model, and the model has now reached a stage where neither SCC nor HE have requested further work on it. Indeed, HE used the results of select link analyses produced from the model in the validation of its own modelling for the RIS scheme at M25 J10, as set out in paragraph 5.3 of the HE Local Model Validation Report (LMVR) for that scheme, extracts from which I include in Appendix K to my Evidence. This gives further credibility to the acceptability of the SINTRAM model in addition to the acceptance of the local model by SCC.
- 5.11 I present the results of the SINTRAM modelling in the following sections.

Base Year Modelling and Validation

- 5.12 The base year modelling was carried out in three stages. Each is outlined below:-
- (i) 2009 Validation**
- 5.13 Initially, the modelling was carried out for the 2009 base year and the model was validated for that set of data.

¹⁵ Transport analysis guidance: WebTAG – Department for Transport – this web-based series of documents provides information on the role of transport modelling and appraisal.

5.14 The Local Model Validation Report for these two stages was included within the TAA as Appendix E. It gives a full account of the validation carried out and presents the results of the validation alongside the WEBTAG guidance values, both for link flows and journey times. The level of validation of link flows both before and after refinement of the model is set out in the series of tables below, taken from that report. Figures in red are below the standard set in WEBTAG and those in green meet the WEBTAG standard.

AM peak hour link flow validation before refinement

CRITERIA AND MEASURE		ACCEPTABILITY GUIDELINE	CALIBRATION			VALIDATION		
Flow Criteria			Total Counts	Meet Criteria	%	Total Counts	Meet Criteria	%
Observed	Modelled							
< 700 vph	±100 vph	> 85 % of links	32	28	88%	33	15	45%
700 – 2,700 vph	±15%	> 85 % of links	15	10	67%	5	1	20%
> 2,700 vph	±400 vph	> 85 % of links	10	6	60%	0	0	0%
GEH Criteria								
GEH Statistic for individual links < 5		> 85 % of links	57	43	75%	38	12	32%

(source – TAA Appendix E Table 5.2)

AM peak hour link flow validation after refinement

CRITERIA AND MEASURE		ACCEPTABILITY GUIDELINE	CALIBRATION			VALIDATION		
Flow Criteria			Total Counts	Meet Criteria	%	Total Counts	Meet Criteria	%
Observed	Modelled							
< 700 vph	±100 vph	> 85 % of links	38	35	92%	37	32	86%
700 - 2,700 vph	±15%	> 85 % of links	15	15	100%	5	5	100%
> 2,700 vph	±400 vph	> 85 % of links	10	9	90%	0	0	0%
GEH Criteria								
GEH Statistic for individual links < 5		> 85 % of links	63	55	87%	42	36	86%

(source – TAA Appendix E Table 5.14)

PM peak hour link flow validation before refinement

CRITERIA AND MEASURE		ACCEPTABILITY GUIDELINE	CALIBRATION			VALIDATION		
Flow Criteria			Total Counts	Meet Criteria	%	Total Counts	Meet Criteria	%
Observed	Modelled							
< 700 vph	±100 vph	> 85 % of links	31	24	77%	36	12	33%
700 - 2,700 vph	±15%	> 85 % of links	15	11	73%	2	1	50%
> 2,700 vph	±400 vph	> 85 % of links	11	9	82%	0	0	0%
GEH Criteria								
GEH Statistic for individual links < 5		> 85 % of links	57	44	77%	38	8	21%

(source – TAA Appendix E Table 5.8)

PM peak hour link flow validation after refinement

CRITERIA AND MEASURE		ACCEPTABILITY GUIDELINE	CALIBRATION			VALIDATION		
Flow Criteria			Total Counts	Meet Criteria	%	Total Counts	Meet Criteria	%
Observed	Modelled							
< 700 vph	±100 vph	> 85 % of links	37	32	86%	40	36	90%
700 - 2,700 vph	±15%	> 85 % of links	15	14	93%	2	2	100%
> 2,700 vph	±400 vph	> 85 % of links	11	11	100%	0	0	0%
GEH Criteria								
GEH Statistic for individual links < 5		> 85 % of links	63	55	87%	42	34	81%

(source – TAA Appendix E Table 5.20)

- 5.15 These tables show the extent of the improvement in how the refined local model represents traffic in the base year. Only in the PM peak does the model fall slightly short of the WEBTAG guidance for 85% of links to meet the GEH¹⁶ criterion.

(ii) 2013 Sense Check Validation

- 5.16 Secondly and in response to concerns of HE, a sense check was also carried out for the year 2013. This was in recognition of the fact that the 2009 base year is now old and newer survey data from 2013 was available to allow a check on the forecasting capability of the model to take place. The output from the 2013 forecasting exercise was subjected to the same statistical checks as the 2009 base year validation. The results are given in the tables below, taken from the 2013 Forecasting Note dated September 2013. The 2013 Forecasting Note is given in Appendix L of my Evidence.

¹⁶ GEH – WEBTAG statistical measure for the closeness of a modelled flow to an observed flow.

AM peak hour 2013 Forecast Validation check

CRITERIA AND MEASURE		ACCEPTABILITY GUIDELINE	VALIDATION		
Flow Criteria			Total Counts	Meet Criteria	%
Observed	Modelled				
< 700 vph	±100 vph	> 85 % of links	2	2	100%
700 - 2,700 vph	±15%	> 85 % of links	13	12	92%
> 2,700 vph	±400 vph	> 85 % of links	8	5	63%
GEH Criteria					
GEH Statistic for individual links < 5		> 85 % of links	23	18	78%

(source: 2013 Forecasting Note Table 4-2)

PM peak hour 2013 Forecast Validation check

CRITERIA AND MEASURE		ACCEPTABILITY GUIDELINE	VALIDATION		
Flow Criteria			Total Counts	Meet Criteria	%
Observed	Modelled				
< 700 vph	±100 vph	> 85 % of links	3	3	100%
700 - 2,700 vph	±15%	> 85 % of links	12	9	75%
> 2,700 vph	±400 vph	> 85 % of links	8	7	88%
GEH Criteria					
GEH Statistic for individual links < 5		> 85 % of links	23	18	78%

(source: 2013 Forecasting Note Table 4-4)

- 5.17 It can be seen that the 2013 model validates very well compared with the original 2009 model. The link flow comparison presented in the 2013 Forecasting Note shows a reasonably close match between modelled and observed values with the majority of links demonstrating a GEH of less than five including flows on the A3 and the M25. In the context that the GEH criteria were determined for base model validation, it was considered that the 2013 year comparison was acceptable and the model was satisfactory for forecasting traffic flows in the transport assessment work.

(iii) 2009 check validation exercise

- 5.18 After the original validation of this model, SCC published the Strategic Highway Assessment Report dated June 2016 (CD ref. 8.21). The report showed that some changes had been made to the SINTRAM model that were not present in the base model originally supplied by SCC to WSP. SCC requested that WSP include new coding within the base year version of the model. The network changes were as follows:

- Ripley High Street Junction was changed to a staggered T junction

- Traffic signals were added to Newark Lane at the bridge over the River Wey
- Traffic signals were also added over the Wisley Canal crossing, representing the priority shuttle at this location.

5.19 The base year model was refined to include the changes listed above and the validation statistics updated within the September 2016 update of the Local Model Validation Report. The tables below show the results of the check validation carried out.

AM peak hour link flow 2009 validation check

CRITERIA AND MEASURE		ACCEPTABILITY GUIDELINE	CALIBRATION			VALIDATION		
Flow Criteria			Total Counts	Meet Criteria	%	Total Counts	Meet Criteria	%
Observed	Modelled							
< 700 vph	±100 vph	> 85 % of links	38	33	87%	37	32	86%
700 - 2,700 vph	±15%	> 85 % of links	15	15	100%	5	5	100%
> 2,700 vph	±400 vph	> 85 % of links	10	9	90%	0	0	0%
GEH Criteria								
GEH Statistic for individual links < 5		> 85 % of links	63	52	83%	42	36	86%

(source: Updated Local Model Validation report September 2016 Table 5.14)

PM peak hour link flow 2009 validation check

CRITERIA AND MEASURE		ACCEPTABILITY GUIDELINE	CALIBRATION			VALIDATION		
Flow Criteria			Total Counts	Meet Criteria	%	Total Counts	Meet Criteria	%
Observed	Modelled							
< 700 vph	±100 vph	> 85 % of links	37	30	81%	40	36	90%
700 - 2,700 vph	±15%	> 85 % of links	15	11	73%	2	2	100%
> 2,700 vph	±400 vph	> 85 % of links	11	11	100%	0	0	0%
GEH Criteria								
GEH Statistic for individual links < 5		> 85 % of links	63	50	79%	42	32	76%

(source: Updated Local Model Validation report September 2016 Table 5.20)

5.20 Again, it can be seen that the refined model is a much improved version of the original model in terms of validation. In accepting this updated model for use in forecasting, SCC officers noted the lower degree of validation in the PM peak.

5.21 In summary, great care has gone into the production of acceptable base SINTRAM models for use in the subsequent forecasting of traffic flows in the with and without development future years, which are presented in the following sections.

Future Base Year Modelling - Scenario A

- 5.22 The future year base modelling was carried out for the year 2031. This is the future year that the SINTRAM model was set for and it aligns with the full build out of the Wisley Airfield development. The Future Year Base modelling is described in more detail within Appendix F of the TAA.
- 5.23 The Scenario A model includes a list of the committed developments that were added to the model so that it represents a reasonable cumulative assessment. However, developments in the Emerging GBLP including Wisley Airfield were not included, as agreed with SCC. It also includes a list of the planned improvements to the highway network but excludes the planned mitigation for each of the emerging GBLP developments.
- 5.24 It should be noted that in carrying out the forecasting in collaboration with SCC, significant allowances were made for the effects of fuel costs and income on traffic growth in the study area. The overall levels of traffic growth applied from 2013 to 2031 are set out below.
- Increase from development (committed and TEMPRO) - 12%
 - Increase from fuel cost and income effects - 12%
 - Total traffic growth applied (all vehicles and purposes) - 24%
- 5.25 The Scenario A modelling data has been used to inform the updated Air Quality and Noise Assessment work undertaken in support of the Application, which has in turn informed the Ecology studies.
- 5.26 The Scenario A modelling was audited by SCC and accepted.
- 5.27 The results of the Scenario A modelling in terms of key link flows are given in Appendix M to my Evidence.

Future “with development” modelling - Scenario C

- 5.28 The Scenario C modelling was carried out by adding the trip generation of the Appeal proposals and highway network mitigation to the Scenario A model. The mitigation added to the model in the latest version of the Scenario C modelling is as follows and excluded the Burnt Common Slips:
- Spine road through the development;
 - Signalised junction onto Ockham Interchange;
 - Signalisation of Ockham Interchange;
 - Priority junction onto Old Lane;
 - Restriction of traffic flow to one way northbound along Old Lane;

- Improved scheme of signalisation at M25 Junction 10.
- 5.29 The Scenario C modelling data has been used to inform the updated Air Quality and Noise Assessment work undertaken in support of the Application, which has in turn informed the Ecology studies.
- 5.30 The Scenario C modelling was audited by SCC and accepted in the email dated 12 November 2015, contained in Appendix F of the TAA (**CD ref. 3.14**).
- 5.31 The results of this modelling are shown in Appendix N of my Evidence. They show not only the actual flows but the flow differences between Scenario A and Scenario C. The summary findings are:-
- In the AM peak hour (both directions combined):
 - There are an additional 175 vehicle movements along Ockham Lane, (approximately 1 vehicle every 20 seconds)
 - There are an additional 161 vehicles on the northbound approach to M25 Junction 10, of which 74 use the roundabout at Junction 10.
 - There are small reductions in the traffic at Junction 10 on all the other approaches due to redistribution of traffic
 - There is a net reduction of 30 vehicle movements on Old Lane north of the site access due to the southbound closure
 - There are approximately 180 extra movements through Ripley (approximately 1 vehicle every 20 seconds).
 - There are an additional 90 vehicle movements on Ockham Road North (approximately 1 vehicle every 40 seconds).
 - In the PM peak hour (both directions combined):
 - There are an additional 150 vehicle movements along Ockham Lane, (approximately 1 vehicle every 24 seconds)
 - There are an additional 71 vehicles on the northbound approach to M25 Junction 10, none of which use the roundabout at Junction 10.
 - There are small reductions in the traffic at Junction 10 on all the other approaches due to redistribution of traffic
 - There is a net reduction of approximately 130 vehicle movements on Old Lane north of the site access due to the southbound closure
 - There are approximately 120 extra movements through Ripley (approximately 1 vehicle every 30 seconds).
 - There are an additional 60 vehicle movements on Ockham Road North (approximately 1 vehicle every 60 seconds).
 - There are approximately 180 additional movements along Guileshill Lane (approximately 1 vehicle every 20 seconds).
- 5.32 The increases in traffic are considered to be relatively low on the local roads but there are potential issues arising from the increases in flow through Ripley because of the

existing conditions and the difficulties at the staggered cross roads of Newark Lane and Rose Lane with B2215 Ripley High Street.

5.33 All the key junctions were tested for the Scenario C flows and the results presented in the TAA.

5.34 The strategy has now progressed to incorporate the Emerging GBLP proposed Burnt Common slips, represented by Scenario C3. The Scenario C modelling still remains relevant for the ES Addendum Transport, Air Quality and Noise assessments as I explain in paragraph 5.38 below. The next section of my Evidence describes the modelling of the Emerging GBLP proposed Burnt Common slips.

Future “with development” modelling and Policy A43a Burnt Common Slips - Scenario C3

5.35 The Scenario C3 modelling was carried out by adding north-facing slip roads to the Scenario C model, as well as new roundabouts on the A247 at Burnt Common.

5.36 All the changes requested by SCC in their audit of this model have been carried out.

5.37 The results of this modelling are shown in Appendix O of my Evidence. They show not only the actual flows but the flow differences between Scenario A and Scenario C3. The summary findings are:-

- Significant reductions in the traffic flows through Ripley as trips re-route to make use of the new connection to the A3 at Burnt Common. Reductions in traffic on the B2215 Portsmouth Road northeast of the junction with Rose Lane are 275 and 235 two way movements in the AM and PM peak hours respectively, which in turn will improve conditions for residents and road users in Ripley compared with the future baseline in Scenario A ie without the Appeal proposal and Burnt Common slip roads
- Increases in traffic along the A247 Clandon Road south of the A3 of approximately 190 and 160 two-way movements in the AM and PM peak hours respectively (approximately one additional movement every 20 seconds)
- Decreases in traffic along Long Reach of approximately 170 and 80 two way vehicle movements per hour in the AM and PM peak hours respectively;
- Increases in traffic along Ockham Lane of 140-170 two way vehicles per hour (up to approximately one additional movement every 21 seconds) in the peak periods
- Increases in traffic along the A247 Clandon Road north of the A3 up to the junction with Send Marsh Road of approximately 200 two-way movements per hour (approximately one additional movement every 18 seconds) in the PM peak. Further north beyond the junction with Send Marsh Road there are no changes in traffic over the 2031 base year Scenario A.
- Most other changes are minimal and unlikely to be perceptible to residents or other road users.

- 5.38 Although Scenario C3 modelling was not used to inform the updated Air Quality and Noise Assessment work undertaken in support of the Application, the differences between Scenarios C and C3 are minor and of no significance to these assessments. Appendix P shows these differences.

Other future year assessments

- 5.39 The TAA also reported on the Scenario B and D assessments but little use has been made of these scenarios in the subsequent discussions with the authorities.
- 5.40 In summary, Scenario B included the development and access proposals for the Appeal site but excluded the associated mitigation. It was devised to establish the extent of mitigation required. Scenario D was based on Scenario C but also included potential traffic management and restrictions and was devised to check if such measures were necessary as part of the mitigation package.
- 5.41 Other mitigation schemes for the impact on the SRN have been discussed with HE in the past and modelled in addition to the above measures. Given that HE have recently been confirmed as Rule 6 parties to the Inquiry, it is possible that the modelling of these schemes may be introduced to the Inquiry dependent on the outcome of ongoing discussions taking place with HE.

7 Transport components of New Sustainable Settlement

- 7.1 In this chapter, I highlight the components of the transport strategy for the development that relate to sustainable transport objectives. The individual components are discussed in more detail elsewhere in my Evidence.
- 7.2 There is no definition of sustainable transport in the NPPF or emerging GBLP. Development does not need to achieve a certain proportion of trips by bus or cycle nor reduce car use below a certain benchmark level. The NPPF is very much about doing everything possible in the context of the site that is cost-effective to take up the opportunities that exist for giving people a real choice about how they travel.
- 7.3 The NPPF is also very clear in stating that planning should take account of the extent to which development can be made sustainable and therefore is not reliant on the existing sustainability of sites.
- 7.4 Having said this, it is a major objective to ensure that development proposals that provide housing to meet national and local demand reduce emissions by:-
- reducing the need to travel; and
 - providing opportunities to travel by sustainable modes of transport.
- 7.5 The Wisley Airfield development seeks to achieve this by a number of means.

Reducing the need to travel by creating a community

- 7.6 The development will be a community with employment and local services which aim to contain travel for day to day services. It is described in more detail within the Evidence of Mr Collins and Mr Bradley.
- 7.7 The local services and facilities included in the Illustrative Masterplan are:-
- Health Centre
 - Local centre containing shops, cafes, community building
 - Two Nurseries
 - Primary and Secondary All-through school
 - Exterior recreational space for walking, exercising dogs and play
 - Community Orchard
- 7.8 The ability to provide these services and facilities on site means that residents are unlikely to have to leave the site and travel elsewhere if they need them. However, there may be some initial need for residents with school age children to travel off site during the early stages of the development. An allowance has been made for offsite travel by secondary school students within the traffic modelling assumptions. The primary school is likely to open in the 4th year of development by which stage only approximately 500

dwellings will have been constructed. The traffic associated with this offsite activity during the first 4 years will therefore be minimal.

- 7.9 Having said this, although there is no external traffic generation included for the primary school in the modelling carried out (as it is all assumed to come from the dwellings on the Appeal site), neither has the external residential traffic generation been reduced to account for this so there is still an implicit allowance for trips to primary education leaving the site. Therefore the modelling of the primary education travel demand is considered to be robust.
- 7.10 Over time, it is expected that the movement pattern of education trips will become predominantly contained within the site.
- 7.11 The Savills Employment Impact report discussed in Mr Collins's Evidence predicts 292 home working jobs on the Appeal site. The proposed initiative of the homeworking hub on the site, supported by the placemaking proposals in the masterplan and Residential Travel Plan, will add to the attractiveness of homeworking and make the maximum possible use of this opportunity to reduce the need to travel beyond the site.
- 7.12 In addition, approximately 5000 sqm of employment floor space in different B-class land uses will be created. It is likely that some of the employees would be residents on the site. It has been agreed with SCC that the impact on the need for residents to travel off site will be at least 20% of these employment trips, i.e. approximately 9 and 7 two-way trips in the AM and PM peak hours respectively.

Sustainable Modes of Transport

- 7.13 The site will deploy the following sustainable modes of travel in accordance with NPPF and Emerging GBLP Policy requirements, under the management and direction of a Travel Plan.

Bus services

- 7.14 Buses will connect the various areas of the site. This can be done very easily because of the layout of the site as shown in the Addendum DAS (**CD ref. 3.11**), meaning that the services can be within easy walking distance of all residents without the need for convoluted loops in the bus routes, which would make for inefficient bus services.
- 7.15 The bus services will also extend beyond the site to other communities making it possible to reach services, employment opportunities and facilities outside the site without use of the car. More on the bus services is contained in later sections of this evidence.

Walking and cycling

- 7.16 The site will be designed to ensure that the opportunities for residents to walk and cycle within the site can be taken up using segregated, safe and pleasant routes specifically designed with these modes in mind.
- 7.17 Cycle routes will extend beyond the site to connect with other communities and destinations residents may wish to access. A cycle route already exists to Ripley and the Appellant will upgrade the facilities at Ockham Interchange to improve the link to that cycle route from the site.
- 7.18 The Appellant is committed to providing cycle facilities to the route from the site to Byfleet and Brooklands where a number of employment opportunities and a train station exist.
- 7.19 The Appellant has also formulated, advanced and discussed with SCC and GBC the funding of future potential studies and schemes to enhance facilities for cyclists who wish to reach the two railway stations at East Horsley and Effingham Junction and to the centre of Cobham.

Construction

- 7.20 Sustainability in construction is also relevant. This site contains previously developed land with a significant amount of construction material (approx. 70 acres of concrete and hardstanding with an estimated gross yield of some 3500 tonnes) that can be won from the recycling of hard-standing areas and the runway. This will reduce that amount of aggregate that needs to be imported to the site and hence will produce lower emissions than a green field site relying on imported material.
- 7.21 The site is also relatively flat so that less grading is required to achieve building plots on the site. This reduces emissions from earthmoving operations.
- 7.22 The construction traffic will also be managed through a Construction Environmental Management Plan (CEMP) which will include various measures aimed at reducing emissions from the construction activities including dust and noise as well as vehicle emissions. The workforce will be encouraged to travel to the site in multi-occupancy vehicles.

8 Proposed Highways Mitigation

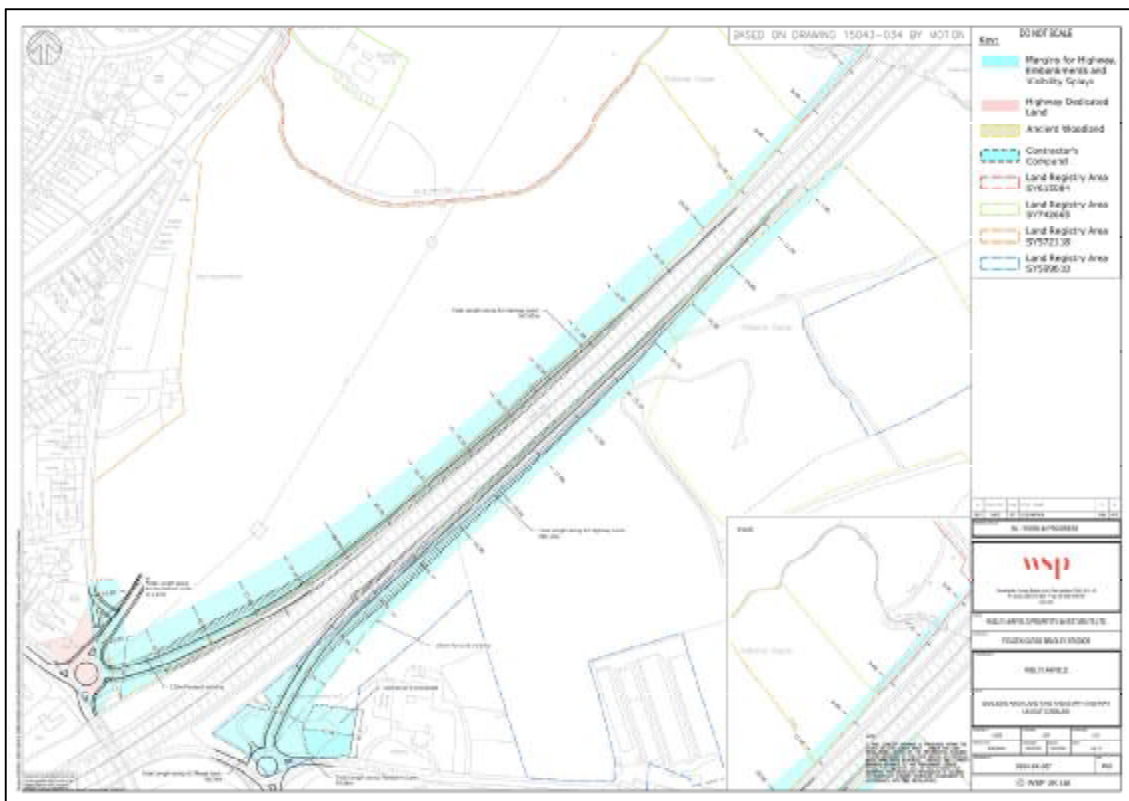
8.1 Appendix H shows the locations of the proposed highways mitigation. I examine each in more detail below.

A3 Burnt Common North-facing Slip Roads

Introduction

8.2 North-facing Slip Roads on the A3 at Burnt Common are proposed as part of the Emerging GBLP. Policy A43a sets out the land allocation and the Guildford Borough Transport Strategy lists these measures as schemes SRN9 and SRN10 in the Borough’s Strategic Road Network Strategy. The slip roads are also included in Emerging GBLP Policy A35 about Wisley Airfield, listing them as identified mitigation for the impacts of Emerging GBLP growth on Ripley and the surrounding local roads.

8.3 Layouts for the slip roads based on the layout in the Option Agreement between the landowner and the Borough Council are shown in Appendix Q of my Evidence. A small scale version is inset below.



8.4 In summary the slip roads comprise:

- New slip roads at the existing location of the southbound on-slip from the A247 Clandon Road. This takes advantage of the existing A3 overbridge carrying the A24;

- A new 4-arm roundabout on the A247 north of the A3 to accommodate the tie-in between the slip road and the A247 as well as the access to the site proposed for allocation in the Emerging GBLP under Policy A43 (Garlicks Arch);
- A new 4-arm roundabout south of the A3 to accommodate the tie-in between the existing on-slip as well as the tie-in with Tithebarns Lane, which currently has a T-junction off the existing on-slip connector road;
- A contractors compound has been allowed for in the north-east quadrant of the new roundabout south of the A3;
- New cuttings to accommodate the slip roads;
- Sufficient carriageway width to allow the construction of slip roads to the Type B specification in TD22/06 of DMRB¹⁷ (a two lane slip road with ghost island merge and diverge);
- In conjunction with the off-slip further west at Send, an all movements junction with the A3; and
- Retention of 3 lanes in each direction on the A3.

8.5 HE have also now acknowledged the scheme as one to be assessed further as part of the A3 Guildford to Ripley study area in the March 2017 update of the M25 to Solent Route Strategy. HE state:

“Opportunities have also been identified to the north of Guildford for enhancing capacity of truck laybys at Ripley and the introduction of north-facing slips at the A3/A247 at Ripley to support local plan aspirations and relieve some pressure on local roads accessing the A3 at Guildford.”

8.6 The evolution of the slip road option at Burnt Common arises from the Local plan aspirations of the authorities regarding two aspects.

(i) The impact on Ripley

8.7 The impacts of additional traffic growth from Emerging GBLP development on traffic conditions in Ripley can be seen in the results of the modelling set out in Paragraph 8.52 below. Scenario A traffic conditions (i.e. in 2031 without Wisley Airfield or its mitigation but with future year background growth from committed developments) deteriorate compared with the base year. The addition of emerging GBLP development growth would make this situation worse without mitigation.

8.8 The Appellant had been pursuing options to mitigate the traffic impacts in Ripley using traffic management solutions such as selective restrictions on certain traffic movements such as turning movements into Rose Lane from Ripley High Street. Officers of SCC and GBC had, however, been seeking alternative solutions that would reduce the traffic levels in Ripley below the Scenario A levels (ie an improvement to the “without Wisley” scenario) and hence achieve an improvement in future traffic conditions in Ripley. This

¹⁷ TD 22/06 –Layout of Grade Separated Junctions – Vol 6 Section Part 1 - DMRB (Highways Agency)

would be much more beneficial to residents and road users in Ripley than a solution that would only result in a policy-compliant “less than severe” impact in this location.

- 8.9 Following confirmation from GBC that the required land was available, feasibility checks were carried out, including detailed engineering plans showing the horizontal and vertical alignments of the slip roads and the associated roundabouts. SCC also modelled the effects that the slip roads would have on local traffic flows using the SINTRAM model, and work was subsequently included in the Emerging GBLP Transport Evidence base and the Strategic Highway Assessment report in particular.
- 8.10 GBC and SCC officers were satisfied that this scheme would be technically feasible and deliverable and would provide capacity headroom to accommodate local plan aspirations including the traffic arising from the Appeal proposal.
- 8.11 The authorities adopted the Burnt Common slip roads proposal as part of the Emerging GBLP in policy A43a.

(ii) The impact on the A3 Northbound on-slip road at Ockham Interchange

- 8.12 In Scenario A, i.e. 2031 without the Appeal proposal, this slip road is predicted to carry approximately 1260 vehicles per hour without the Wisley Airfield development, with A3 mainline flows being approximately 4220 vehicles per hour. Thus, the standard of merge required by DMRB TD22/06 to accommodate future year predicted flows, even without the Wisley airfield development, could require an additional lane on the A3, bringing it to 4 lanes. This is the approach adopted in the RIS scheme Options 9 and 14 referred to earlier.
- 8.13 Without the new Burnt Common slips (i.e. in Scenario C), the Appeal proposal generates approximately 377 additional AM peak hour movements on the A3 on-slip north of Ockham Interchange.
- 8.14 During the conversations with HE it was clear that mitigating the impact of the additional traffic generated by the Wisley Airfield development at this location would present challenges. The existing layout is very constrained by the close proximity of the end of the northbound on slip from Ockham Interchange, being within 100m of the start of the off slip road to the Wisley Lane junction. This is severely substandard as this distance should be at least 450m and thus leaves little room for weaving of the traffic streams entering and leaving the A3. Without appropriate mitigation, introduction of additional development traffic into this layout would be likely to cause a disproportionate change in conditions and could compromise safety.
- 8.15 The introduction of the slips at Burnt Common in conjunction with the Appeal proposal (Scenario C3) actually reduces traffic on the on-slip by approximately 190 vehicles per

hour in the AM peak hours compared with the Scenario A flows i.e. even after the additional traffic from the Wisley Airfield proposal is added.

- 8.16 A consequence is that the mainline A3 flows increase between Burnt Common and Ockham. Notwithstanding this, on balance I consider it is better to reduce the number of merging movements at Ockham where the standard of the A3 is poorer (as described above) and introduce them at Burnt Common, where the A3 is less prone to breakdowns in conditions caused by congestion at M25 Junction 10. Updated personal injury accident (PIA) data shown in Appendix R of my Evidence illustrates the relatively high level of recorded PIAs on the A3 north of Ockham compared with at Burnt Common in the vicinity of the new slips. I therefore consider this measure is likely to be a net benefit to highway safety on the SRN.
- 8.17 In addition it is relevant to consider that the announcement of a preferred route for the RIS scheme at M25 Junction 10 is likely before the commencement of this Inquiry. An upgrade to the layout from Ockham to Junction 10 will take place as part of this scheme and the conflicts with side roads will be removed. Given the stage of the RIS scheme in the programme with a start date in 2020, it is likely that the issues related to the on-slip will be removed in due course. HE have acknowledged in discussions immediately prior to submitting this Evidence that the appraisals and traffic modelling of the RIS scheme at M25 Junction 10 include growth from traffic in the emerging GBLP and hence the RIS scheme would accommodate the traffic from the Appeal proposal.
- 8.18 Nonetheless the Appellant is conscious of the ongoing discussions with HE about the SRN mitigation at the time of preparing Evidence and, as provided for within emerging GBLP Policy A35, otherwise alternative interventions which provide comparable mitigation may be introduced to the Inquiry should it be required.

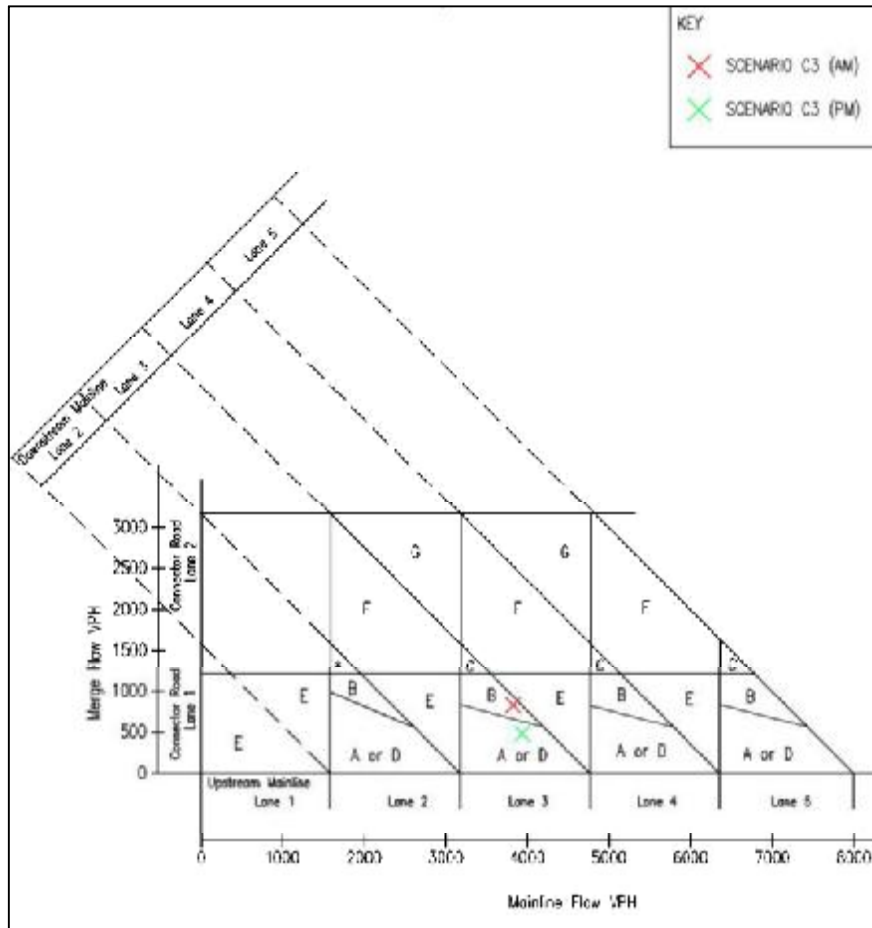
Design to DMRB TD22/06 (CD13.42)

- 8.19 The design of grade-separated junctions is contained in the DMRB within TD22/07. This design standard, along with many others in DMRB, is currently under review by HE. Some of the current requirements are considered onerous and the review is highlighting some aspects that would mean changes are introduced in the near future and potentially before the detailed design of the junction. However, I proceed in my Evidence on the basis of the current document.
- 8.20 The relevant design criteria are the merging and diverging flows and the mainline flows. These are compared with the appropriate design standard given in Figure 2/3 AP and Figure 2/5 AP respectively for merging (on-slip) and diverging (off-slip) slip roads. I have carried out an assessment based on the SINTRAM flows from Scenario C3 shown in Appendix O to my Evidence. This is shown in the table below:

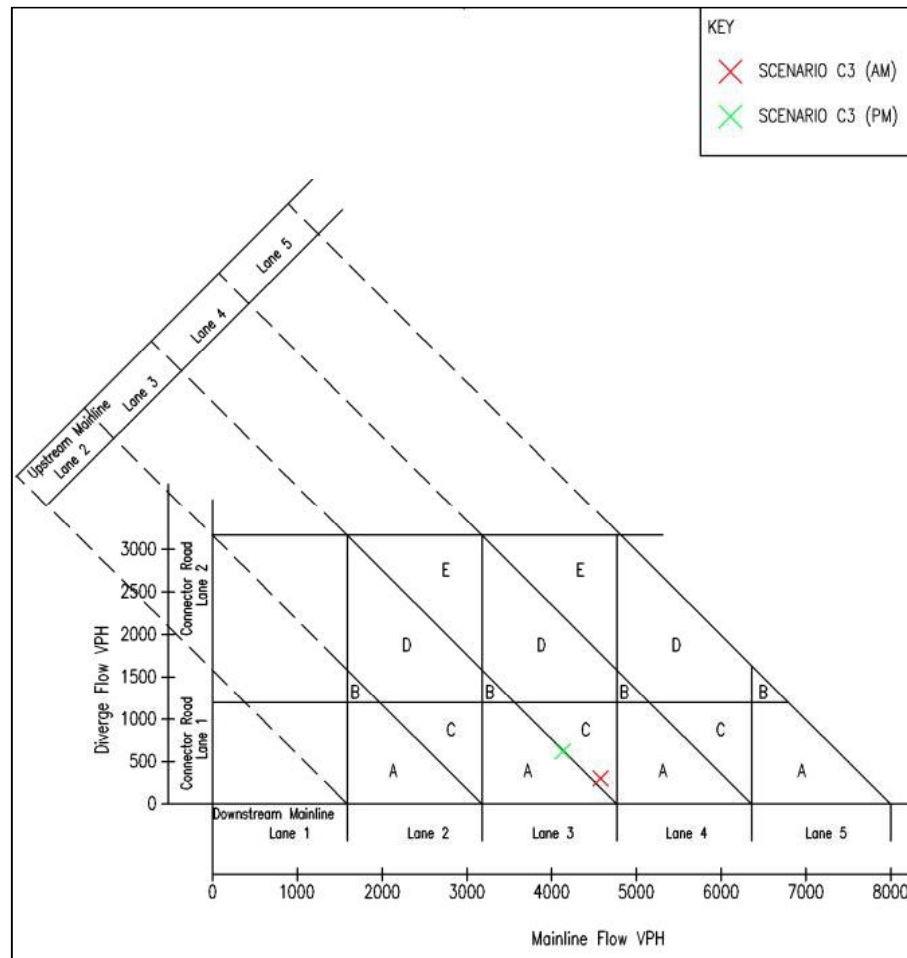
WSP SINTRAM Scenario (2031 with Appeal proposal)	Slip road flow	Mainline Flow	Standard indicated (from TD 22/06)
Northbound on slip			
AM peak			
WSP Scenario C3	829	3833	Type B Parallel Merge
PM peak			
WSP Scenario C3	482	3946	Type A or D Taper
Southbound off slip			
AM peak			
WSP Scenario C3	302	4580	Type C Lane drop
PM peak			
WSP Scenario C3	622	4131	Type A Taper

(Sources:- SINTRAM WSP Scenario C3 and DMRB TD22/06)

8.21 I also set out below the diagrams based on Figures 2/3 AP (for merges) and 2/5 AP (for diverges) of TD22/06.



(Sources:- SINTRAM WSP Scenario C3 and DMRB TD22/06 Figure 2/3 AP for merges)



(Sources:– SINTRAM WSP Scenario C3 and DMRB TD22/06 Figure 2/5 AP for diverges)

- 8.22 The assessments show that in the case of the merge for the northbound on slip, the flows require a parallel lane merge. This can be provided within the land available and safeguarded within Emerging GBLP Policy A43a.
- 8.23 In the case of the diverge for the southbound off slip, the flows in 2031 would justify a taper during the PM peak hour but a lane drop¹⁸ in the AM peak hour. However the extent to which the A3 mainline flow exceeds the requirement for a taper is only approximately 100 vehicles per hour out of 4580 vehicles per hour. I think this is a marginal result and introduces the need to review if it is actually a justifiable investment decision to implement a lane drop.
- 8.24 As background to that review, Paragraph 32 of NPPF requires that mitigation be cost-effective and should lead to impacts that are less than severe.

¹⁸ Lane Drop – this is where the upstream carriageway has 4 lanes and the downstream carriageway has 3 lanes as per Figure 2/6.2 of TD22/06 (CD13.42)

8.25 In the absence of the M25 Junction 10 RIS scheme being implemented, a lane drop in effect means that the A3 would need a 4th southbound lane from Junction 10 to Burnt Common because there are no south-facing slip roads at Ockham Interchange that would act as the start for the extra lane. This would mean approximately 6.2km of new construction to provide the additional lane. Apart from the significant cost, this would have a number of other consequences each of which would impact on the cost-effectiveness of the scheme:-

- Interference with the existing roadside services on the A3 at Ripley;
- Potential bridge widening or reconstruction at a number of locations;
- The need for additional potential third party land alongside the A3;
- Impacts on Scheduled Ancient Woodland adjacent to the A3 at Oldlands Copse.

8.26 It is also relevant to consider the benefits that the proposed slips would have. I set these out below and in paragraph 7.33:

- Relief for the village of Ripley from Local Plan development growth as set out in paragraph 5.37 above;
- A reduction in flows joining the A3 at Ockham where accidents occur due to the breakdown in traffic flow caused by the queues of traffic from M25 Junction 10 and where the layout is substandard.

8.27 I consider that these combined benefits outweigh the marginal result of the TD22/06 assessment for a lane drop, especially when considered alongside the major negative implications of the construction work required to provide a lane drop. However further detailed technical discussions are ongoing at the time of writing this Evidence and will be reported to the Inquiry.

Cost

8.28 These slip roads are identified as being developer funded as they are intended as mitigation for local plan growth. The cost given in the IDP is up to £10m each. This assumes that there is no requirement for a 4th lane southbound on the A3.

8.29 Other similar projects have been undertaken on the SRN in similar conditions and can be referred to in order to calibrate the costing for the Burnt Common slips.

8.30 New slips have been constructed in Oxfordshire on the A34 at Chilton along with connecting roundabout junctions onto the A4185 Newbury Road. The slip roads were constructed largely off line and caused minimal disruption to traffic on the A34 during their construction. As shown in the table below (in which the costs are in £000s) the total costing for these slips in the business case was £10.883m for both slip roads combined with the cost of construction works only £6.347m of the total.

Statutory Undertakers' Diversion Works	£435	October 2013	Works cost estimate based on rate/m2 (from previous outturn costs) for the length over which the utility plant is affected
Construction	£6,347	October 2013	Works cost estimate based on derived bill of quantities using current market rates and Spon's Price Book to establish rates
Client costs	£203	October 2013	Estimate of staff cost of a Project Manager for the duration of the scheme plus allowance for some other internal specialist staff time
Part 1 Claims	£507	October 2013	Value based on previous experience
Commuted Sum	£402	October 2013	Life Cycle Plan
Quantified Risk Assessment	£990	October 2013	P(50) value calculated using @RISK
Optimism Bias	£1,419	October 2013	OB is 15% based on HA's PAR guidance when combined with a QRA
TOTAL	£10,883		

(source: Oxfordshire County Council business case)

8.31 Another aspect of this is the uncertainty attached to commuted sums for maintenance. On another scheme WSP are dealing with in HE Area 3 (on the M27 in that case), the commuted sums are being taken to be 80% of the construction costs. It is not yet clear if this level of commuted sum would apply to the A3 as it is not a Motorway but I carry out the calculation below to stress test the assumptions on cost..

8.32 Based on the costing from the business case for Chilton Slips, commuted sums were only £402,000 (6%) but if they were increased to 80%:-

- Construction costs – £6.3m
- Commuted sums @80% - £5.04m
- Oxfordshire County Council Business case overall cost – £10.883m
- Commuted sum already included – £0.402m
- Revised cost (10.883-0.402+5.04) = £15.5m

8.33 This includes the combined contingency of quantified risk assessment and optimism bias of £2.4m which represents 38% of the construction cost. In my view, this would be a justifiable basis for scheme cost.

8.34 I therefore consider that the costing for this scheme included by GBC in the IDP is extremely conservative and that the costing is much more likely to be in the order of £10-£15m.

Benefits

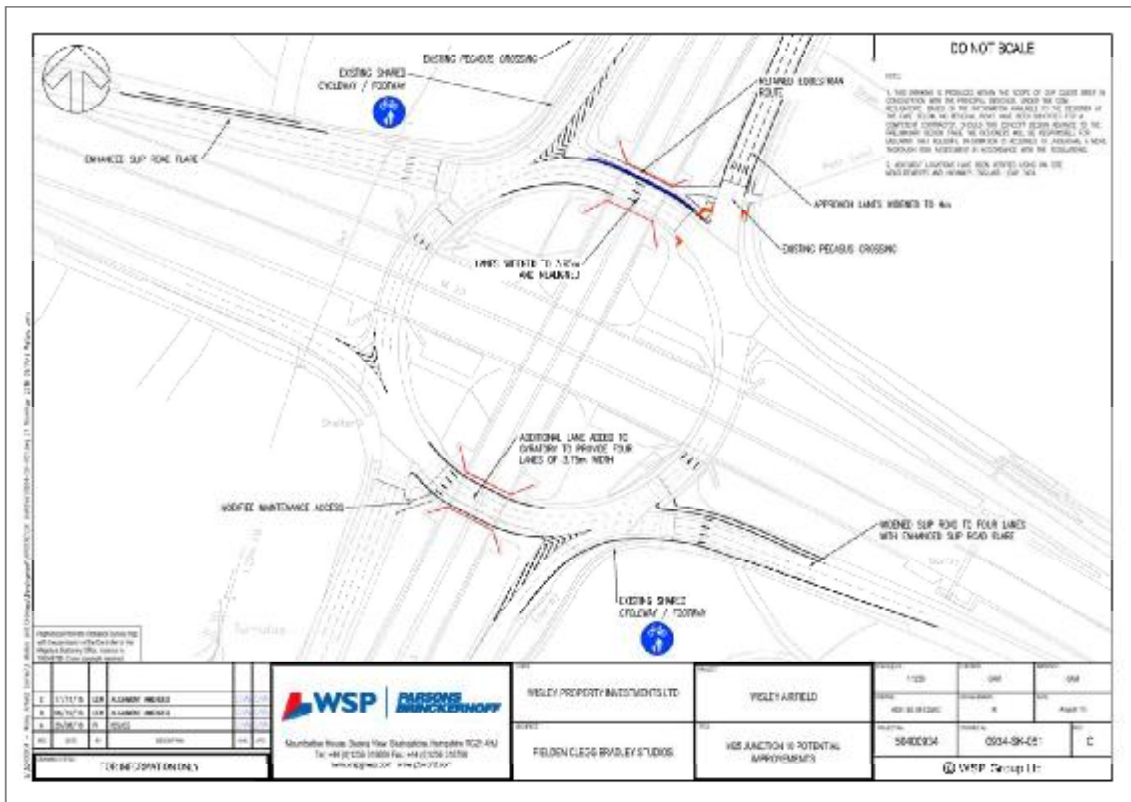
8.35 The benefits of the Burnt Common slip road proposal include those set out below:-

- It provides relief for other junctions on the A3 corridor in the context of planned growth. For example, it reduces flows on the on-slip road at Burpham by approximately 50 vehicles in the AM and PM peak periods and at Ockham it reduces the northbound on-slip movements by 191 and 160 vehicles in the AM and PM peak hours respectively and hence reduces conflicting movements at each location;
- It introduces traffic from Emerging GBLP growth onto the SRN at a location with a better safety record and reduces traffic at a higher risk location;
- It removes up to approximately 300 vehicles per hour from Ripley, which is a local shopping and commercial centre, reducing traffic conflicts and making conditions better for residents and other road users.

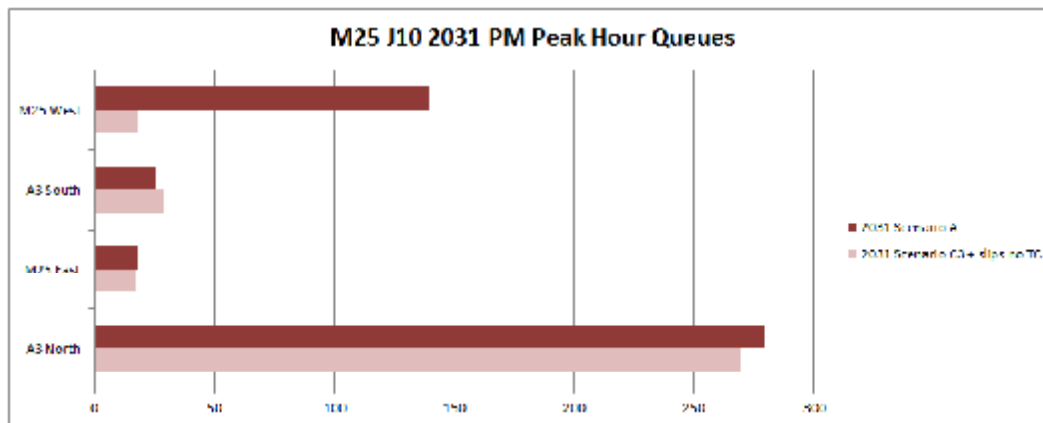
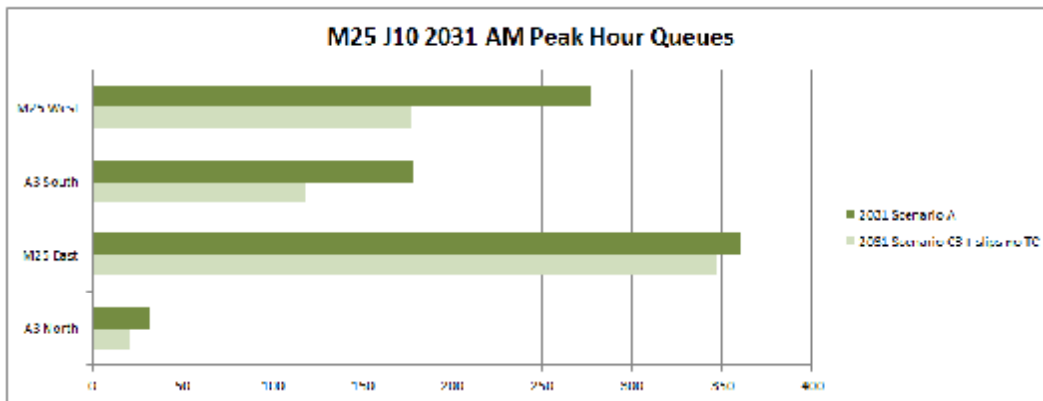
8.36 In summary there is land available for construction of the slip roads, they form a key part of the local authority's plan for growth, there is no impediment to them being constructed to a standard that is on balance justifiable, they provide beneficial relief on the SRN and local roads and have been identified as being funded by Appellant contributions at no cost to the public purse. They are the preferred solution of the Appellant for mitigating the impacts on the SRN, but as previously mentioned, otherwise alternative interventions may be brought forward if necessary.

M25 Junction 10 and slip roads (No RIS Scheme)

8.37 The scheme Drawing 0934/SK/051 Rev C for this mitigation is in Appendix S of my Evidence. A small scale version is inset below.



- 8.38 It shows that the proposal comprises:
- Widening of the circulating carriageway under the A3 bridges to provide 3 lanes each 3.95m wide on the northern section and 4 lanes each 3.75m wide on the southern section;
 - Widening of the westbound M25 off slip approach to 4 lanes and longer slip road flare to improve flow;
 - Widening of the southbound A3 off slip approach to 3 lanes each 4m wide to improve flow and capacity;
 - Enhancement of the eastbound M25 off slip approach flare to improve flow;
 - Retention of the existing NMU routes.
- 8.39 Discussions with HE have determined that their preference would be for 3.95m wide lanes on the southern section also, with a reduction in the northern verge. This would assist should it ever occur that 4 HGVs are circulating the roundabout line abreast.
- 8.40 The effects of the mitigation are to maintain or improve the overall operational capacity of the junction compared with conditions without the development in the design year of 2031. The queue length diagrams and tables below illustrate the AM and PM situation without the development and mitigation (Scenario A) and with the development and mitigation (Scenario C3). These are from the operational assessments carried out using the traffic signal analysis software LINSIG and have been assessed and accepted by HE.



M25 J10 Existing Arrangement
2031 Scenario A

	AM		PM	
	DoS%	Q	DoS%	Q
A3 North	101.4%	32	164.7%	280
M25 East	167.5%	361	92.1%	18
A3 South	121.5%	179	97.2%	26
M25 West	150.0%	277	116.2%	140
PRC		-86.10%	PRC	-83.00%

M25 J10 Proposed Arrangement
2031 Scenario C3 + slips no TC

	AM		PM	
	DoS%	Q	DoS%	Q
A3 North	100.7%	21	163.5%	269
M25 East	164.7%	347	91.7%	17
A3 South	112.8%	119	98.7%	29
M25 West	125.5%	177	92.4%	18
PRC		-83.00%	PRC	-81.70%

(Source: WSP LINSIG assessment of M25 J10 based on factored ¹⁹flows)

- 8.41 The results above show that the mitigation results in a significant net improvement to capacity of the junction on all approaches to the junction. This in turn is likely to bring about safety benefits to the SRN as there is a general reduction in queuing in all directions in both AM and PM peak periods. This is particularly the case in the AM peak period on the A3 south (northbound) where the queue length is reduced by 60 pcus²⁰. (345m) and in the PM peak period on the M25 west (eastbound) where the queue length is reduced by 122 pcus (701m).
- 8.42 The current tailbacks from the roundabout at M25 junction10 result in stop-start conditions on the A3 and M25 mainlines, particularly on the A3 south (northbound) and M25 west (eastbound). Within these zones of stop/start conditions, many PIAs occur as tail-end shunts. Reducing the extent of that queuing will also reduce the occurrence of these types of accidents, which have a disproportionate effect on the free-flow of traffic and the costs to the wider community of delays.
- 8.43 I therefore consider these to be significant contributions towards improving the safety of the SRN, in the context that the area around the M25 junction 10/A3 Wisley is described by HE in its RIS scheme Consultation Brochure (**CD Ref. 13.41**) as having the highest collision rate across the HE network.

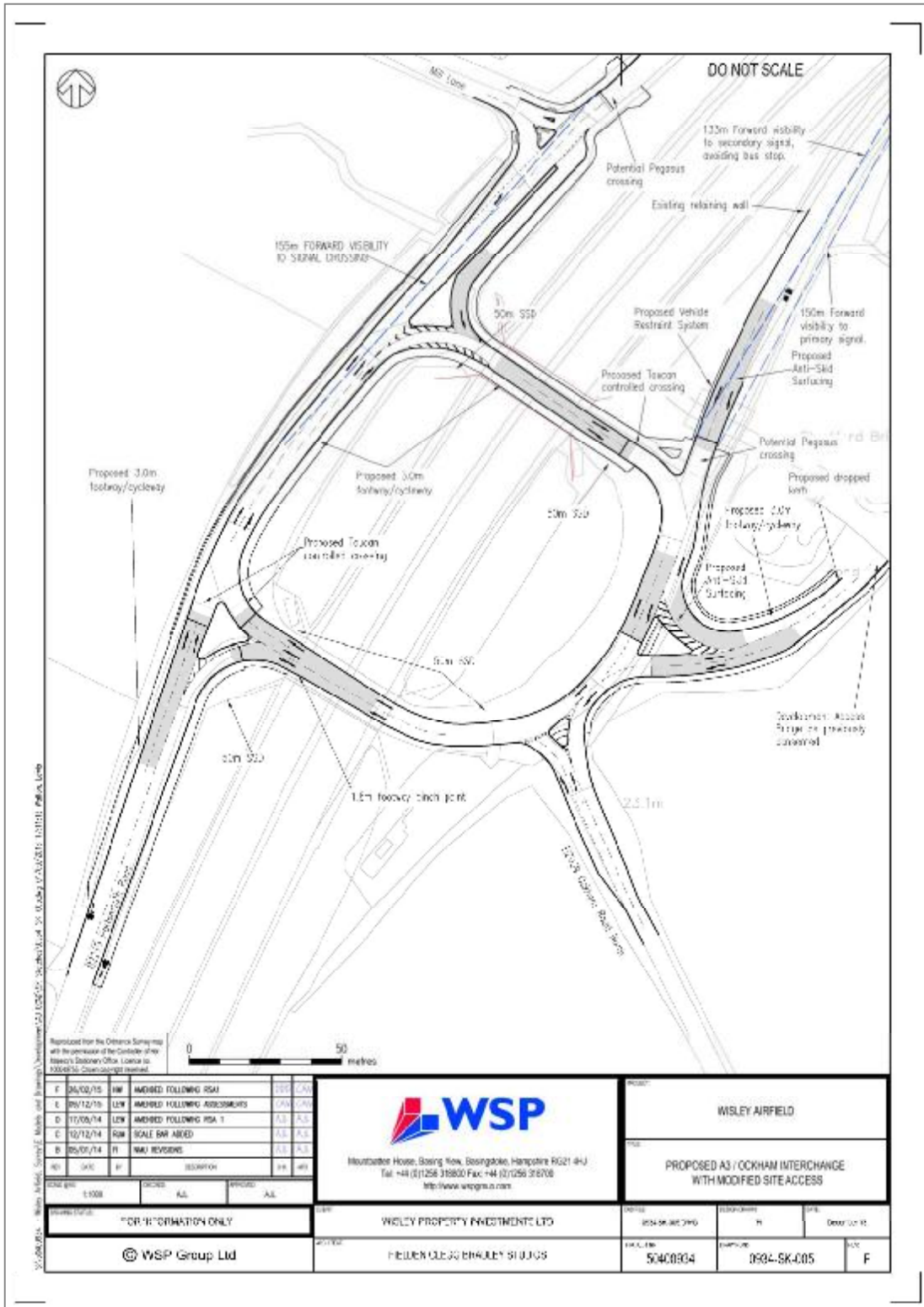
A3 Ockham Interchange and slip roads (No RIS Scheme)

- 8.44 The scheme Drawing 0934/SK/005 Rev F for this mitigation is in Appendix T of my Evidence. A small scale version is inset below. This is the Amended Plan for this junction as accepted by the Inspector at the Pre Inquiry Meeting. It differs from the original application plan Drawing 0934/SK/005 Rev B in respect of safety improvements, including as follows:-
- Rationalisation of circulatory lane markings;
 - Improved layout at the junction of Mill Lane with the northbound A3 on slip;
 - addition of areas of high-friction surfacing;
 - clarification of the defined routes for NMUs; and
 - reduction in number lanes on the A3 southbound off-slip approach from 3 to 2.
- 8.45 It shows that the proposal comprises:
- Signalisation of the southbound off slip approach;
 - Signalisation of the new site access;
 - Signalisation of the B2215 Portsmouth Road northbound approach;

¹⁹ Factored flows – Flows factored in line with ANPR survey data for M25 J10 supplied by HE, taking account of the highest hour of flow within the 3 hour peak period.

²⁰ Pcus = passenger car units, each pcu is estimated to take 5.75m in a queue

- Incorporation of enhanced NMU controlled crossing points within these signalised junctions; and
- Safety improvements as a result of a Road Safety Audit by SCC.



- 8.46 The effects of the mitigation are to allow the primary site access and associated traffic to be incorporated into the junction without compromising the operational capacity or safety of the junction. In particular the safety of the southbound off slip is considered to be improved as the introduction of traffic signals will increase the conspicuousness of the junction and the need to stop when required. At present there is potential for drivers to overshoot the give way markings as there is limited visibility to the right, which makes it difficult to appreciate the nature of the junction ahead. I would expect that the safety of the junction would improve as a result of these improvements compared with the “do minimum” situation ie no Appeal proposal and no improvements to the junction.
- 8.47 The layout of this junction has been accepted by SCC in their email dated 09/06/2017, which I include in Appendix U to my Evidence.
- 8.48 The capacity tests of the junction shown in the table below show that the proposed part-signalised junction remains within capacity for the Scenario C3 flows. The bold figures in amber and red in the table of results for the existing priority roundabout indicate approaches to the junction that are respectively approaching and exceeding the capacity of the junction. It can be seen that conditions are likely to be much more stable with the proposed signal control, particularly on the A3 southbound approach.

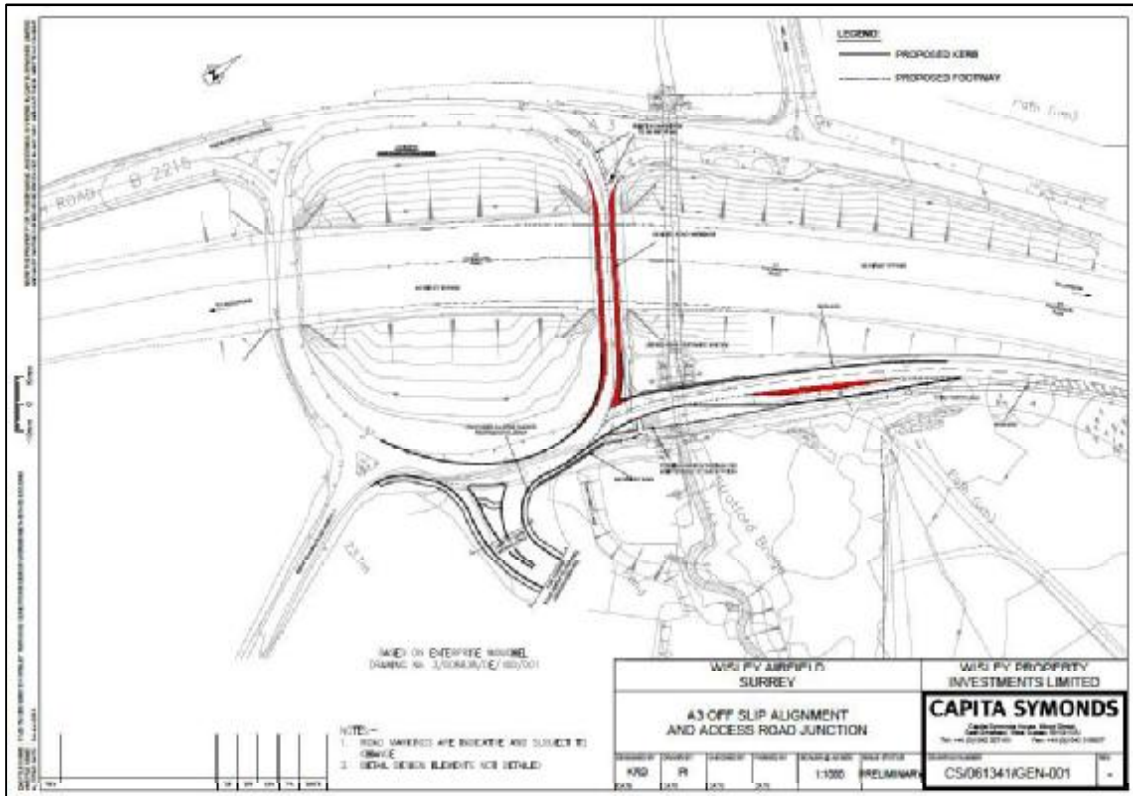
Existing Priority Gyratory						
Scenario A	AM			PM		
	Delay	RFC	Q	Delay	RFC	Q
A3	5.97	0.671	2	98.93	1.042	54
Ockham Road	40.02	0.886	7	10.59	0.45	1
Portsmouth Road	4.06	0.512	1	3.37	0.45	1
Proposed Amendments (Part Signalised)						
Scenario C3	AM			PM		
	Delay	DoS%	Q	Delay	DoS%	Q
A3	14.3	64.8%	9	24.6	79.0%	12
Site Access	23.3	67.3%	7	24.7	34.6%	3
Ockham Road	2.3	41.5%	1	1.7	25.3%	1
Portsmouth Road	24.5	56.2%	5	16.7	51.3%	6
	PRC:	33.7%		PRC:	12.6%	

Notes RFC is ratio of flow to capacity - >0.85 indicates the junction is close to capacity
 PRC is percentage reserve capacity
 DoS% is degree of saturation - >0.9 indicates the junction is close to capacity
 Delays in seconds, queues in vehicles

Comparison with Access to Consented IVC Facility

- 8.49 As explained in the Evidence of Mr Collins, consent was previously granted to construct an In-Vessel Composting (IVC) facility on the site. This consent has been validated as

having been implemented although the facility and its access road have not been constructed in full. Nonetheless the consented access is very similar to the proposed access in terms of location and extent. The only material differences being that there are only minor works to the rest of the Ockham Roundabout and none of the arms of the junction are signalised. I show the consented access layout below.



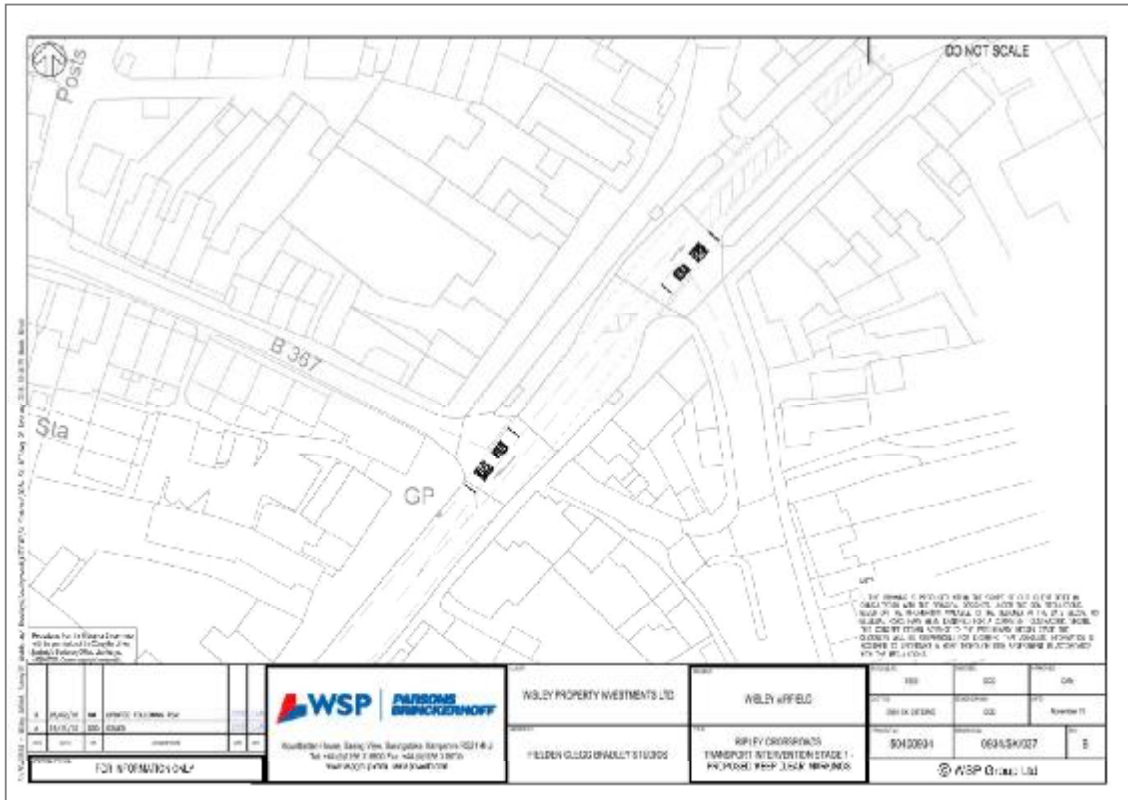
8.50 By comparison with Drawing 0934/SK/005 Rev F, it can be seen that the alignments of each access are very similar in part because there are various constraints on the alignment of the access road further to the northeast.

Points raised by HE consultation on the Amended Plan

8.51 HE raised a number of detailed technical points on the layout in Amended Plan. At a meeting held with HE shortly before submitting this Evidence, HE acknowledged that these were all technical points that could be dealt with through the detailed design process. Nonetheless WSP will investigate them and report the findings to the Inquiry.

Ripley

8.52 The critical location in Ripley is at the staggered priority junction between Newark Lane and Rose Lane with the B2215 Ripley High street. The existing layout is shown on the inset below.



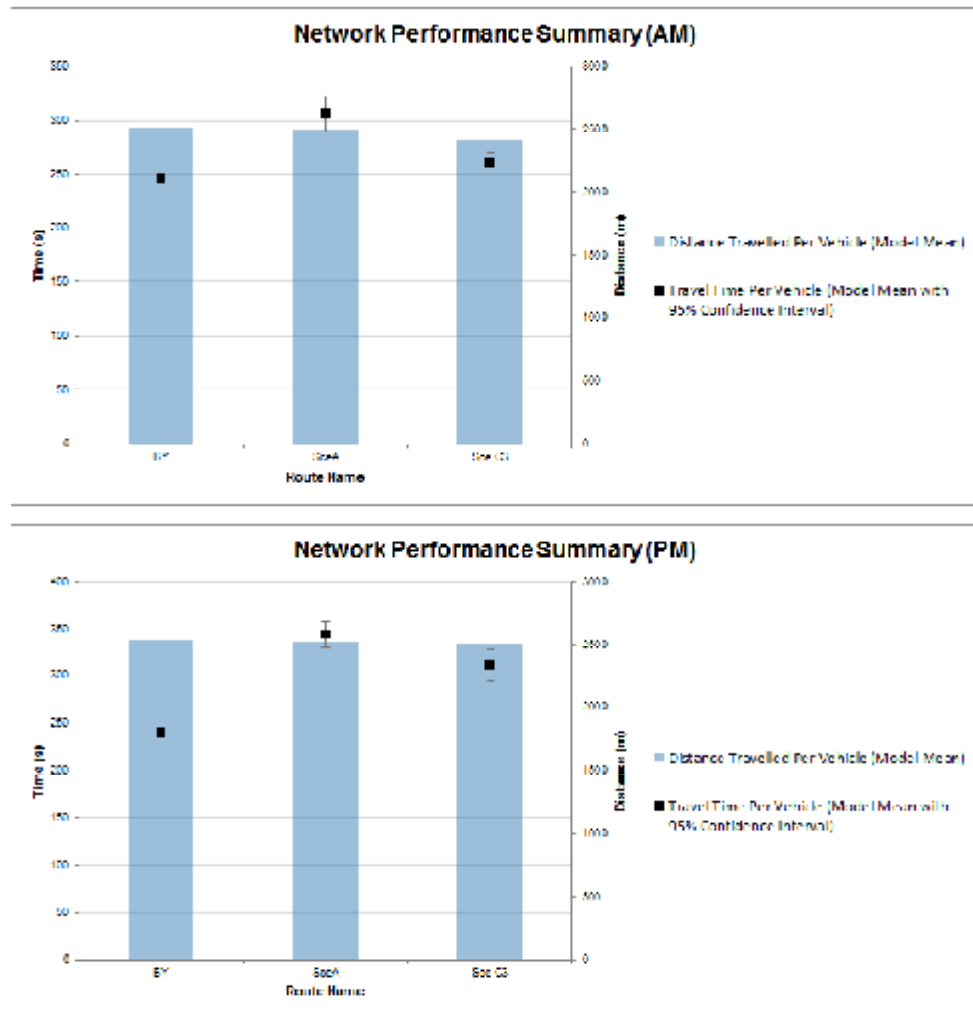
8.53 The Emerging GBLP scheme for introducing new north-facing slips at Burnt Common reduces traffic levels in Ripley significantly. WSP has carried out VISSIM²¹ microsimulation modelling of the effects of the scheme based on the output from SINTRAM with the slip roads in place. The results are shown in the table below, with the reduction in delays and improvement in conditions over the position without the scheme being significant.

²¹VISSIM – An industry standard and widely-used micro-simulation traffic modelling package, which allows the interaction between driver behaviour and highway layout to be modelled in detail over a specified period of time. The model is calibrated using existing conditions and then run a number of times with different arrival flow profiles and the averages of the resulting delays are calculated and reported.

	Base Year (AM)	Sc A (AM)	Sc C3 (AM)
Total Time Taken (s)	449130	586727	447134
Average Time (s)/Vehicle	246	306	260
Average Time (s) /Mile	158	197	173
Average Speed (mph)	23	18	21
	Base Year (PM)	Sc A (PM)	Sc C3 (PM)
Total Time Taken (s)	444204	681104	600882
Average Time (s)/Vehicle	240	344	312
Average Time (s) /Mile	153	219	200
Average Speed (mph)	24	16	18

(Source WSP: VISSIM microsimulation modelling)

- 8.54 Total time taken for all journeys through the junction reduces by 24% and 12% in the AM and PM peak hours respectively and journey times through the modelled area reduce from 306 secs to 260 secs in the AM peak hour and from 344 secs to 312 secs in the PM peak hour.
- 8.55 The graphs below show travel time per vehicle from the VISSIM model and assist in understanding that, especially in the AM peak hour, conditions in 2031 with the committed developments, traffic growth, Burnt Common slips and the Wisley New Sustainable Settlement will only be a slightly worse than existing conditions (i.e. in the Base Year, which in this case was based on 2013 traffic flows) but demonstrably better than conditions under 2031 Scenario A.

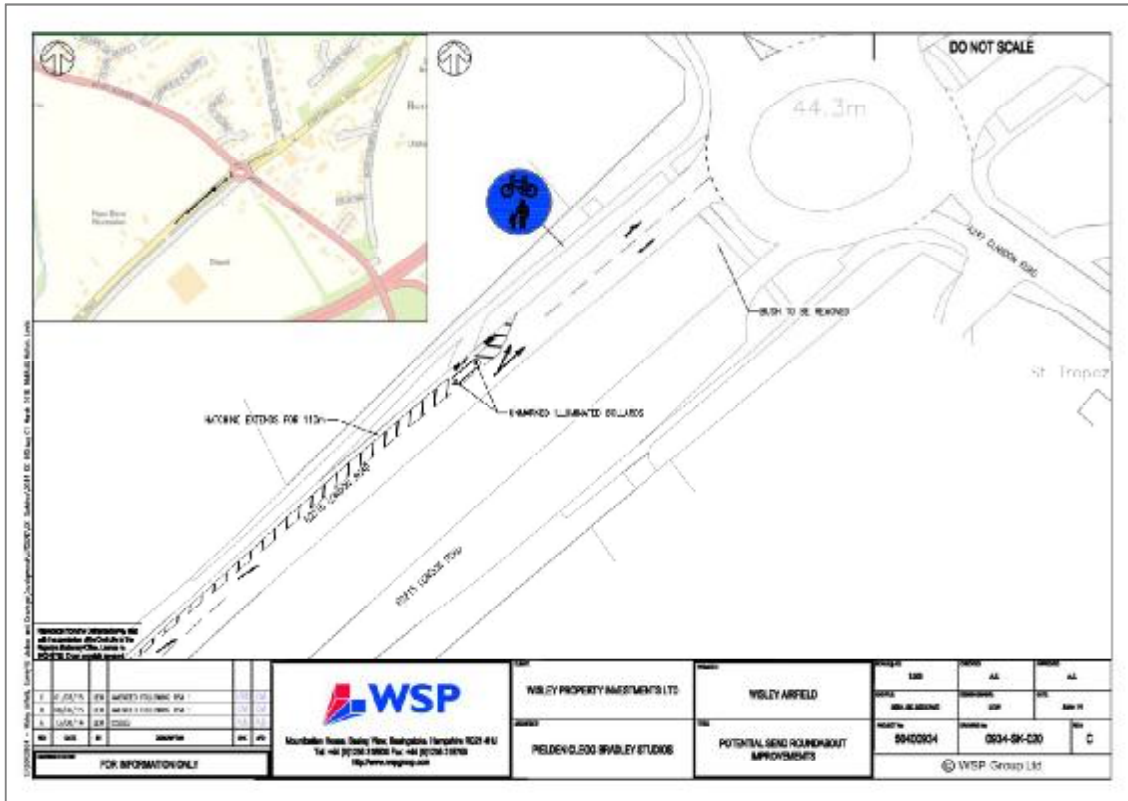


(Source WSP VISSIM microsimulation modelling)

- 8.56 As set out in the TAA, prior to the land becoming available for the Emerging GBLP scheme to provide slip roads at Burnt Common, WSP proposed an approach which incorporated a phased series of interventions, firstly to improve driver behaviour at the High Street junctions by introducing “Keep Clear” markings and secondly by considering restricting the amount of turning traffic at the Rose lane junction which would improve the free flow of traffic by reducing the number of conflicting turning movements.
- 8.57 SCC highways have themselves recently introduced the first stage of this proposed mitigation, being the “Keep Clear” markings at the junction.
- 8.58 Alternative solutions such as introducing traffic signals or mini-roundabouts have been discounted on traffic capacity and road safety grounds respectively.

Send Roundabout

8.59 The scheme Drawing 0934/SK/020 Rev C for this mitigation is in Appendix V of my Evidence. A small scale version is shown in the inset below.



8.60 It shows that the proposal comprises:

- Modifications to the layout of the northbound B2215 two lane approach to the A247 Send Barns Lane/Clandon Road roundabout whereby additional protection is provided for the existing on-carriageway cycle lane; and
- additional deflection is provided for vehicles on this approach with a view to reducing approach speeds.

8.61 The scheme has been subject to a Road Safety Audit and accepted by SCC in the email dated Thu 02/02/2017 which I include in Appendix W to my Evidence.

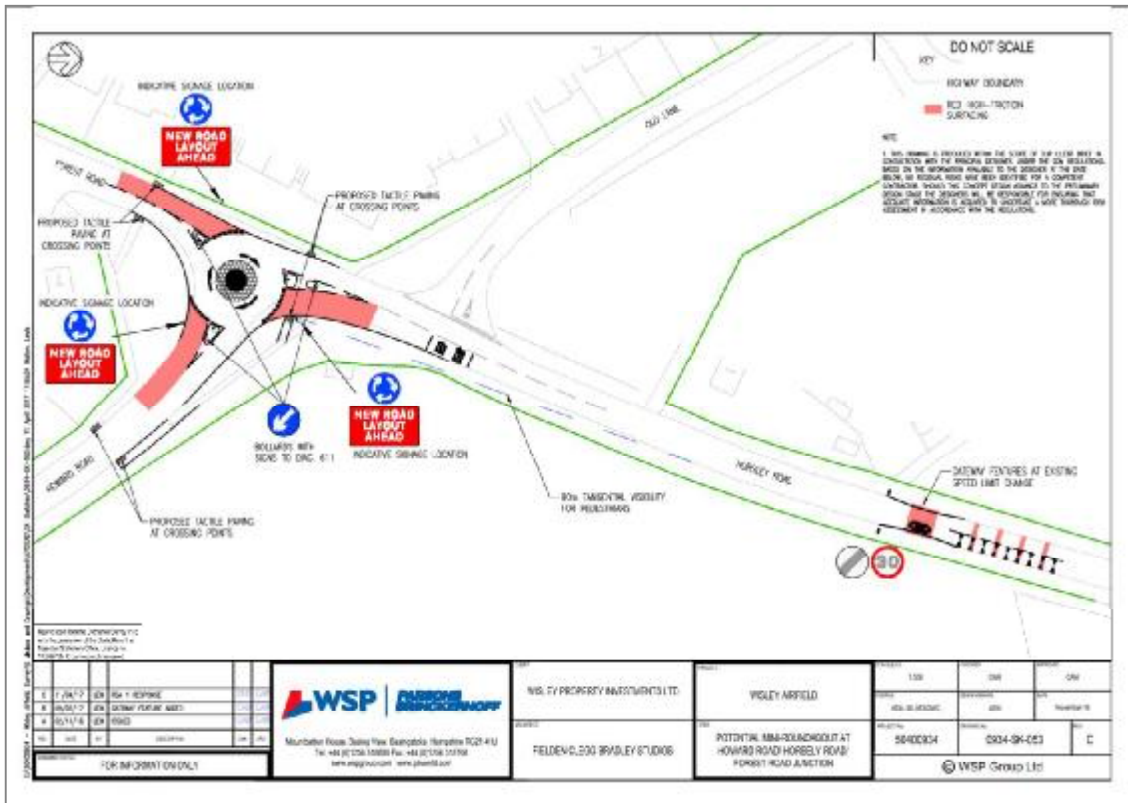
8.62 The capacity of the junction with these modifications has been reviewed and found to be acceptable, with the table below setting out the results.

Existing						
Scenario A	AM			PM		
	Delay	RFC	Q	Delay	RFC	Q
Portsmouth Road	6.67	0.518	1	7.55	0.565	1
Clandon Road	5.25	0.540	1	3.50	0.406	1
London Road	4.28	0.172	1	3.04	0.401	1
Send Barns Lane	6.78	0.572	1	7.26	0.602	2
Scenario C3						
Scenario C3	AM			PM		
	Delay	RFC	Q	Delay	RFC	Q
Portsmouth Road	3.47	0.307	1	5.78	0.449	1
Clandon Road	2.41	0.271	1	4.28	0.482	1
London Road	9.01	0.684	2	9.01	0.677	2
Send Barns Lane	3.47	0.426	1	9.33	0.657	2
Proposed						
Scenario C3	AM			PM		
	Delay	RFC	Q	Delay	RFC	Q
Portsmouth Road	0.39	0.311	1	5.79	0.455	1
Clandon Road	2.43	0.276	1	4.29	0.481	1
London Road	13.77	0.787	3	14.06	0.763	3
Send Barns Lane	3.55	0.429	1	9.47	0.666	2

Notes RFC is ratio of flow to capacity - >0.85 indicates the junction is close to capacity
Delays in seconds, queues in vehicles

Effingham Junction Crossroads

8.63 The scheme Drawing 0934/SK/053 Rev C for this mitigation is in Appendix X of my Evidence. A small scale version is shown in the inset below.



- 8.64 It shows that the proposal comprises:
- Introduction of a mini-roundabout at the junction of Forest Road/Howard Road/Horsley Road; and
 - Introduction of a gateway feature including roadside features and road markings on the southbound Horsley Road approach with a view to reducing approach speeds.
- 8.65 The scheme has been subject to a Road Safety Audit and accepted by SCC in their email dated 02/02/2017 which I include in Appendix W to my Evidence.
- 8.66 In the TAA, analysis of the junction based on the outputs of the SINTRAM model at that time revealed that it was unlikely that this junction would require mitigation. However, officers at GBC and SCC maintain that the queuing situation, on Forest Road particularly, was underestimated by both the surveys undertaken and the detailed modelling carried out that was based on them.
- 8.67 It was also evident that the residential development proposals at Howard of Effingham school required mitigation of this junction based on the Transport Assessment of that development, which it is noted was not based on output from the SINTRAM model. The Howard of Effingham school development is pending an S78 appeal decision at the time of writing this evidence.
- 8.68 The scheme in WSP Drg 0934/SK/053 Rev C is based on the design of the mitigation associated with the Howard of Effingham school development and it is agreed with SCC

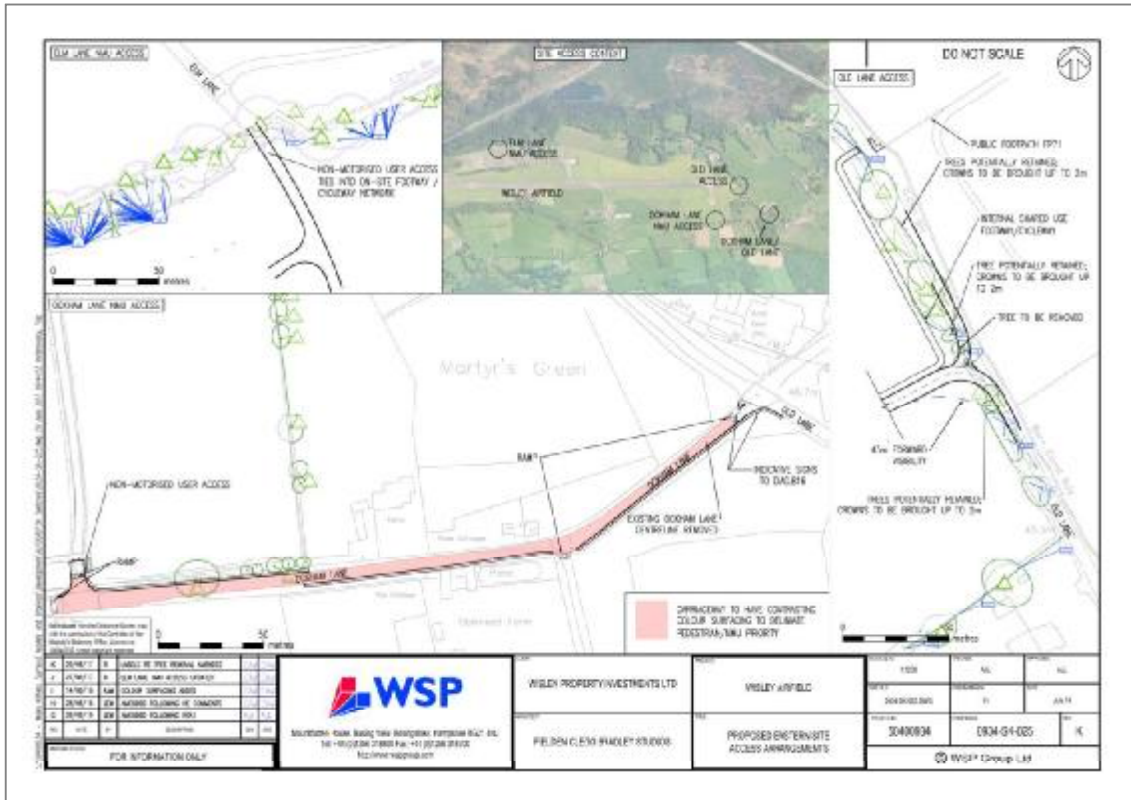
and GBC that whichever development gains consent should implement the improvement. That similar layout was agreed between the appellant and SCC in the Howard of Effingham appeal.

8.69 The capacity of the junction with these modifications has been reviewed and found to be acceptable as the table of results below demonstrates. The figures in amber and red in the table indicate approaches to the junction that are respectively approaching and exceeding the capacity of the junction.

Existing						
Scenario A	AM			PM		
	Delay	RFC	Q	Delay	RFC	Q
Horsley Road (N)	5.88	0.061	1	4.44	0.039	1
Howard Road	48.26	0.859	6	15.35	0.565	2
Forest Road	6.96	0.318	1	8.66	0.252	1
Old Lane	22.05	0.503	1	18.88	0.515	1
Existing						
Scenario C3	AM			PM		
	Delay	RFC	Q	Delay	RFC	Q
Horsley Road (N)	5.66	0.06	1	4.48	0.04	1
Howard Road	45.57	0.853	6	21.82	0.688	3
Forest Road	7.36	0.332	1	8.88	0.25	1
Old Lane	20.14	0.465	1	19.21	0.524	2
Proposed T Junction + Mini Roundabout						
Scenario A	AM			PM		
	Delay	RFC	Q	Delay	RFC	Q
Internal Link (NB)	-	-	-	-	-	-
Old Lane	22.25	0.505	1	19.59	0.524	2
Horsley Road	5.54	0.055	1	4.24	0.036	1
Internal Link (SB)	10.45	0.556	2	32.56	0.858	6
Howard Road	14.96	0.682	3	10.02	0.509	1
Forest Road	23.32	0.751	3	6.78	0.286	1
Proposed T Junction + Mini Roundabout						
Scenario C3	AM			PM		
	Delay	RFC	Q	Delay	RFC	Q
Internal Link (NB)	-	-	-	-	-	-
Old Lane	20.16	0.465	1	19.89	0.533	1
Horsley Road	5.29	0.054	1	4.28	0.036	1
Internal Link (SB)	11.19	0.583	2	34.603	0.867	6
Howard Road	13.77	0.663	2	14.383	0.658	2
Forest Road	18.96	0.692	3	7.079	0.276	1

Old Lane site access

8.70 The scheme Drawing 0934/SK/025 Rev K for this mitigation is in Appendix Y of my Evidence. A small scale version is shown as an inset below. This is the Amended Plan for this access as accepted by the Inspector at the Pre Inquiry Meeting. It differs from the original application plan Drawing 0934/SK/025 Rev E in respect of safety improvements, to change the priorities of each arm of the junction so that the northern Old Lane arm becomes the minor arm.



8.71 This junction arrangement was been modified to respond to road safety audit comments by SCC about the balance of flows and the priority of each arm changed as a result. The layout will have the effect of reducing traffic speeds along Old Lane and on exiting the development spine road, whilst still maintaining the ability for all likely vehicles to access the site. The capacity of the junction is sufficient for the traffic flows predicted to use it as is shown in the table below. The layout has been accepted by SCC in their email dated 09/06/2017 which I include in Appendix U to my Evidence.

Proposed T-junction						
Scenario C3	AM			PM		
	Delay	RFC	Q	Delay	RFC	Q
Site Access	-	-	-	-	-	-
Old Lane (N)	0	0	0	0	0	0
Old Lane (S)	0	0	0	5.608	0.002	0

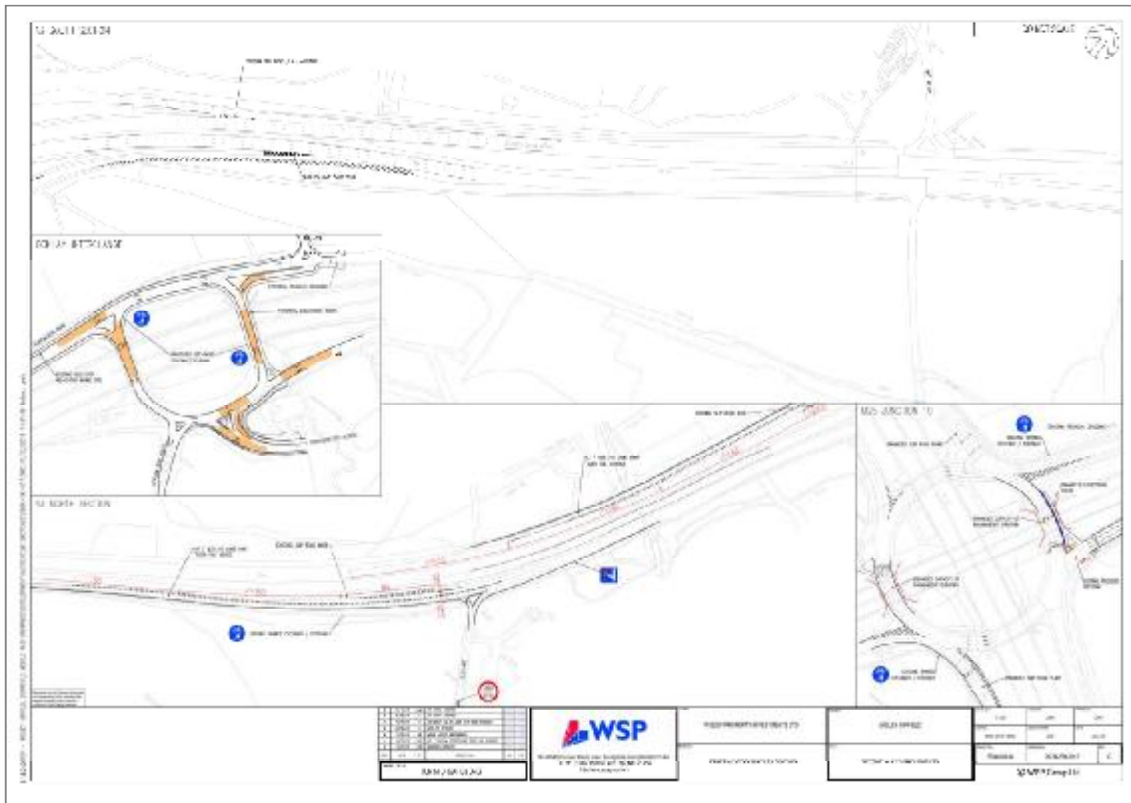
Notes RFC is ratio of flow to capacity - >0.85 indicates the junction is close to capacity
 Delays in seconds, queues in vehicles

8.72 Drawing 0934/SK/025 Rev K also shows the arrangement for the eastern end of Ockham Lane, where a short length of the road acts as a link between the site and an existing Public Right of Way east of Oakmead Farm. To emphasise the change in character of this stretch of the road, it is proposed for it to be resurfaced in a contrasting material and the centre-line marking is to be removed which also emphasises the change in character.

8.73 This safety measure will improve the accessibility of Footpath 27 both to the proposed development at Wisley Airfield, but also to the Black Swan public house, so making a net contribution to the integrity of the local PRow network and improving the facilities for and experience of NMUs compared with a “Without Wisley” scenario.

Old Lane/A3

8.74 The scheme Drawing 0934/SK/017 Rev Q for this mitigation is in Appendix Z of my Evidence. A small scale version is shown in the inset below.



- 8.75 It shows that the proposal comprises:
- Introduction of a tiger tail merge onto the A3 mainline from the M25 Junction roundabout, in order to channel traffic on the slip road into two separate streams of traffic before the Old Lane Junction.
 - The southbound restriction of traffic beyond the Pond car park, meaning that traffic turning left at the junction is much reduced. This restriction would be enabled by a traffic regulation order, traffic regulatory signs with supporting physical measures and would allow vehicles to be turned around in the Pond car park if they entered Old Lane from the A3 erroneously.
- 8.76 The effect of the mitigation is to reduce the quantity of traffic that drivers emerging from Old Lane need to consider giving way to, which in turn increases the capacity of the junction.
- 8.77 The capacity of the junction has been tested using standard junction assessment software and the results are shown in the table below. Even with the increase in traffic emerging from the access as a result of the Wisley Airfield development, the junction provides adequate capacity.

Existing						
Scenario A	AM			PM		
	Delay	RFC	Q	Delay	RFC	Q
Old Lane	19.025	0.341	1	9.459	0.198	1
A3	-	-	-	-	-	-
Proposed						
Scenario C3	AM			PM		
	Delay	RFC	Q	Delay	RFC	Q
Old Lane	17.775	0.549	2	9.658	0.212	1
A3	-	-	-	-	-	-

Notes RFC is ratio of flow to capacity - >0.85 indicates the junction is close to capacity
Delays in seconds, queues in vehicles

8.78 This is a junction between the County and Strategic highway networks. As such both SCC and HE have been engaged in the discussion relating to the proposed improvement. Both Authorities are content that it meets their requirements.

8.79 It is not clear what the implications for this junction improvement are when the RIS scheme for M25 Junction 10 come forward as the choice of junction will depend on the detail of the scheme chosen. However, only the rejected Option 16 made no specific provision for this existing junction and it is therefore considered that the preferred scheme option will include a connection to Old Lane.

8.80 Should the final RIS scheme solution be advanced before these mitigation works are carried out, and if that makes the Appellant’s proposal here superfluous, then only the works proposed to enable the southbound restriction on Old Lane south of the Pond car park would be carried out.

Elm Corner

8.81 In the original planning application, it was proposed that the existing junction of the A3 with Elm Corner be closed to vehicular traffic and the existing properties be served via a new link through the Wisley Airfield site. A pedestrian and cycling link would be maintained to the existing bridge across the A3 at this location from the existing bridleway and footpath network, as well as from the Wisley Airfield site.

8.82 However, in subsequent discussions, HE advised that it would be content if the access remained open.

8.83 Therefore the current position is that the Elm Lane access would be retained unless and until any intervention detailed in a confirmed RIS scheme option is brought forward. However access to the development site would only be for NMUs

9 Public transport

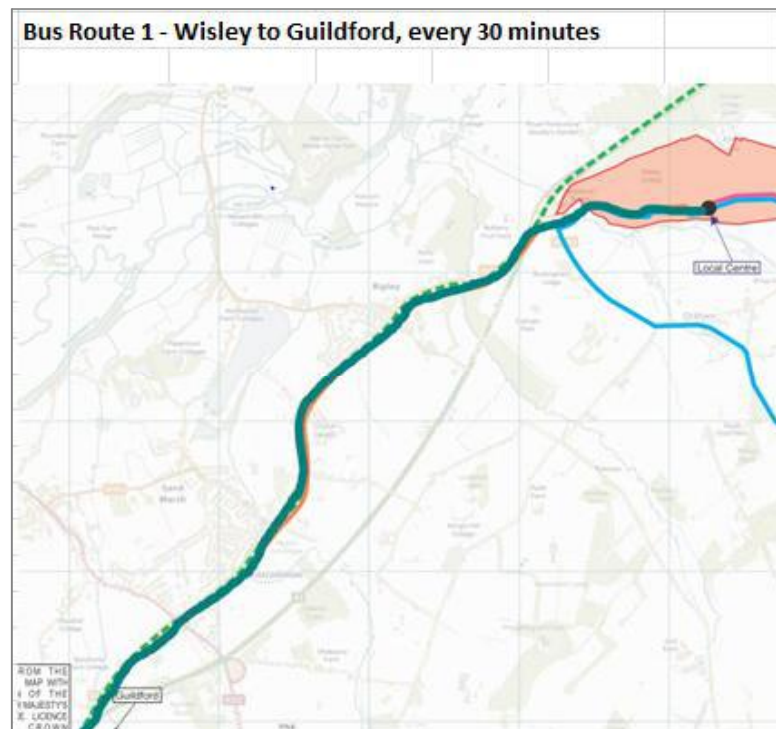
Background

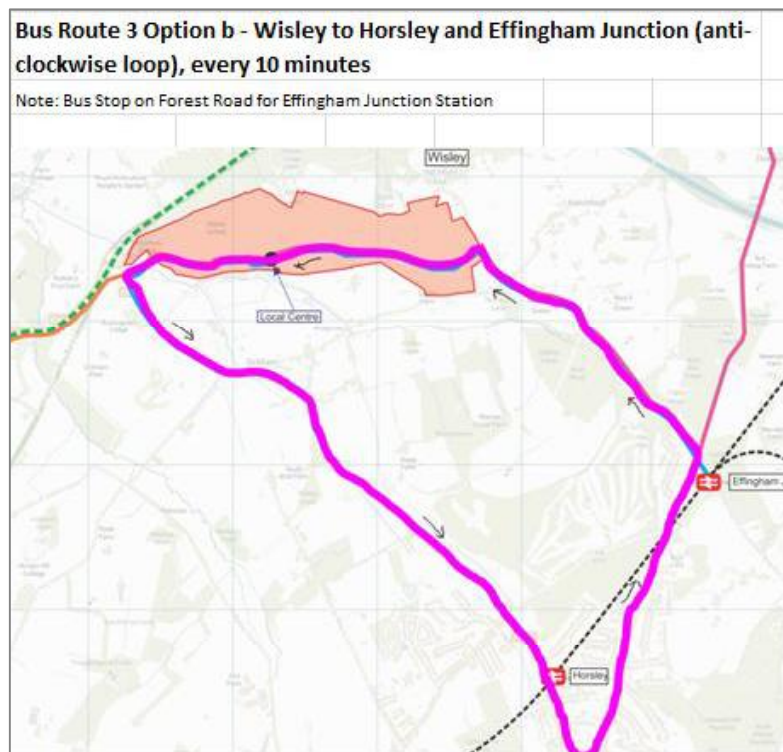
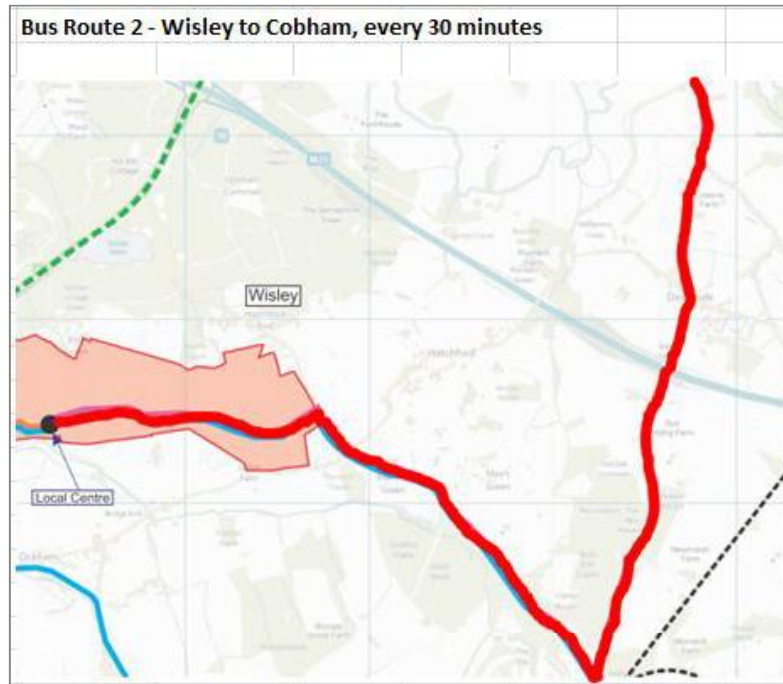
9.1 The public transport proposals have evolved in three broad stages.

- The proposals as set out in the TA were based on a diversion of the existing Guildford to Kingston on Thames service 515 (now the 715), an extension of the existing Guildford/ Ripley/Woking service 462/463 and a new service connecting the site to Guildford and Effingham Junction;
- The proposals as set out in the TAA followed on from discussions with the operator of the 515 and the public transport officers at SCC, who recommended not relying on the 515 or 462/463 but providing a wholly new standalone service connecting the site with Guildford and Cobham via Effingham Junction. This was translated into a minimum service level for the Appellant to guarantee as part of the S106 funding for bus services. As well as setting out a calculation for the cost of the minimum service level, the TAA also costed a service based on a number of enhancements that were aimed at increasing patronage from the predicted 5.9% of residents on the site to 9%. The TAA set out a commitment by the Applicant to fund the services for 10 years beyond the full build out of the site;
- The current proposals are based on the discussions held subsequently to submission of the TAA and have responded to the SCC officers desire to have a guaranteed level of funding “in perpetuity” to support the minimum service level. This mechanism is set out in brief in the following chapter of My Evidence and in more detail in Mr Collins's Evidence.

Proposed Services

9.2 The routes to be followed by the bus services are shown in the diagrams below.





9.3 The final detail of the routes and stops will be submitted to and agreed with GBC and SCC in accordance with the S.106 Agreement. In summary they comprise:

- A new service to Guildford twice an hour Monday to Saturday from 0600 to 2300 hrs;
- A new service to Effingham Junction Station and/or Horsley Station five times an hour Monday to Saturday from 0600 to 2300 hrs; and

- A new service to Cobham twice an hour Monday to Saturday from 0600 to 2300 hrs.

9.4 Draft AM peak period timetables for the services are given in the tables below. Our working assumption is that the services connect to the existing bus stops that are located within 200m walk (2.5mins) of the stations rather than enter the station forecourts, which present existing vehicle accessibility challenges.

Draft Timetable for Route to Cobham

Wisley (Local Centre)	07:00	07:30	08:00	08:30
Cobham	07:11	07:41	08:11	08:41
Cobham	07:15	07:45	08:15	08:45
Wisley (Local Centre)	07:26	07:56	08:26	08:56

Draft Timetable for Route to Guildford

Wisley (Local Centre)	07:00	07:30	08:00	08:30	09:00	09:30
Guildford	07:26	07:56	08:26	08:56	09:26	09:56
Guildford	07:30	08:00	08:30	09:00	09:30	10:00
Wisley (Local Centre)	07:56	08:26	08:56	09:26	09:56	10:26

Draft Timetable for Route to Stations

Wisley (Local Centre)	07:00	07:12	07:24	07:36	07:48	08:00
Horsley Station	07:11	07:23	07:35	07:47	07:59	08:11
Effingham Jn (Forest Road)	07:16	07:28	07:40	07:52	08:04	08:16
Wisley (Local Centre)	07:24	07:36	07:48	08:00	08:12	08:24
Wisley (Local Centre)	08:12	08:24	08:36	08:48	09:00	09:12
Horsley Station	08:23	08:35	08:47	08:59	09:11	09:23
Effingham Jn (Forest Road)	08:28	08:40	08:52	09:04	09:16	09:28
Wisley (Local Centre)	08:36	08:48	09:00	09:12	09:24	09:36

Potential Bus Facility at East Horsley

9.5 The Appellant has advanced a bus turnaround and public realm improvement scheme contained within Adopted Highway for Station Parade, East Horsley, which could be implemented if required. Provision is proposed to be made within the S.106 Agreement to that effect. The potential scheme is shown in Appendix AA of my Evidence and a small scale version is included as an inset below. A consultation carried out by the Appellant with local traders found that there was general support for this facility and SCC officers also generally support it. The consultation results are also shown in Appendix AA along with the other layout option consulted on.



Evidence of viability

- 9.6 It has been calculated that a timetable that dovetails these routes together requires 5 vehicles and this is the basis of the costing calculations carried forward into the arrangements for the funding of services.
- 9.7 An enhanced service increasing the frequency of the Guildford service to 3 per hour and the service to the stations to 7 per hour, as set out in the TAA, would require 6 or 7 vehicles. The calculations for this enhanced service have been based on 7 buses.
- 9.8 The costing calculations also assume patronage from a number of sources, not only the residential component of the Wisley Airfield development as set out below:
 - 5.9% of Wisley Airfield residents
 - 2% of the existing community through which the bus routes pass, including Ripley, and Send, (excluding the Horsleys, Cobham and Guildford);
 - 7% of the new employment zone (taken to be up to 300 FTE employees although many more are expected to be employed on the site.) and
 - 34% of Secondary School trips external to the site.
- 9.9 The mode share of Wisley Airfield residents (agreed in the SCC Consultation response dated 15 March 2016) is in turn based on a number of assumptions.

- 9.10 Further to the bus mode share estimates made in the TA²², which were based on the 2001 census data, a review of 2011 Census Data was conducted. Below are tables which show the change in distribution of trips to London (by Rail) and to Guildford.

Potential Bus Mode Share from Main Destinations (2001 Census Data)

Destination	Catchment	Bus Mode Share for the New Service	Overall Bus Mode Share for the New Service
London (Rail)	9.4%	33.3%	3.1%
Guildford	49.0%	3.75%	1.8%
Total			4.9%

Potential Bus Mode Share from Main Destinations (2011 Census Data)

Destination	Catchment	Bus Mode Share for the New Service	Overall Bus Mode Share for the New Service
London (Rail)	14.5%	33.3%	4.8%
Guildford	29.4%	3.75%	1.1%
Total			5.9%

- 9.11 It has been assumed that the main station for access to London would be Effingham Junction and that a third (33.3%) of Wisley Airfield residents would choose the frequent and direct bus service to access the Station, as set out in paragraph 6.2.2 of the TA.
- 9.12 The mode share for journeys to Guildford by bus at full development has been assumed to be 3.75%. This is considered to be a reasonable projection based on the 2011 census indicating that local bus mode share is 3% in the context of an hourly service. In the development scenario Guildford would be served by 2 buses an hour provided by the new service.
- 9.13 The data above indicates that the latest Census data (from 2011) makes a case for the bus mode share for the new service being higher than the 5% assumed in the TA.
- 9.14 The assumptions set out above have been made following dialogue with SCC officers, and, a number of stress tests have been applied to the figures to establish their elasticity to worse than predicted outcomes and variations in fare levels should lower fares be required to encourage patronage.

²² TA Section 7.2 Public Transport Strategy, paragraphs 7.2.14 to 7.2.20

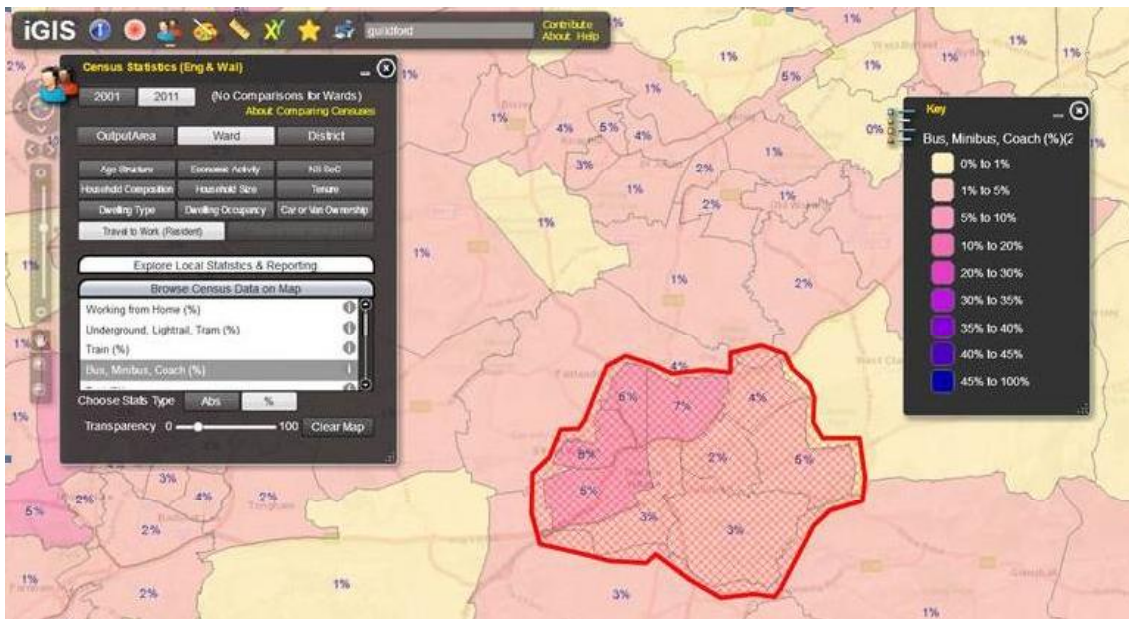
9.15 I have produced the following summary table of variations on the bus viability model for delivery of the agreed service level requiring 5 buses. The full results are given in Appendix BB.

9.16 The summary table also includes the scenario for the enhanced service assuming a fare of £2.70 and 7 buses but without any increase in patronage. This is considered to be a robust approach to understanding the additional cost of the enhanced service.

Scenario (agreed service level requiring 5 buses)	Average single fare £	Inclusion of school revenue	Wisley Airfield mode share	Existing Community Mode Share	Annual Subsidy in Year 12 £
Base £2.60 fare	2.60	100%	5.9%	2%	20,338
Base £2.70 fare	2.70	100%	5.9%	2%	3,449 profit
A	1.50	100%	5.9%	2%	281,995
B	2.60	0	4%	1%	292,168
C	2.50	50%	4%	1%	277,254
D	1.80	50%	5.9%	1%	284,326
E	2.30	0	4.7%	1%	290,865
Enhanced 7buses	2.7	100%	5.9%	2%	276,551

9.17 A reasonable “basket” of combined effects has been taken account of in Scenarios A to E. All result in an ongoing subsidy broadly equivalent to the marginal anticipated cost of an enhanced 7 bus service over the 5 bus service level agreement at 2,000 units (year 12) with a 5.9% mode share. I would offer the following additional comments:

- A single fare of £2.70 (less than half the cost of the daily peak parking charge (£6.50) at Effingham Junction or Horsley station car parks) produces a profit in year 12 in the Base Scenario;
- An increase in service frequency is likely to encourage more patronage with a likely increase in revenue and reduction in subsidy;
- In perpetuity funding is proposed equivalent to the anticipated additional cost of provision of the enhanced service over the minimum service level at year 12 / 2,000 dwelling (£276,551) using the same assumptions (other than number of buses). This will provide resilience funding against potential variances, as explored through the sensitivity testing above. See paragraph 8.18 and 8.19 below.
- WSP's public transport specialists have direct experience in Surrey and many other similar exercises across the UK, have no reason to suspect the Base Scenario assumptions should be any different to those adopted. The scenarios tested are therefore extremely conservative.
- It is highly unlikely that all of the potential variations on the Base Scenario would take place simultaneously;
- We have included variations on the contribution that school patronage makes to revenue, but consider that the revenue is highly unlikely to be zero.
- The 2011 census average journey to work data for bus use in Urban Guildford (at the ward level) is an average of 4.7% with a range from 2% to 8%. I test this census average in Scenario E. The diagram below shows the variation of 2011 census data in Urban Guildford.



Funding and management

- 9.18 It is proposed that the bus services will be managed under the auspices of a community trust. The Appellant has proposed a structure for delivery of this trust, called the Wisley Airfield Community Trust (or WACT). The WACT is discussed in more detail in Mr Collins' proof of evidence. It is based on initial discussions with SCC officers as set out in the email from SCC dated 02/02/2017 in Appendix W of my Evidence. The WACT would provide for the management of the bus services and for the maintenance of and expenditure of the in-perpetuity fund set up, either to provide resilience against fluctuations in the assumptions made or to fund the enhanced 7 bus service provision set out above.
- 9.19 The bus patronage would be monitored under the general provisions of the Travel Plan for the site. Decisions on how the bus service is adapted if any of these variations becomes evident would be made through the Trustees of the proposed WACT, which would include a representative of SCC. This would all be provided for in the S.106 Agreement and is discussed more fully in Mr Collins' proof of evidence.

On site infrastructure

- 9.20 Bus stops will be provided within the development at key locations and at the optimal locations along the spine road for access by all residents and workers. The linear nature of the development, whereby every dwelling is within approximately 200m of the spine road, means an efficient route can be achieved through the site with the minimum of deviation required to ensure all residents are within an easy walking distance of a bus stop, normally taken to mean up to 400m (a 5 minute walk). The potential arrangement of

bus stops is shown in the DAS Addendum (**CD ref. 3.11**) at Section 3.4 Illustrative Public Transport and Cycle Connections and will be fully accessible by all potential users.

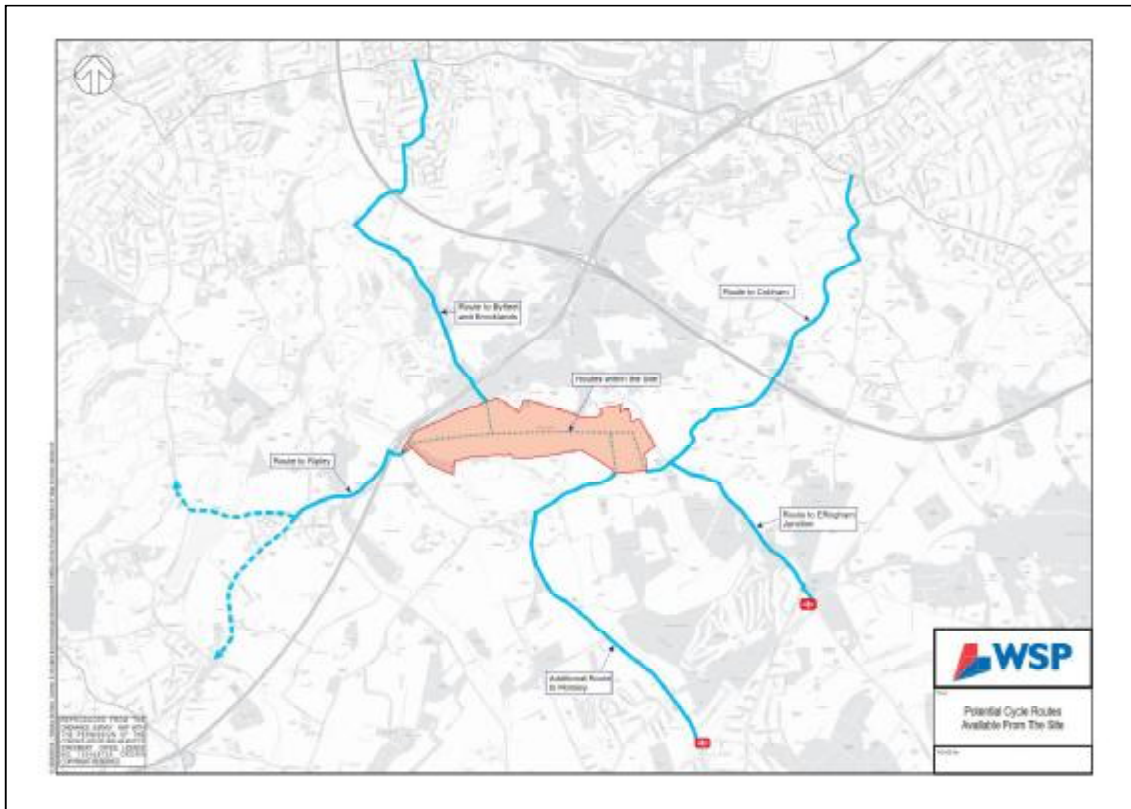
9.21 It is intended that the bus stop facilities will incorporate shelters that have seating and provision for real-time information on expected next bus arrivals, route timetables and maps, contact information and be highly accessible to all users.

9.22 In summary, the bus proposals have evolved in discussions with the authorities towards a package of self-contained bus services that are predicted to be self-financing by the full build out of the development.

10 Cycling

Background

- 10.1 The following part of my Evidence builds on and updates the assessment in the TAA on this subject. Where journey times are quoted they are based on a range of 12.5mph (20kph) and 19mph (30kph).
- 10.2 Paragraph 2.9 of TA 91/05 Provision For Non-Motorised Users, part of the Design Manual for Roads and Bridges, states:-
- “Nearly three quarters of all journeys are less than 5miles in length, distances that could easily be cycled by the majority of people.”*
- 10.3 The roads around the site are already popular with cyclists, especially recreational riders many of whom are attracted by the use made of some of the roads for the 2012 Olympic Road race competition. Use is particularly high during the weekends and Bank Holidays, when individuals and group rides are a common sight. Many of these riders make use of the local centres on route for refreshment, e.g. Ripley and Cobham.
- 10.4 Cycling is therefore well established on the roads surrounding the site, and having cycled them myself, I consider that drivers and cyclists are aware of each other and, where no facilities exist on the quieter roads, coexist well.
- 10.5 The TA contains a number of suggested improvements to existing conditions for cyclists. However SCC and GBC have been keen to understand the level of certainty that can be attached to the provision of routes serving the “compass point” connections to other local destination. These “compass points” are shown broadly in the diagram below and were:-
- A route south east to Effingham junction railway station;
 - A route west to Ripley and potentially on to Woking;
 - A route north west to Wisley and on to Byfleet and Brooklands; and
 - A route north, to Cobham.



Source TAA (CD ref. 3.14)

10.6 In addition SCC undertook consultation on a number of cycle route proposals as part of the Guildford Borough Cycling Plan, and suggested a number of routes in proximity to the site as part of that exercise, namely Old Lane and Ockham Road North, in addition to the proposed access road through the site. Whilst it is acknowledged that technical solutions are still to be identified by SCC for these routes, it is encouraging that the consultation took place, unprompted by the Appellant as part of the planning application process.

10.7 Extracts from the material reported to committee on the consultation and from the consultation itself, which is web-based, are given in Appendix G of my Evidence. It shows a commitment to providing significant infrastructure improvements for cyclists including:-

- a cycle path along Old Lane connecting the site and Effingham Junction station:
- cycle-friendly traffic management along Ockham Road North connecting the site, via Ockham, and Horsley.
- Controlled crossing upgrade for the bridge over the A3 at Elm Corner
- The cycle measures through the site are also included, permitting connections through to the existing facilities at Ockham Interchange and to the A3 bridge at Elm Corner.

10.8 I refer to Bikeability levels 1 to 3 in My Evidence. Bikeability is the current format for cycle training, replacing the Cycle Proficiency scheme. SCC provides training for cyclists from levels 1 to 3 and the suggested age ranges for each are as follows:-

- Level 1 – 9-10 years
- Level 2 – 10-11 years
- Level 3 – 12-14 years

10.9 SCC is keen to promote solutions for increasing cycling use by less confident users at any time of the day or time of year. However SCC itself has no policies relating to specific levels of cycling competence to be used in selecting or designing cycle routes although it suggests Level 2 of the national Bikeability scheme as mentioned in the Sustrans Design Manual “Handbook for cycle-friendly design” dated April 2014. Level 1 cyclists are beginners and Level 3 cyclists are capable of dealing with complex situations and of taking and defending the “primary” position on the highway i.e. central in the space normally occupied by a motorised vehicle.

10.10 Schemes in suburban or rural locations involve at least one of the following measures:

- reducing traffic speeds and traffic flows;
- providing segregation between cyclists and motorists;
- improving (or providing) street lighting.

10.11 Not all of these measures are applicable in every situation. The consultation that was carried out by SCC will be useful in determining the way forward on some of the links available to residents of the development. The Appellant is committed to working with SCC to ensure that the most appropriate solutions are employed and has held an ongoing dialogue with SCC to formulate the most appropriate solution in each case supported by an appropriate financial commitment.

10.12 Significant funding is proposed to be made available by the Appellant through planning obligations towards funding off site cycle measures. It is envisaged that they may comprise a mix of specific highway improvement schemes as and when opportunities arise alongside more holistic behavioural measures such as local speed awareness campaigns for drivers or a zoned reduction in speed limits on local roads around the site targeted at improving conditions for all cyclists.

10.13 A summary of the current position on each of the four routes suggested above is set out below. Firstly the on-site infrastructure for cyclists is set out.

On site cycle infrastructure

10.14 The onsite cycle infrastructure is shown in the DAS Addendum (**CD ref. 3.11**) at Section 3.4 Illustrative Public Transport and Cycle Connections. This infrastructure will be

designed and constructed as an integral part of the masterplan to encourage its use. It will take account of the existing points of connection to bridleways. Facilities will include cycle-friendly shared streets, dedicated crossing points and segregation from motorised traffic where possible. Covered and secure cycle storage or parking will be available at key locations such as the local centre, sports areas and schools as well as being included in residential units as required by GBC policy in line with SCC guidance.

A route south east to Effingham junction railway station

- 10.15 This route was included in the SCC consultation for the Guildford Cycling Plan. There are currently no specific measures for cyclists along Old Lane.
- 10.16 From the centre of the proposed development via Old Lane, this route is 2.5 miles long and would take circa 8-12 minutes depending on the speed of the cyclist. During the day it is a relatively comfortable route for Level 3 Bikeability riders. Level 2 riders may find it less comfortable because of the speeds of vehicles and the width of available carriageway but as there are few junctions and only one short uphill gradient, on the southbound approach to Effingham Junction it is a straightforward cycle ride in both directions. The absence of lighting means its use after dark is only likely to be by experienced riders such as regular commuters.
- 10.17 The route is considered to be short and direct enough for level 3 cyclists and experienced commuters to be able to use it at all times of the year to reach Effingham Junction station and Level 2 cyclists under most conditions. As set out elsewhere in my Evidence, a regular bus service would also be provided between the site and Effingham Junction and/or Horsley Station meaning a rail commuter who did not wish to cycle would not have to rely on the private car to achieve their journey.
- 10.18 As can be seen in Appendix G of the TAA (**CD ref. 3.14**), the flows on Old Lane in Scenario C with the Development (350 AM 263 PM) remain close to the flows in Scenario A without the Development (345 AM 268 PM).
- 10.19 As part of the discussions on cycle routes, WSP and SCC have considered the potential to provide an improved situation for cyclists on Old Lane whilst reducing the average speeds of vehicles. An initial indicative scheme showing a system of priority pinch points along the road was considered by road safety specialists at SCC as not performing well. However, this scheme was reviewed by SCC prior to SCC launching its consultation on cycle routes for the Guildford Borough Cycle Plan and yet it did not result in the removal of Old Lane from the list of potential cycle routes in that consultation. Commentary on the potential usage of facilities is given later in this section.

A route west to Ripley

- 10.20 This route already has a number of cycle facilities, including short lengths of shared cycleway/footway at Ockham Interchange and an advisory segregated on carriageway cycle lane on both sides of Portsmouth Road/Ripley High Street that is continuous except for approximately 100m over a bridge east of the village centre. Ripley has a number of local services and shops.
- 10.21 From the centre of the proposed development via Ockham interchange and Portsmouth Road, this route is 2.5 miles long and would take circa 8-12 minutes depending on the speed of the cyclist.
- 10.22 At Ripley, cyclists can join the Surrey Cycle Way which is maintained by SCC along Newark Lane towards Woking and which formed part of the Olympic Road Race route in 2012. Alternatively they can continue south along Portsmouth Road towards Send using the existing on-carriageway cycle lane.
- 10.23 The proposals for signalling the Ockham Interchange roundabout include enhancements to the cycle facilities around this junction. The route to Ripley is considered to be short and direct enough for level 3 cyclists and experienced commuters to be able to use it at all times of the year to reach Ripley. It is also considered likely to be attractive to Level 2 cyclists under most conditions.

A route north west Via Wisley and on to Byfleet and Brooklands

- 10.24 From the centre of the proposed development via Ockham interchange, Wisley Lane, Muddy Lane (currently only legal when dismounted) and routes through Byfleet and Oyster Lane to Brooklands Business Park, this route is 3.2 miles long and would take circa 10-16 minutes depending on the level of cyclist.
- 10.25 This route already has cycle facilities at a number of locations, principally at the northern end of the route and 3 km of the total route has previously been maintained as a recommended cycle route by SCC. The record of this extracted from the SCC web-based interactive map in January 2016 is shown in Appendix G The link between the site and the bridge over the A3 at Elm Corner is proposed as a cycle route as part of the consultation on the Guildford Cycling Plan and the footbridge is identified for improvement as part of this proposed route.
- 10.26 It is proposed by the Appellant to assist SCC and HE by funding improvements to the route as described in the Cycle Route Concept Report attached as Appendix CC This involves the following works;
- Improve the existing footbridge over the A3 north of the site by providing a “cycle channel”. This is a narrow channel on the stairs up to the deck of the bridge, into which cyclists place the rear wheel or both wheels of their bike to make it

unnecessary to carry or bump the cycle up or down the stairs. It is a simple but very effective improvement and has been carried out at various other locations in Surrey;

- Convert the existing footway alongside Wisley Lane to shared use, widening to 2m where possible;
- Provide way marking signs at changes in direction and junctions
- Provide shared use footways or on-carriageway cycle lanes from the M25 to A245/Oyster Lane
- Provide new shared use crossing facilities on either side of the A245/Oyster Lane junction
- Extend the cycleway on the south side of A245 Parvis Road westwards to meet the existing shared facility on the north side of the road creating a connection to Byfleet.

10.27 Two lengths of this proposed route are worthy of particular note.

(i) Route through RHS Wisley

10.28 As part of the planning application GU/16/P/01080 by RHS Wisley for new front of house and retail facilities, SCC was keen to ensure a cycleway was provided through RHS Wisley's site which would allow a route segregated from Wisley Lane to be created from the northern end of the A3 bridge over a length of approximately 900m. In its consultation response to the RHS Wisley Planning application, SCC stated:-

"1) Footpath 7 should be upgraded to a cycle route and moved so it runs parallel to Wisley Lane, rather than running through the site itself, from the junction with the A3. This would keep pedestrians and cyclists separate from vehicles. The footway/cycleway shall be extended to link up with Muddy Lane (Footpath 566), creating a link north to south.

2) Upgrading of the surface of Muddy Lane to enable all-weather cycle access."

10.29 The planning Decision Notice sets out in Condition 7 that

"before the [development] is occupied Footpath 7 shall be widened to 3m and surfaced to allow both pedestrians and cyclists access and a sign shall be located at either end of Footpath 7 where it joins Wisley Lane to indicate the shared use."

10.30 The Decision Notice and SCC consultation response in Appendix DD of my Evidence.

10.31 As a first step to achieving this, the existing footpath No7 is to be diverted away from its current route which is blocked by an existing drinks kiosk, and provided with a 2m wide all weather surfaced path. This diversion is underway.

(ii) Muddy Lane

10.32 SCC is well advanced in the process of securing a legal bridleway along Muddy Lane which would allow cyclists to complete the link without having to dismount for a short distance. A consultation is currently underway closing on 8 May 2017 following which if

no objections are received, the Order will be made by SCC. This link is expected to be available during the development period.

- 10.33 With the improvements proposed, this route is considered to be short and direct enough for level 3 cyclists and experienced commuters to be able to use it at all times of the year to reach Byfleet and Brooklands. It is also considered likely to be attractive to Level 2 cyclists under most conditions.

A route north to Cobham

- 10.34 This route along Ockham Lane and Plough Lane was previously maintained as a recommended cycle route by SCC. It has no specific cycle measures along it. However it is a very popular cycle route with leisure cyclists.

- 10.35 From the centre of the proposed development via Old Lane, this route is 3.05 miles long and would take circa 9-15 minutes depending on the speed of the cyclist. There are hills along the route in both directions which might affect some cyclists' attitude towards using this route, even if the route was upgraded in some way.

- 10.36 As can be seen in Appendix G of the TAA (**CD ref. 3.14**), the southern part of the route is along a very lightly trafficked highway. The flows in Scenario C (83 AM 80 PM) are a little higher in absolute terms than the flows in Scenario A (49 AM 38 PM). The closure of Ockham Lane leads to even lower traffic flow (17 AM 41 PM). However, bearing in mind Scenario C traffic flows are only approximately one vehicle every minute, the levels of traffic are considered to be acceptable for shared carriageway use by Level 2 cyclists under most conditions as well as experienced commuters. The alignment of Ockham Lane and Plough Lane confines traffic speeds to less than 40mph.

An additional route to Horsley

- 10.37 In addition to the four routes set out above, an additional potential route exists south of the site connecting it to Horsley. Horsley contains a railway station with connections to Guildford and London and a number of local shops and services.

- 10.38 This route has no specific cycle facilities but it is proposed as part of the Guildford Cycling Plan in conjunction with traffic management measures. It has short lengths of footway which could be converted to shared cycleway/footways. The route from the centre of the site to Horsley via Ockham Road north is approximately 2.7 miles long and would take circa 8-14 minutes depending on the speed of the cyclist.

- 10.39 The Appellant proposes to serve Horsley Station and local centre with a frequent bus service.

Demand for cycling

- 10.40 I have formulated an approach for determining the potential demand from residents of the site for cycle facilities or improvements to routes to accommodate cyclists. This is shown in Appendix EE of my Evidence.
- 10.41 The work shows that demand for cycling offsite is likely to be in the order of 3% or 50 peak hour trips. This means that the peak demand during the normal commuting periods, when traffic volumes are highest, will be especially low on the route to Cobham, with 2 users predicted. Given the route has hills that are likely to dissuade most other than recreational cyclists, it is considered unjustifiable to provide a costly scheme on this route. On the other hand, demand for cycling to the north west of the site to Byfleet and Brooklands employment areas will be higher and thus it is appropriate for the Appellant to provide specific proposals as already set out.

Summary

- 10.42 It is acknowledged that SCC officers wish to see greater levels of cycling connectivity from the site to the employment opportunities and local services in adjacent communities. From the above, it can be seen that the site is already at the centre of a network of routes that have been maintained as recommended cycle routes. In addition and as part of the Guildford Cycling Plan, SCC has gone to formal consultation on a number of routes that are adjacent to or in close proximity to the site.
- 10.43 All the distances quoted above are less than 5 miles and hence well within the evaluation in the DMRB of the distance most people can easily cycle, taking a maximum of approximately 16 minutes to cycle.
- 10.44 The Appellant proposes to deliver a route to Byfleet which includes significant additional facilities and to provide significant funding through a S.106 Agreement for additional facilities or schemes to improve cycling in the vicinity of the Appeal site. It is considered that these further improvements would improve conditions and accessibility for cyclists to the local services and employment opportunities that are available within 5 miles of the site.

11 Response to matters raised by other Appeal parties

Introduction

11.1 In this section, I set out my responses to the matters raised in the Statements of Case of the other parties to the Appeal. The list of matters raised and by whom is set out in

Matter raised	Party ²³	Statement of Case paragraph reference
IMPACT ON ROAD NETWORK		
Impact on Strategic Road Network	GBC	6.3.1 6.3.2 6.5.2
Impact on traffic & transport	EH/WH	4.14-4.16
Infrastructure	CCHT	7e
Road Safety	EH/WH	4.17 4.18
Road Accidents	RPC	4.23
Traffic Congestion	EH/WH	4.19 4.20
Alteration to operation of local roads	EH/WH	4.21
Alteration to local road network	RPC	4.25
Ripley Road Network	RPC	4.22
Transport Sustainability	GBC	6.4.1-6.4.3
Parking impact at Railway Stations	EH/WH	4.24 4.25
Access to Railway Stations	RPC	4.24
Impact on Public Car Parks	EH/WH	4.26
Impact on Local Highways and Infrastructure	WAG/OPC	3.38 3.39
Junction 10	Paton	Pp9 / Pp17
Accesses	Paton	Pp16
TRAFFIC DATA & MODELLING		
RPC Traffic Data	RPC	4.26
Transport Modelling	WAG/OPC	3.40 3.42
RIS		
RIS	WAG/OPC	3.41
Implementation / RIS	RPC	4.53-4.54
CYCLING		
Cyclists	RPC	4.28
Cycle Safety	EH/WH	4.18 4.29

11.2 Clearly a large number of individual points are made so I have set out my responses under section headings below, drawing on the evidence I give elsewhere in my evidence wherever possible.

²³ Abbreviations – EH/WH-East and West Horsley Parish Councils jointly; CCHT-Cobham Conservation and Heritage Trust; RPC-Ripley Parish Council; WAG-Wisley Action Group; OPC-Ockham Parish Council.

Road Safety – personal injury accident record, increases in traffic flows

- 11.3 The point has been made that traffic flows on the local roads will increase as a result of the development and that this will have adverse effects on road safety.
- 11.4 WSP have carried out a full ES assessment and an ES review using the previous and latest versions of the SINTRAM traffic model. This is the best available comprehensive method we have of modelling the changes in traffic levels in the future. The methodology used is the standard one utilised across the country and is based on accepted scientific thresholds for judging when changes in conditions become perceptible. I have set out how the assessment was carried out in Chapter 2 of my evidence [paragraphs 2.14 to 2.29]. Further detail can be seen in the ES Addendum itself, which is core document **CD ref. 14.1.14**.
- 11.5 The result of the ES assessment was that no impacts of significance would take place during construction or operation of the development with the mitigation proposed. This is not to say that traffic levels on some roads will not increase, just that the impacts will not breach the thresholds for significance in the terms assessed, which includes road safety.
- 11.6 I understand the concerns of the other parties on road safety and to a large extent the detailed discussions with GBC and SCC have focussed on how the Appellant can mitigate these impacts. The work I have carried out and present in my Evidence, which reflects these discussions, demonstrates that the residual traffic impacts of the development after mitigation will not be severe and will therefore not breach the threshold for acceptability set in NPPF.
- 11.7 A significant output of the discussions with the authorities is the commitment of the Appellant towards the construction of the Burnt Common slip roads, for which land is safeguarded in the Emerging GBLP. This scheme reduces traffic levels on many local roads. For example in Ripley High Street, the scale of the traffic reduction is approximately 275 vehicles per hour in the AM peak hour and approximately 235 vehicles per hour in the PM peak hour. These figures are set out in Appendix K to my Evidence.
- 11.8 The supplementary updated record of personal injury accidents I have set out in the material within Appendix R of my Evidence covers the period 01/01/2011 to 30/04/2017. It demonstrates the occurrence of accidents and it can be seen that there are relatively few accidents on the local road network, and no fatalities attributable to congested conditions (the one fatality reported on Old Lane was a single vehicle accident where the driver lost control and collided with a tree).

- 11.9 It has to be acknowledged that road accidents are related to levels of traffic and the degree of conflict between road users. In this light, any plan-led development for the number of dwellings the subject of the Appeal proposals might be seen as resulting in accidents wherever located. As such, it is important to study trends in accidents as well as local effects.
- 11.10 The SCC LTP3²⁴ states that trends for killed and seriously injured casualties of accidents (KSI), Child KSI and slight casualties are downward, and are currently on track to meet national targets. The table below illustrates the scale to which road safety is improving in Surrey generally, with a 24% reduction in total casualties between 2005 and 2014. This change is due factors including road safety campaigns, improvements in vehicle passive safety design and programmes of highway safety improvements across the county including the introduction of 20mph zones and traffic calming measures where large numbers of pedestrians are present. During the same period the population of Surrey grew by 3.7%²⁵.

Road accidents facts and figures

In 2013, 5,223 people were reported injured in collisions on the roads in Surrey.

- 599 people were killed or seriously injured
- 45 children under the age of 16 were killed or seriously injured
- 4,624 people were slightly injured

Previous casualty data for Surrey is shown below.

Year	Fatal	Serious	Slight	Total
2005	64	520	6274	6858
2006	52	531	6265	6848
2007	60	529	5524	6113
2008	45	483	5411	5939
2009	41	530	5184	5755
2010	32	488	4811	5331
2011	28	554	5173	5755
2012	18	556	4991	5565
2013	18	581	4624	5523

(Source –SCC web site - <https://www.surreycc.gov.uk/roads-and-transport/road-safety/road-accidents-facts-and-figures>)

- 11.11 Cycling safety is a particular concern in Surrey due to an increase in the numbers of people cycling and is reflected in the views expressed by other parties. The Appellant is committing to funding improvements to facilities for cyclists through legal planning

²⁴ Surrey Transport Plan: Problems and Challenges paragraph 2.16

²⁵ Surrey Transport Plan: Problems and Challenges paragraph 2.3

obligations in line with the emerging GBLP and will deliver the improvement of the route to Byfleet and Brooklands where major employment areas are located. This is described in more detail within Chapter 9 of my Evidence. Notwithstanding this, the Appellant is also committed to the in-perpetuity funding of bus routes to key local destinations so that less confident cyclists do not have to rely on cycling under all conditions when their safety may be more at risk.

11.12 For these reasons, I do not share the view that traffic levels will increase to the extent presumed by the other parties and I consider that the effects particularly on road safety will not be significant and certainly not severe.

Impact on the Horsleys

11.13 Specific concerns are raised about the Horsleys, whereby it is claimed potential traffic management on other roads will increase traffic in these villages and worsen conditions.

11.14 The estimates of traffic in the Horsleys given in Appendix O of my Evidence show that in a typical AM peak hour, compared with the situation without Wisley Airfield development and its mitigation:-

- the traffic level on the B2039 Ockham Road South at Station Parade will increase by 55 vehicles per hour i.e. approximately one vehicle per minute;
- the traffic level on the B2039 Ockham Road South south of its junction with Forest Road will decrease by 47 vehicles per hour;
- the traffic level on Forest Road north of its junction with Ockham Road South will increase by 57 vehicles per hour i.e. approximately one vehicle per minute;
- the traffic level on the Street will decrease by 67 vehicles per hour;
- the traffic level on the A246 east of The Street will increase by 166 vehicles per hour i.e. approximately one vehicle every 22 seconds;

11.15 It can be seen that the traffic levels in the Horsleys will increase on some roads and decrease on others. This is because the SINTRAM model re-optimises the routes taken by all trips on the highway network based on future year journey times and distances, many of which change in response to the combined effects on journey times of additional traffic growth and planned infrastructure. The increases are likely to be modest and imperceptible in normal conditions. The decreases will be beneficial. During the PM peak hour this pattern is repeated but the scale of change is less.

11.16 Some concerns are raised about the impacts at local schools, whereas the development proposal includes schools on site. It is therefore highly unlikely that the development will contribute to congestion at other local schools. As explained in paragraphs 6.7 and 6.8 of my Evidence, it is not expected that this will be an issue of any significance even in the early years of the development prior to the opening of the new schools on the site. In any event the trip generation assumptions take account of the potential effect.

- 11.17 For these reasons, I do not share the view that traffic levels will increase to the extent presumed by the other parties and I consider that the effects particularly on road safety will not be significant and certainly not severe.

Impact on Railway stations

- 11.18 WSP carried out parking surveys at the Horsley and Effingham junction Station car parks on a typical day, namely Tuesday 28th February 2017. These are given in Appendix FF to my Evidence. The surveys found that the Effingham junction car park was up to 93% full by 10.00 hrs with 166 of the 178 spaces occupied. However the Horsley Station car park was only 78% full by 10.00 hrs with 152 of the 194 spaces occupied at that time.
- 11.19 Part of the car park at Effingham Junction station is currently being used as a works compound for the adjacent railway works facility, which is artificially reducing the parking provision compared with its previous capacity.
- 11.20 It is recognised that access to the railway stations at Effingham Junction and Horsley is an important component of the development proposals. That is why the Appellant proposes high frequency bus services to the stations with likely fare levels (less than £3 single) that are cheaper than the current parking charges (£6.50 per day at both stations). Residents will therefore have an attractive alternative to driving to the station in a private car and competing for parking.

Impacts on public car parks

- 11.21 WSP carried out parking surveys at the East Horsley car park behind the Station Parade shops on a typical day, namely Tuesday 28th February 2017. These are also given in Appendix FF to my Evidence. The survey showed that whilst there was a peak occupancy of 50 of the available 60 spaces, the car park never became full. For most of the day more than 15 spaces were available and the average occupancy between 6am and 6pm was 44% (26 spaces).
- 11.22 In addition, the facilities in Horsley are considered important to the diversity of facilities available to residents in the Wisley Airfield development and as such the Appellant is proposing to serve it with the bus service set out earlier in my Evidence. Residents of the development will therefore have an alternative to travelling by car to the village and competing for parking.

Disruption from construction of Wisley and other schemes i.e. M25 J10 and RHS Wisley

- 11.23 Only the Appeal proposals and developments that had planning permission at the time were considered in the construction assessment within the December 2015 ES review, which concluded that no impacts of significance would take place during construction or

operation of the development with the mitigation proposed. This excluded the RHS Wisley scheme which received conditional planning consent in September 2016. The RIS scheme consultation had not been announced at that time and the preferred solution is still not known.

11.24 The RHS project is likely to commence shortly and be complete well before the start of the main construction phase at Wisley Airfield. I understand that the construction activity on the RHS Wisley site will be controlled through a Construction Transport Management Plan which is on the process of being reviewed and agreed with the authorities at the time of writing my Evidence.

11.25 The Junction 10 RIS Scheme construction phase is very likely to be disruptive to the local area and the programme shows that it will be taking place in the period 2020 to 2023, i.e. in the first 3 years of the buildout of the Wisley Airfield development. I consider that the RIS scheme will be much more disruptive than Wisley Airfield to the extent that it will be for HE and their contractors to work closely with all stakeholders including the construction project managers of the Wisley Airfield site (in the event that it gains planning permission) to minimise disruption to local residents and road users.

11.26 Having said this, the Wisley Airfield scheme will not be allowed to commence until a Construction and Environmental Management Plan (CEMP) as described earlier in my Evidence has been agreed with the authorities.

11.27 Overall, I consider that there will be limited overlap between the construction of the RHS Wisley and Wisley Airfield sites and that the unavoidable and more significant disruption during the RIS scheme works at M25 Junction 10 will have to be comprehensively managed and in any event only take place during part of the Wisley Airfield construction phase.

Approach to cycle routes

11.28 I have explained the cycle proposals in Chapter 10. The Appellant is proposing to invest a substantial sum in cycle improvements to meet the aspirations of SCC and GBC, as well as committing to the delivery of a new route to Byfleet and Brooklands where a large employment catchment exists. In reality, I consider that demand for cycling to the other routes identified in the Guildford Cycling Strategy would be low but it is recognised by the Appellant that the opportunities for sustainable transport modes should be taken up to the maximum possible extent, taking into account the nature and location of the site.

11.29 It is acknowledged that not all the roads surrounding the site are suitable for all abilities of cyclist at present. However I do believe that the authorities working together will be able to devise and successfully promote schemes that would make a difference for cyclists, for example by implementing rural traffic calming schemes to reduce speed limits.

- 11.30 In general I have observed that the cyclists currently using the roads are experienced and well-used to the conditions that exist. I have also described the traffic flows after the Wisley Airfield development has been implemented, including the effects of the Burnt Common slip roads, whereby it can be expected that many roads in the area will experience reductions in traffic compared with the situation without the Wisley Airfield development.
- 11.31 I therefore consider that conditions for cyclists, overall, will not materially worsen and on the contrary may well improve due to reductions in traffic or through the implementation of measures to improve conditions for cyclists or provide facilities where none presently exist.

12 Benefits of the transport mitigation

12.1 The scheme of mitigation provided in conjunction with the Appeal proposal has wider benefits that go beyond the planning need to ensure that the impacts of the development are less than severe.

12.2 In summary I set these out below:-

- The commitment of the Appellant to the preferred A3 mitigation scheme of new North-facing A3 slip roads at Burnt Common lead to overall reductions in traffic on many local roads including within Ripley as well as improved conditions on the SRN by reducing traffic joining the A3 at one of its most congested and substandard locations;
- The Appellant's cycle route proposal to Byfleet provides a publicly available enhancement to local cycle facilities for use by all cyclists;
- The bus service provision provides additional transport options for the local communities through which they pass, thereby bringing additional potential retail and commercial expenditure and potential employees to these communities;
- The commitment to substantial additional financial contributions towards promoting cycling and road safety measures will benefit all road users;
- The capacity improvements to M25 Junction 10 in the absence of the RIS scheme would extend the life of Junction 10 by reducing queuing on the approaches and thus be of benefit to the users of the SRN in terms of improved and more reliable journey times and increased safety.

13 Conclusions

- 13.1 The key transport objectives of this Appeal proposal have been to satisfy local and national planning policy as contained respectively in the emerging GBLP and NPPF. My Evidence seeks to demonstrate how this can be achieved.
- 13.2 As I explain in my Evidence, NPPF focuses not on the existing transport context of the site, but on the extent to which all opportunities for sustainable modes have been taken up. It is the extent to which the Appeal site *can* be made sustainable that matters and NPPF recognises that the location of the site must be taken into account in that assessment.
- 13.3 I explain the extent of facilities being made available on site for residents of the Wisley Airfield Sustainable New Community. These provide for the educational, health, recreational and day to day retail needs of residents with the potential for some employment on site, either in office or industrial businesses or in one of the educational, food and drink or retail opportunities planned for the site.
- 13.4 As such, many journeys that would otherwise require travel beyond the site are likely to be contained on site and be capable of being carried out on foot or cycle via the purpose built infrastructure within the development.
- 13.5 Bus services will be provided to serve the site with an innovative approach that will meet the aspirations of the authorities for this site in terms of level of service provision, locations to be served and in-perpetuity funding via a community trust arrangement. The bus services will provide or enhance public transport connections for adjacent local communities too, benefitting existing residents as well as those in the Sustainable New Community. Local railway stations will be served by these bus routes which will allow those who wish to access the rail network to do so without needing to drive or compete for a parking space.
- 13.6 The Appellant is also proposing to enable a package of cycling measures to be carried out in line with the aspirations of the authorities for this site, including delivery of a cycle route to a major employment area and funding for further connections, facilities and improvement measures to be provided by the authorities as and when opportunities arise.
- 13.7 In addition, the Appellant is proposing a package of highways mitigation that delivers improvements in conditions and therefore goes beyond the requirement in the NPPF for impacts to be less than severe.
- 13.8 As well as improvements at junctions on local roads, two major schemes of mitigation on the SRN have been identified and provided within the proposals, both of which meet the aspirations of SCC and HE. A pair of north-facing slip roads on the A3 at Burnt Common

will assist in mitigating the effects of emerging GBLP development growth not only on the SRN but also on the local road network in a number of locations, particularly the sensitive local community of Ripley. Although this is a local plan scheme, it is designated for developer funding. The Appellant is proposing its funding up to a capped limit that is well in excess of the likely cost of the scheme based on other similar schemes.

- 13.9 The bespoke mitigation for M25 J10 provided as part of the proposed highways improvements package will extend the life of the junction in the event that the RIS scheme proposed by HE is delayed. HE have no in-principle objection to either scheme affecting the SRN and have confirmed that the RIS scheme at M25 Junction 10 would accommodate the Wisley Airfield New Sustainable Settlement.
- 13.10 I have given due consideration to the concerns of other parties to this Inquiry and have addressed each area of concern. In particular I discuss the effects of the New Sustainable Settlement after mitigation on each area of concern. Fears about safety are not borne out by the general picture in Surrey where road safety has improved despite continued growth in traffic. Environmental concerns are not borne out by the findings of the ES which reported no significant impacts in terms of any of the specific effects related to transport. The practicality and viability of providing sustainable travel for residents has been proven and these measures will also be available to residents in existing local communities.
- 13.11 All the work carried out has been underpinned by a transport model that has evolved since the original planning application was submitted to the point where it has not only passed the audits carried out by SCC but been adopted by HE as part of its traffic modelling of the M25 Junction 10 RIS scheme.
- 13.12 The Appellant has worked closely with the highway authorities SCC and HE and also with the local planning authority GBC to identify specific concerns about impacts and to address them. Following its recent confirmation as a Rule 6 party to the inquiry discussions are ongoing with HE at the time of preparing this Evidence to address mitigation of the impacts on the SRN to their satisfaction. I may therefore wish to present otherwise alternative interventions to the Inquiry that provide comparable mitigation.
- 13.13 The resulting package of measures proposed by the Appellant to be either implemented or funded via planning obligations will lead to a development that meets local and national planning policy and I therefore believe the Appeal proposal should be granted planning permission.



Appendix 2b

Appendix J to Highways engineer Colin McKay's proof of evidence to the Wisley Airfield Appeal Inquiry

Table 3.14 Summary of proposed vehicular trip rates

Vehicular trip rate per dwelling or 100sqm GFA	AM Peak (0800-0900)			PM Peak (1700-1800)		
	In	Out	Two-way	In	Out	Two-way
Residential (trips per dwelling)	0.100	0.395	0.494	0.360	0.160	0.520
B1 Employment (trips per 100sqm GFA)	1.414	0.327	1.741	0.206	1.089	1.295
B2/B8 Employment (trips per 100sqm GFA)	0.670	0.158	0.828	0.118	0.728	0.846
Employment A3/A5 (trips per 100sqm GFA)	2.567	2.345	4.912	3.518	3.138	6.656
Secondary School (trips per pupil)	0.138	0.081	0.219	0.023	0.032	0.055

Table 3.15 Resulting number of vehicular trips

Total vehicular trip rate per dwelling or 100sqm GFA	AM Peak (0800-0900)			PM Peak (1700-1800)		
	In	Out	Two-way	In	Out	Two-way
Residential (2,068 dwellings)	207	817	1022	744	331	1075
Employment B1 (1,790sqm GFA)	25	6	31	4	19	23
Employment B2/B8 (2,500sqm GFA)	17	4	21	3	18	21
Employment A3/A5 (2,240 sqm GFA)	58	53	110	79	70	149
Secondary School (500 external pupils)	69	41	110	12	16	28

Table 3.16 External vehicular trip generation

Vehicular trip rate per dwelling or 100sqm GFA	AM Peak (0800-0900)			PM Peak (1700-1800)		
	In	Out	Two-way	In	Out	Two-way
Residential	121	755	874	678	263	941
Employment B1	20	5	25	3	16	19
Employment B2/B8	13	3	17	2	15	17
Employment A3/A5	14	13	28	20	18	37
Secondary School	35	20	55	6	8	14
Total	203	796	998	709	318	1027
Total Employment	83	41	124	31	56	86

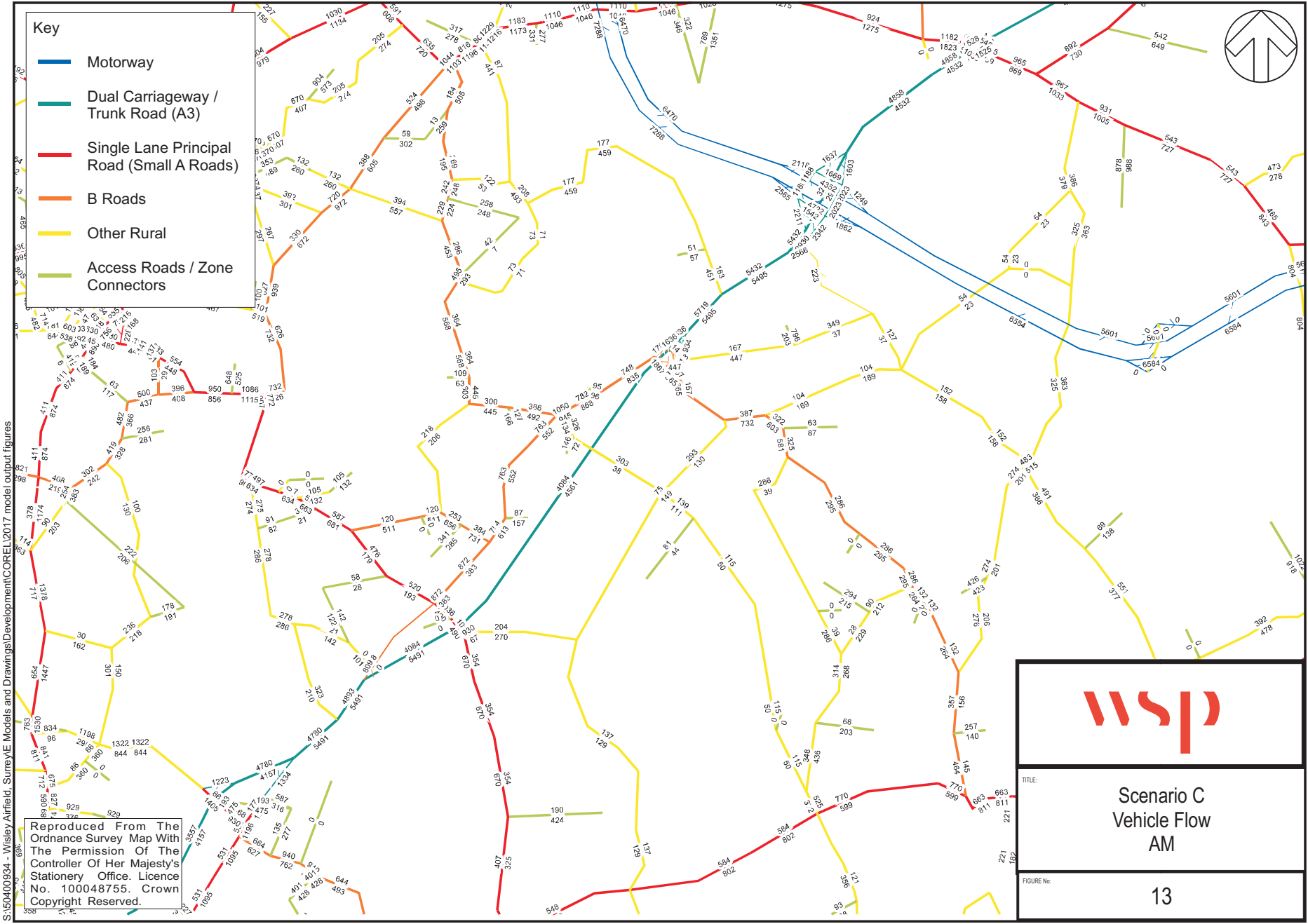
	AM Peak (0800-0900)			PM peak (1700-1800)		
	In	Out	Two-way	In	Out	Two-way
Residential trips	121	755	874	678	263	941
B1 Employment trips	20	5	25	3	16	19
B2/B8 Employment trips	13	3	17	2	15	17
Employment A3 - A5 trips	14	13	28	20	18	37
Secondary School trips	35	20	55	6	8	14
Total	203	796	998	709	318	1027

Internal %	Internal Vehicular trip rate per dwelling or 100sqm GFA	AM Peak (0800-0900)			PM Peak (1700-1800)		
		In	Out	Two-way	In	Out	Two-way
	Residential (2,068 dwellings)	86	62	148	66	68	134
20%	Employment B1 (1,611sqm GFA)	5	1	6	1	4	5
20%	Employment B2/B8 (2,250sqm GFA)	3	1	4	1	4	4
75%	Employment A3/A5 (560 sqm GFA)	43	39	83	59	53	112
50%	Secondary School (500 pupils)	35	20	55	6	8	14




Appendix 2c

**Extract of Appendix N to Highways engineer Colin McKay's
proof of evidence to the Wisley Airfield Appeal Inquiry**



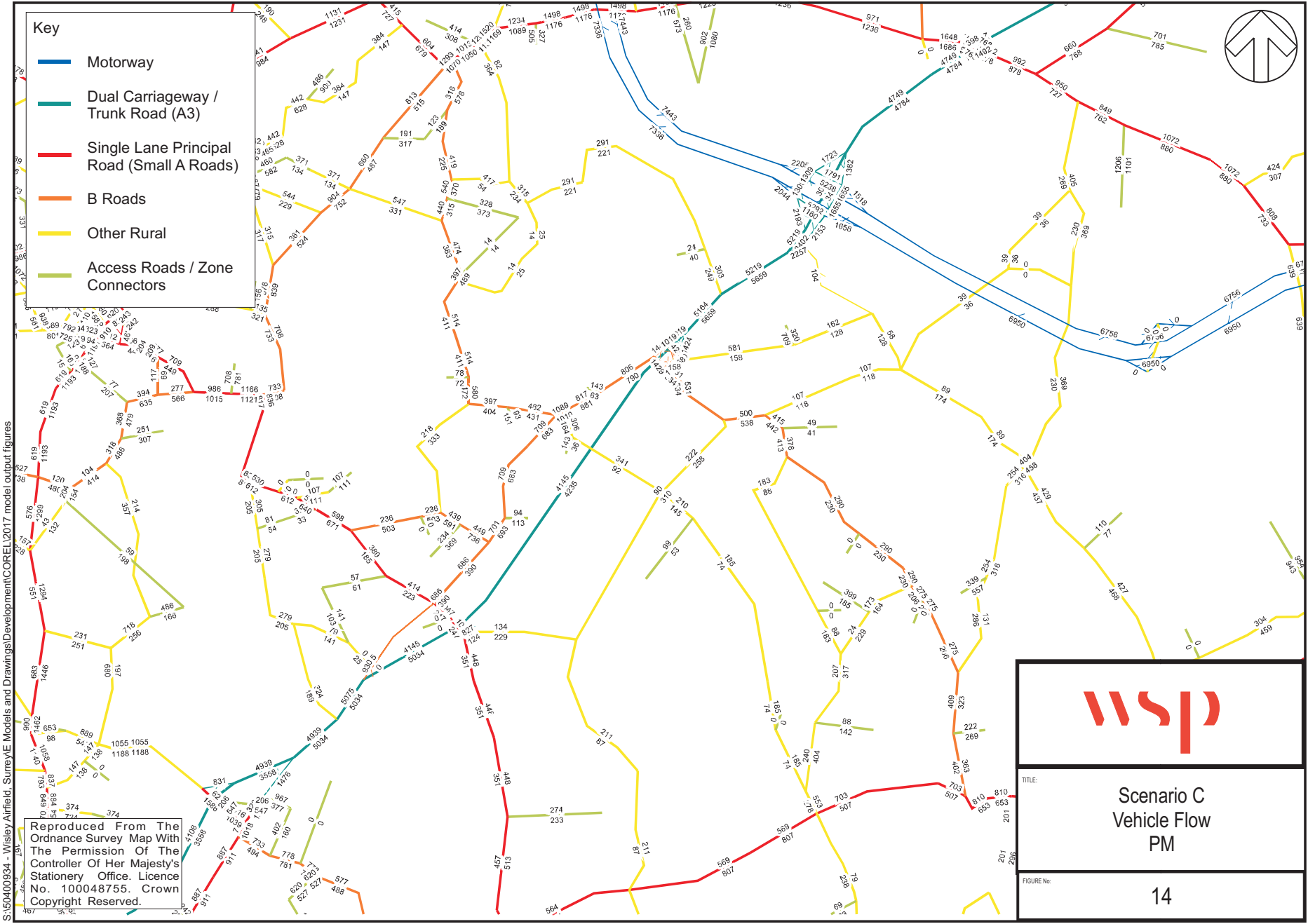
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TITLE:
**Scenario C
Vehicle Flow
AM**


FIGURE No:
13



- Key**
- Motorway
 - Dual Carriageway / Trunk Road (A3)
 - Single Lane Principal Road (Small A Roads)
 - B Roads
 - Other Rural
 - Access Roads / Zone Connectors

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TITLE:
**Scenario C
Vehicle Flow
PM**

FIGURE No:
14



Appendix 3.0

Agreed Statement on Progress' of 13 March 2018 referred to in paragraph 2.3.2.5 of SCC's relevant representation

Wisley Airfield Planning Appeal; reference APP/Y3615/W/16/3159894

Agreed Statement on Progress

Between Wisley Property Investments Ltd and Highways England

1. This statement relates solely to the mitigation proposed by Wisley Property Investments Ltd (WPIL) for the impacts of the appeal development on the Strategic Road Network (SRN).
2. Since the closure of the Inquiry, Highways England and WPIL have continued to meet and good progress has been made.
3. The main focus has been on the tests in the Highways England Licence in terms of demonstrating that the proposed north-facing A3 Burnt Common slips can be provided safely and with demonstrable benefit to the economy.
4. Safety
 - The appellant has carried out an assessment using DMRB standard GD04 of substandard elements that would be retained in the proposed mitigation to the A3. Highways England agrees that for each element the increase in accident risk is broadly acceptable taking into account the consequences, particularly cost, of providing the alternatives assessed.
 - Highways England accepts that it would not be cost effective for the Appellant to offer to widen the A3 carriageways from three lanes to four lanes.
 - The Appellant has provided Highways England with an assessment of accident costs carried out in accordance with the economic assessment below, which includes local roads. This shows a reduction in accident costs arising from the Burnt Common slips across the study area.
 - Highways England now need further time to review the assessment and form an overall view of the impact of the proposed mitigation on safety.
5. Economics
 - The Appellant has provided Highways England with further economic material based on broad WebTAG principles. Overall, this material shows that the economic user benefits for transport users across the strategic and local networks as a whole and the community are broadly neutral, but there is a benefit in terms of land value arising from the Wisley Airfield development.
 - Highways England needs to carry out further checks on the material but, subject to this, agrees that the economic case for the BC slip roads is persuasive.
6. RIS scheme for M25 J10
 - The RIS scheme for the Wisley A3/M25 Junction 10 improvement has progressed to the stage of statutory consultation on a preferred scheme.
 - The traffic assessments of the RIS scheme include the local plan growth in Guildford and adjacent authorities. This specifically includes the quantum of development of Wisley Airfield in the draft Guildford Local Plan.
 - Preliminary assessments carried out by Highways England as part of that RIS scheme show that the slip roads reduce the negative impacts that the RIS scheme would bring about in the village of Ripley. Without the slip roads the impact of the RIS is a 4% increase in traffic but with the slip roads the traffic reduces by 11%, an overall reduction in traffic of 15%. The consultation document for the RIS scheme states that the capacity improvements at the M25 junction 10 roundabout will allow for all additional traffic demand associated with the housing and employment growth predicted as a result of local planning policy (up to 2037) to be accommodated.
 - Highways England has recently asked WPIL to carry out additional work on the effects of the development on the A3 mainline once improved to 4 lanes by the RIS scheme. This is only possible now following the publication of the preferred route for that scheme. WPIL and Highways England need further time to assess this work.
7. Given the above and in light of the progress that has been achieved, it is agreed that it is likely to take Highways England 2-3 months to finalise their assessment of information provided and to reach a final position on the impacts on the SRN. This timing allows for possible discussion with the Department for Transport in respect of interpretation of the Highways England Licence.
8. The outcome can then be reported in an update to the SOCG sent to the Secretary of State.
9. Highways England is therefore content that WPIL request a deferral of the decision on the Appeal by 3 months.

Wisley Airfield Planning Appeal; reference APP/Y3615/W/16/3159894

Agreed Statement on Progress

Between Wisley Property Investments Ltd and Highways England

Signed

Colin McKay
on behalf of
Wisley Property Investments Ltd



Date: 13 March 2018

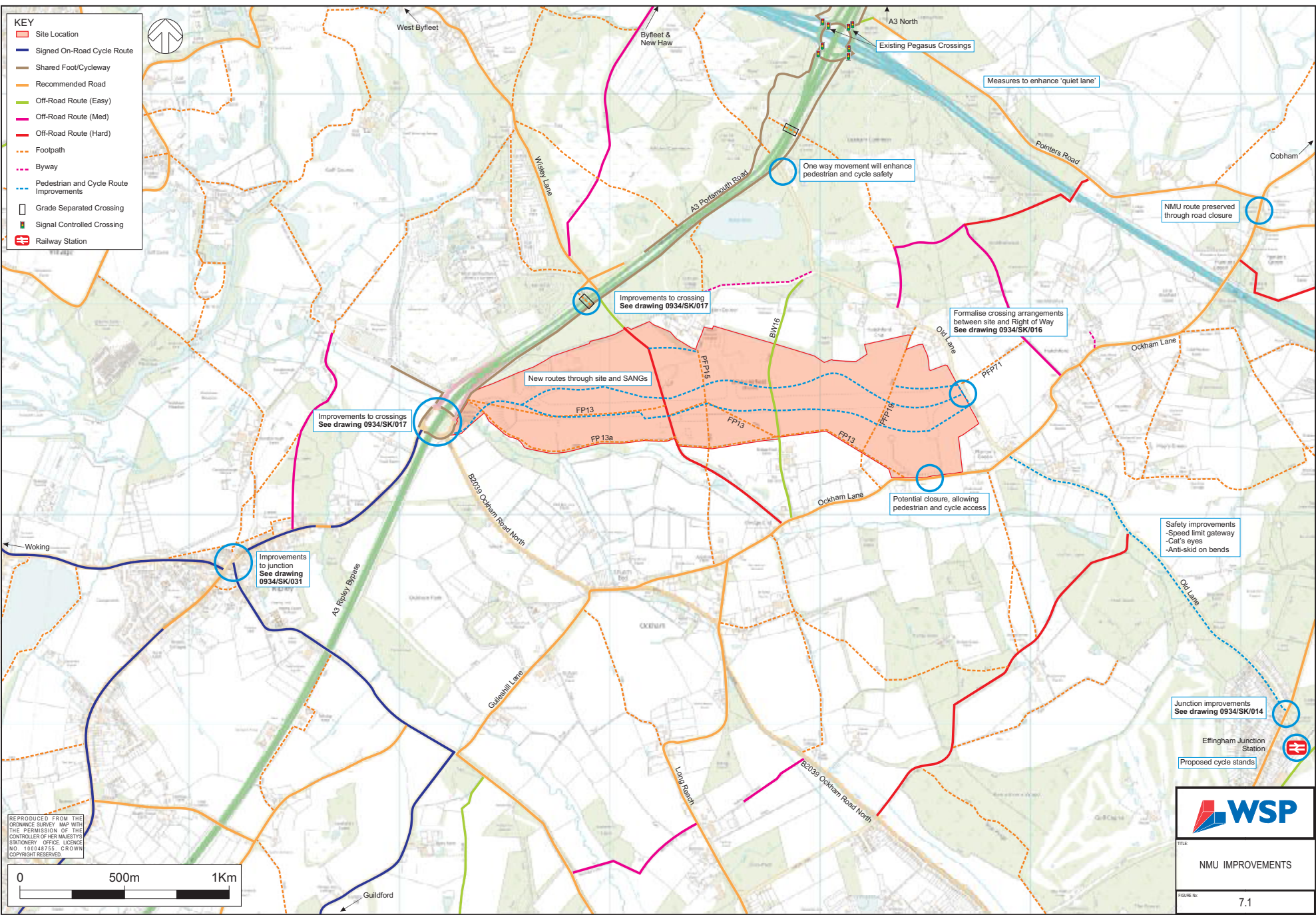
Paul Harwood
on behalf of
Highways England




Date: 13 March 2018



Appendix 4.0
NMU Improvements. Plan contained in the Appeal Scheme
Transport Assessment (0934-Fig 7.1)



REPRODUCED FROM THE ORDNANCE SURVEY MAP WITH THE PERMISSION OF THE CONTROLLER OF HER MAJESTY'S STATIONERY OFFICE LICENCE NO. 10048755. CROWN COPYRIGHT RESERVED.

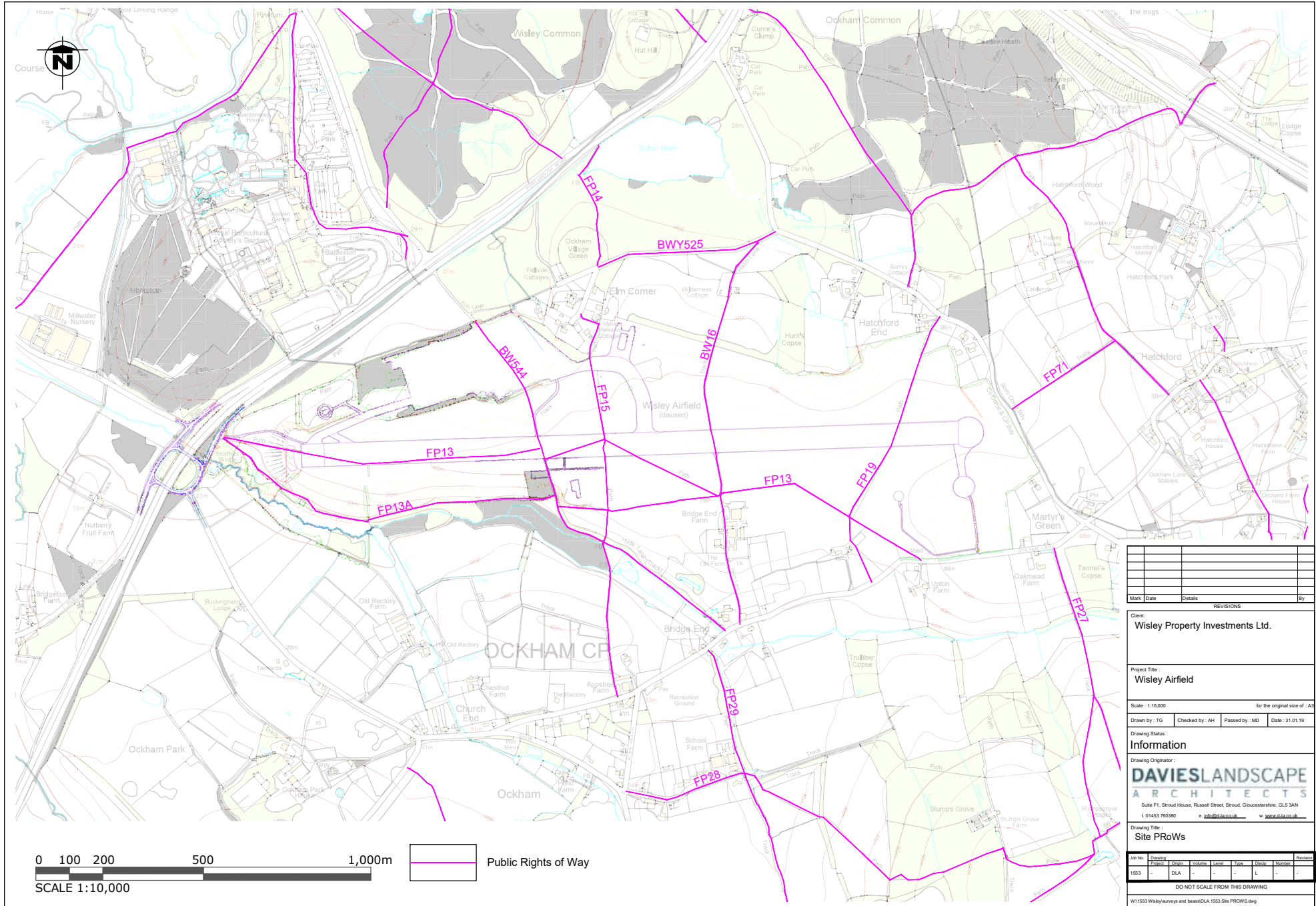


TITLE
NMU IMPROVEMENTS

FIGURE No:
7.1



Appendix 5.0
Site Public Rights of Way (January 2019)



Mark	Date	Details	REVISIONS	By

Client:
Wisley Property Investments Ltd.

Project Title:
Wisley Airfield

Scale: 1:10,000 for the original size of A3
 Drawn by: TG Checked by: AH Passed by: MD Date: 31.01.19

Drawing Status:
Information

Drawing Originator:
DAVIESLANDSCAPE ARCHITECTS
 Suite F1, Stroud House, Russell Street, Stroud, Gloucestershire, GL5 3AN
 T: 01453 760380 e: info@dsla.co.uk www.dsla.co.uk

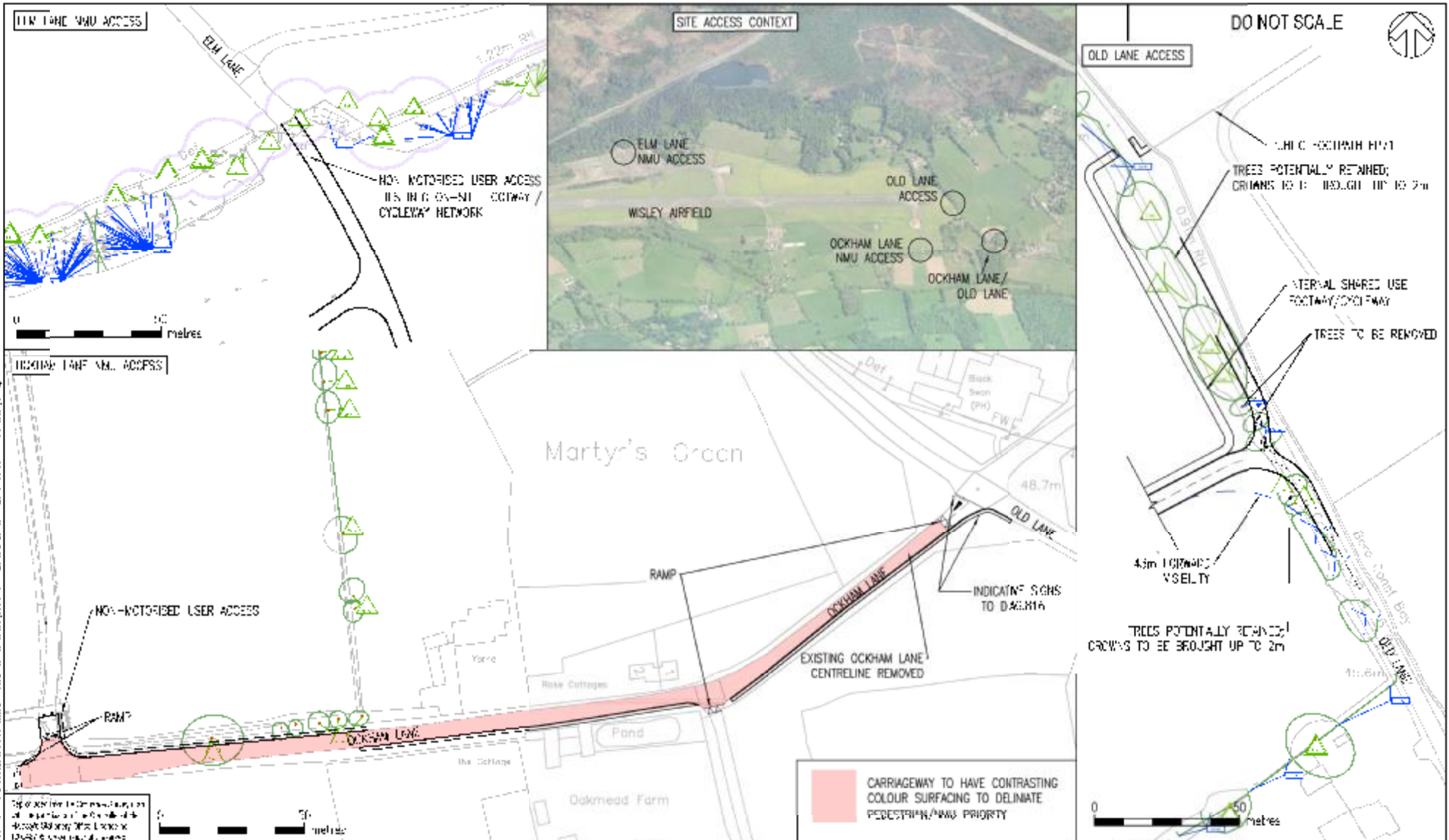
Drawing Title:
Site PRoWs

Job No	Drawn	Checked	Drawn	Checked	Drawn	Checked	Drawn	Checked	Drawn	Checked	Drawn	Checked
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DO NOT SCALE FROM THIS DRAWING
 W:\1553\Site\surveys and bases\DLA\1553_Site_PRoWs.dwg



Appendix 6.0 Proposed Eastern Access including stopping up of Ockham Lane (0934-SK-025-J) (July 2014)



J	27/03/17	LI	ELM LANE NMU ACCESS U-TRN	✓	✓
L	14/05/16	PLU	TO BE SURFACING AND	✓	✓
H	28/05/16	LPA	40'00" FOLLOWING OF	✓	✓
C	29/03/16	LEA	40'00" FOLLOWING OF	✓	✓
F	12/12/17	PLU	SCALE BARS ADDED	✓	✓

FOR INFORMATION ONLY

WSP

WISLEY AIRFIELD

WISLEY PROPERTY INVESTMENTS LTD

FIELDEN CLEGG BRADLEY & JOHNS

PROPOSED EASTERN SITE ACCESS ARRANGEMENTS

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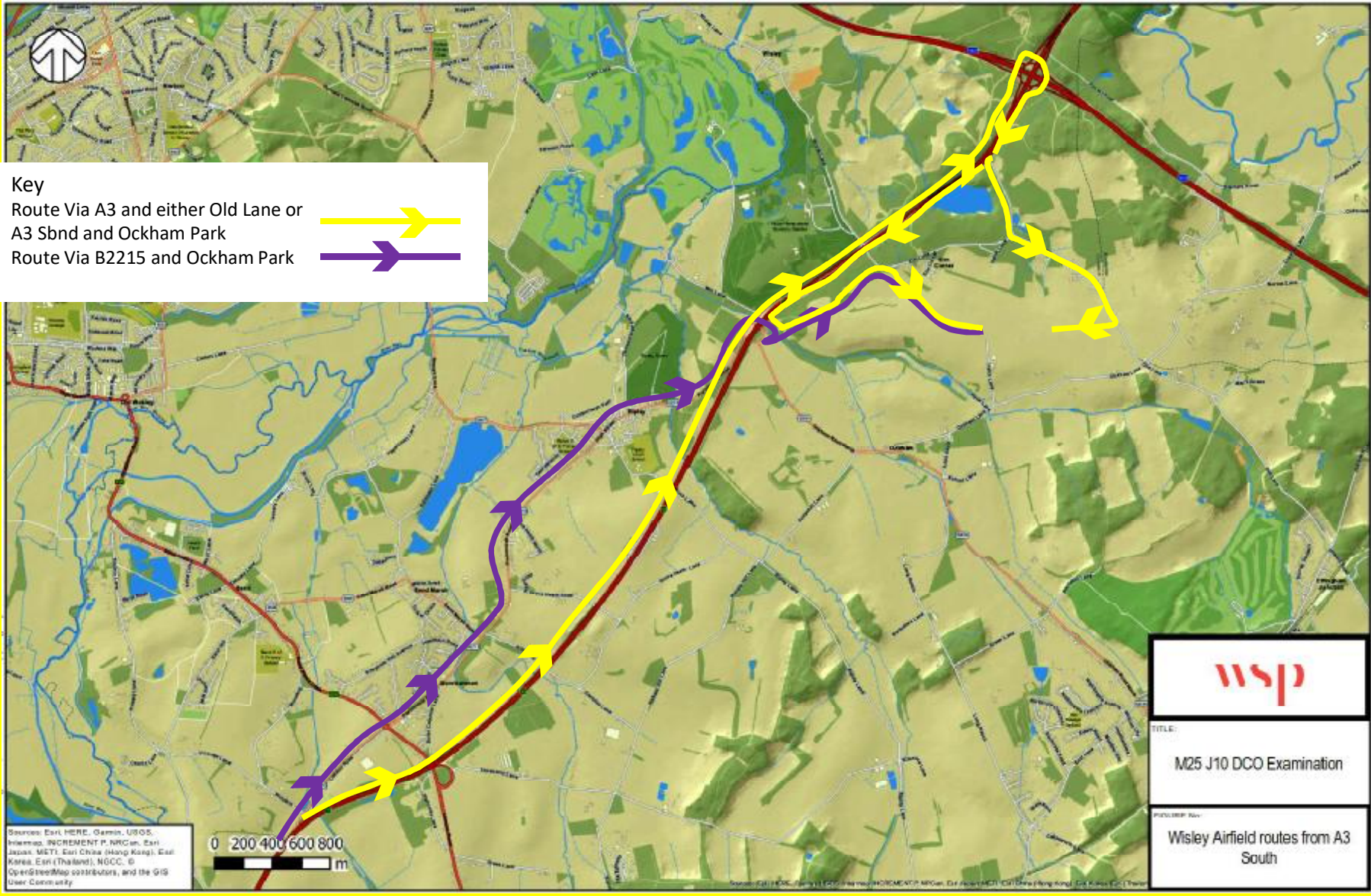
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DWG FILE	0934-SK-025.DWG	DWG NUMBER		DATE	4.1.17
PROJECT NO	50400934	PROJECT NAME	0934-SK-025	REV	J

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Appendix 7.0

Plan showing access to Wisley new settlement Allocation A35 without South Facing Ockham Interchange slips



Key

Route Via A3 and either Old Lane or
A3 Sbdnd and Ockham Park

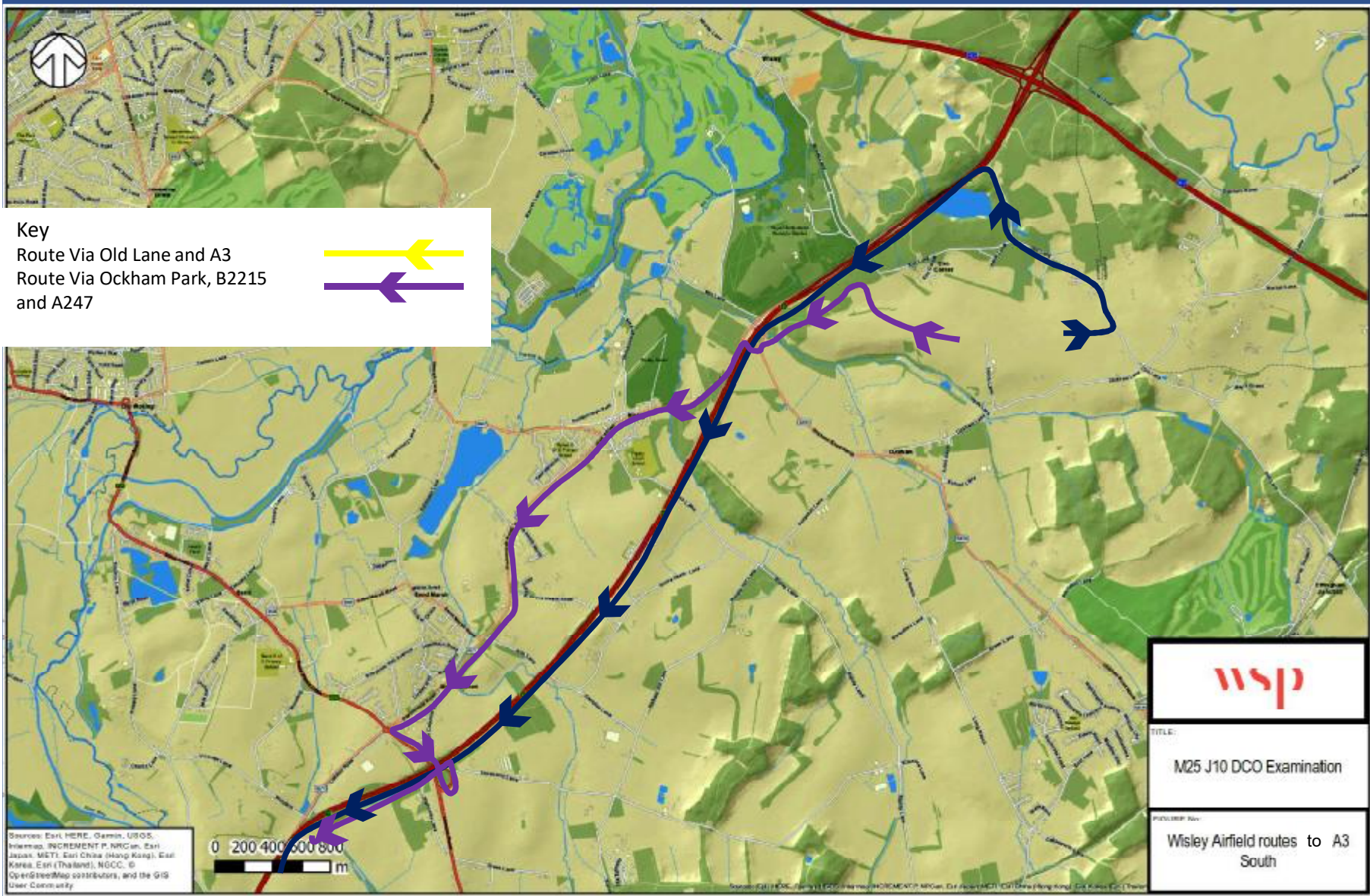
Route Via B2215 and Ockham Park



Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, © OpenStreetMap contributors, and the GIS User Community

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TITLE:	
M25 J10 DCO Examination	
SUBTITLE:	
Wisley Airfield routes from A3 South	

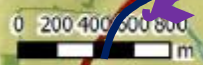


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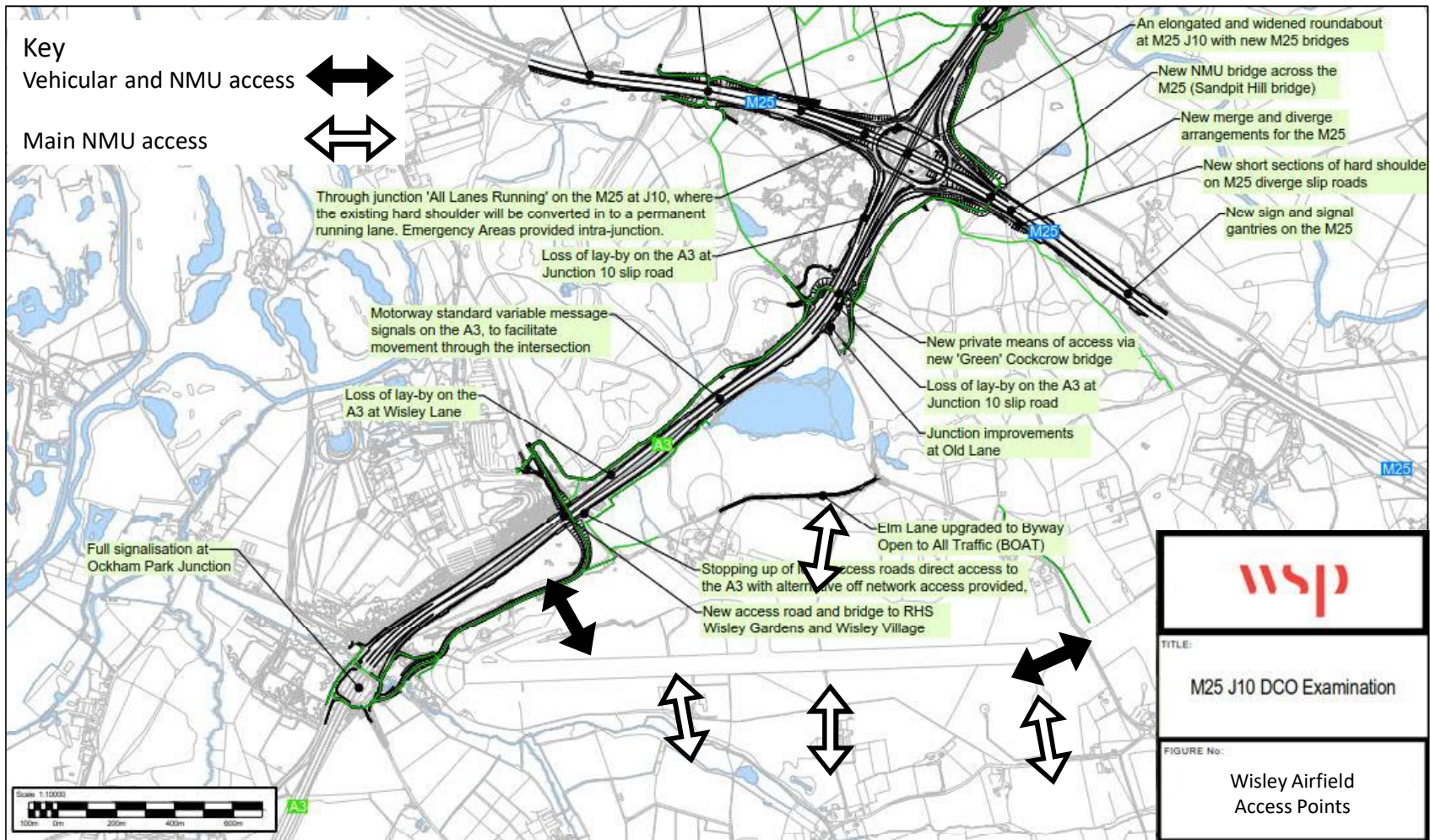
- Route Via Old Lane and A3
- Route Via Ockham Park, B2215 and A247



Source: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, © OpenStreetMap contributors, and the GIS User Community



TITLE: M25 J10 DCO Examination	
PROJECT No: Wisley Airfield routes to A3 South	



Source: Base plan is an extract from Figure 1.1 of TR010030 7.4 Transport Assessment Report



Appendix 8.0 Appendix F to the Transport Assessment Addendum submitted with the Appeal Scheme

WISLEY AIRFIELD

FORECASTING NOTE

Wisley Properties Investment Ltd

Type of document (version)
Confidential

Project no: 50400934
Date: October 2015

—
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QUALITY MANAGEMENT

ISSUE/REVISION	FIRST ISSUE	REVISION 1	REVISION 2	REVISION 3
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Prepared by	Phil Eveleigh Nadia Lyubimova			
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Checked by	Nadia Lyubimova			
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4	SCENARIO B ASSUMPTIONS	3
5	SCENARIO C ASSUMPTIONS	5
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FIGURES

NO TABLE OF FIGURES ENTRIES FOUND.

APPENDICES

**A P P E N D I X A COMMITTED DEVELOPMENTS IN GUILDFORD BETWEEN
2009 AND 2013**

1 INTRODUCTION

- 1.1.1 This technical note outlines the methodology and details the assumptions for the production of forecast year models aimed at assessing the impact and potential mitigation measures associated with the new development at the former Wisley airfield site. It has been agreed with SCC that the future year of 2031 will be assessed.
- 1.1.2 The assessment will be undertaken based on the 2009 and 2013 SINTRAM models refined and revalidated in the Wisley study area. The details of this can be found in the Local Model Validation Report, September 2015, and in the 2013 Forecasting Note, September 2015.

2 FORECAST SCENARIOS

- 2.1.1 To test the Wisley development four forecast year models, Scenario A, Scenario B, Scenario C and Scenario D for 2031 AM average peak period hour (07:00-10:00) and PM average peak period hour (16:00-19:00) will be developed.
- 2.1.2 To assess the Wisley development and potential mitigation measures four scenarios will be considered as follows:
- Scenario A: takes into account background growth and committed development within and outside of Guildford borough but not the Wisley development. There will be no allowance for the Guildford Local Plan growth.
 - Scenario B: based on Scenario A plus Wisley development and access infrastructure:
 - Spine road through the development
 - Signalised junction onto Ockham Interchange
 - Signalisation of Ockham Interchange
 - Priority junction onto Old Lane
 - Scenario C: based on Scenario B plus mitigation:
 - Restriction of traffic flow to one way working along Old Lane
 - Roundabout at Forest Road/Horsley Road/Old Lane junction
 - Improved scheme of signalisation at M25 Jct 10
 - Scenario D: based on Scenario C plus additional transport interventions to test if they are required to mitigate the impacts of the Wisley development:
 - Plough Lane Closure
 - Ockham Lane Closure
 - Restriction of traffic flow to one way working along Guileshill Lane.
- 2.1.3 It is important that the correct quantum and location of development and associated infrastructure is included in the transport model used for the assessment of the Wisley development. The assumptions associated with each of the scenarios are detailed further in the document.

3 SCENARIO A ASSUMPTIONS

- 3.1.1 Scenario A takes into account background growth and committed development within and outside of Guildford borough but not the Wisley development or Guildford Local Plan development.
- 3.1.2 Scenario A will be built from 2013 forecast year model, which includes all committed developments in Guildford between 2009 and 2013 as detailed in Appendix A. 2013 scenario development has been fully described within the 2013 Forecasting Note, September 2015
- 3.1.3 To produce 2013 – 2031 car growth for Scenario A factors derived from TEMPRO v.6.2 will be applied. The full TEMPRO growth will be adjusted downwards to exclude Guildford Local Plan development as summarised in Table 3-1:

Table 3-1: Quantum of Local Plan Development in Guildford

AREA CODE	TOTAL HOMES	A	B1	B8	C (HOTEL)	D	TOTAL JOBS
A	1435	3,684	872	10	105	123	4,794
B	1304	737	760	338	-	97	1932
C	1500	221	1296	251	-	-	1767
D	-	-	-	-	-	31	-
H	5265	147	848	87	-	158	1,240
G		74	50	-	-	-	124
I	1275	-	1200	463	-	-	1663
F	225	-	211	54	-	196	461

Source: "Guildford borough draft Local Plan Item 3(2a) – Appendix 2 policies 201 to 123, May 2014"

- 3.1.4 Car growth factors will also be adjusted to take into account the changes in income and fuel prices and their impact on the volume of car trips as detailed in DfT's WebTAG.
- 3.1.5 Growth in goods vehicle traffic will be calculated based on the 2015 Road Traffic Forecasts (RTF) published by the DfT (Scenario 1).

3.2 TRANSPORT NETWORK

- 3.2.1 All four of the scenarios will include completed infrastructure improvements around the study area. These improvements are:

- Hindhead Tunnel
- M25 widening between junction 16 – 23 and junction 27 – 30
- Conversion of Royal Surrey County Hospital roundabout to signals
- Link road at Cobham services to enable a U-turn on the M25
- Sheerwater Link Road

4 SCENARIO B ASSUMPTIONS

4.1.1 Scenario B is based on Scenario A plus Wisley development with access infrastructure. This infrastructure will include:

- Spine road through the development
- Signalised access onto Ockham Interchange
- Signalisation of Ockham Interchange
- Priority junction access onto Old Lane

4.2 DEVELOPMENT PROPOSALS

4.2.1 The Wisley site development proposals are residentially-led with ancillary facilities, intended to serve many of the needs of the proposed community. It is proposed the development would include employment, local shops and a primary school. Whilst the proposals have not been finalised, at this stage it is anticipated that they comprise:

- 2,068 residential dwellings (mixed tenure and type) – 100% external
- B1 employment, offices (approximately 1,790sqm) –100% external minus 20% internal
- B2/B8 employment (approximately 2,500sqm) - 100% external minus 20% internal
- A3-A5 Retail, Food and Drink (2,240sqm) - 75/25 internal/external
- Primary School (probably a two form entry (2FE)) 300 pupils-100% internal
- Secondary School (Probably 4 FE) 500 pupils – 50/50 internal/external
- Community Centre (included in Primary School) -100% internal
- Health Centre -100% internal
- 2x Nursery schools - 100% internal
- Outdoor spaces Land Uses-100% internal

TRIP GENERATION

- 4.2.2 Trip rates have been agreed with SCC/HA as part of the TA scope. Whilst there will be a number of land uses within the site boundary, the only land uses likely to generate a net increase in external trips are the residential and employment elements of the development proposals.
- 4.2.3 Table 4-1 shows the AM peak and PM peak hour vehicular Car/LGV and HGV trip rates that will be applied to Wisley development.

Table 4-1: Vehicular trip rates for proposed development – prior to internalisation of employment trips

VEHICULAR TRIP RATE PER DWELLING OR 100SQM GFA	AM PEAK (0800-0900)			PM PEAK (1700-1800)		
	In	Out	Two-way	In	Out	Two-way
Residential (trips per dwelling)	0.100	0.395	0.494	0.360	0.160	0.520
B1 Employment (trips per 100sqm GFA)	1.414	0.327	1.741	0.206	1.089	1.295
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Secondary School (trips per pupil)	0.138	0.081	0.219	0.023	0.032	0.055

DISTRIBUTION

- 4.2.4 The distribution of development generated vehicular trips are based on 2011 journey to work data for the employment element, and a combination of journey to work data (to account for work related trips) and a simple gravity model (account for other journey purposes) for the residential elements. A summary of the distribution for both residential and employment uses was agreed with SCC/HA as part of the TA scope and is shown in Table 4-2.

Table 4-2: Distribution of development traffic flows

LOCATION		RESIDENTIAL TRIPS	EMPLOYMENT TRIPS
Surrey	Elmbridge	10%	6%
	Epsom and Ewell	1%	1%
	Guildford	34%	43%
	Mole Valley	9%	6%
	Reigate and Banstead	0%	1%
	Runnymede	6%	3%
	Spelthorne	1%	0%
	Surrey Heath	1%	2%
	Tandridge	0%	1%
	Waverley	2%	7%
Woking	22%	13%	
Buckinghamshire		0%	0%
Hampshire		2%	5%
Kent		0%	0%

LOCATION	RESIDENTIAL TRIPS	EMPLOYMENT TRIPS
West Sussex	1%	2%
Berkshire	1%	1%
East Sussex	0%	0%
Inner London	3%	1%
Outer London	6%	4%
East of England	0%	0%
South West	0%	0%
East Midlands	0%	0%
North East	0%	0%
North West	0%	0%
West Midlands	0%	0%
Yorkshire and the Humber	0%	0%
Scotland	0%	0%
Wales	0%	0%
Total	100%¹⁾	100%¹⁾

1) Minor errors due to rounding

4.3 TRANSPORT NETWORK

4.3.1 The traffic model includes onsite infrastructure including a priority junction site access on to Old Lane, a signalised junction access on to Ockham Interchange and a link road through the development. These in addition to the signalisation of Ockham Interchange mentioned above will be used to create Scenario B.

5 SCENARIO C ASSUMPTIONS

5.1 DEVELOPMENT PROPOSALS

5.1.1 Scenario C will use the same development proposals as set out for Scenario B.

5.2 TRANSPORT NETWORK

5.2.1 Scenario C is based on Scenario B plus infrastructure mitigation. This mitigation will include:

- Restriction of traffic flow to one way working along Old Lane
- Roundabout at Forest Road/Horsley Road/Old Lane junction
- Improved scheme of signalisation at M25 Jct 10.

6 SCENARIO D ASSUMPTIONS

6.1 DEVELOPMENT PROPOSALS

6.1.1 Scenario D will use the same development proposals as set out for Scenario B.

6.2 TRANSPORT NETWORK

6.2.1 In Scenario D a number of additional mitigation measures will be tested to check if they are required. These include:

- Plough Lane Closure
- Ockham Lane Closure
- Restriction of traffic flow to one way working along Guileshill Lane.

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