

Client: Richborough Estates and Lone Star Land

Project: OS Parcel 1570 adjoining and west of Chilgrove Drive, and adjoining and north of Camp Road, Heyford Park

> Project No: T19562 Report Title: Highways Proof of Evidence – James Parker

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1.0 Introduction

Qualifications and Experience

- 1.1 My name is James Parker. I am the founding Director of Hub Transport Planning Ltd having established the company in 2006. Hub Transport Planning Ltd is a company based in Birmingham in the West Midlands and undertakes transport-related project work throughout the UK.
- 1.2 I have an honours degree (BSc in Geography) from the University of Sheffield and a postgraduate degree (MSc in Transport Planning and Engineering) from the Institute for Transport Studies at the University of Leeds.
- 1.3 I am a Member of the Chartered Institute of Logistics and Transport and a Member of the Chartered Institute of Highways and Transportation.
- 1.4 I am responsible for managing a wide range of transport projects for both private and public sector clients across the UK. I have worked in the field of transport planning and traffic engineering for over 25 years and my areas of expertise include transport assessments, transport accessibility and sustainability appraisals, traffic engineering, travel plans, and access feasibility studies.
- 1.5 I have represented a variety of both private and public sector clients throughout the planning process, including at Public Inquiries, Local Hearings and Examinations in Public.
- 1.6 Hub Transport Planning Ltd was instructed by Richborough Estates and Lone Star Land in 2019, in relation to their interests in OS Parcel 1570 Adjoining and west of Chilgrove Drive and adjoining and north of Camp Road, Heyford Park.
- 1.7 I am fully familiar with the Appeal site and the surrounding highway network.
- 1.8 The evidence I have prepared for the Appeal is true and I confirm that the opinions expressed are my true and professional opinions on the matters to which they refer.

Scope and Nature of Evidence

- 1.9 The outline application (reference 21/04289/OUT) was submitted to Cherwell District Council (CDC) on 4th April 2022; the application description is "Outline planning application for the erection of up to 230 dwellings, creation of new vehicular access from Camp Road and all associated work with all matters reserved apart from Access".
- 1.10 The application was refused by CDC on 31st March 2023; the Decision Notice issued by CDC contained two Reasons for Refusal (RfR).
- 1.11 The second RfR states:

"In the absence of a satisfactory unilateral undertaking or any other form of Section 106 legal agreement, the Local Planning Authority is not satisfied that the proposed development provides for appropriate infrastructure contributions or transport mitigation required as a result of the development and necessary to ensure modal



shift to sustainable transport modes and make the impacts of the development acceptable in planning terms, to the detriment of both existing and proposed residents and workers and contrary to policy INF 1 of the Cherwell Local Plan 2015, CDC's Planning Obligations SPD 2018 and Government guidance within the National Planning Policy Framework".

- 1.12 There was no statutory objection from the Local Highway Authority (LHA), Oxfordshire County Council (OCC), to the proposed development.
- 1.13 The Committee Report for the application sets out OCC's response to the application, concluding as follows:

"Assessment

9.57. The applicants provided a Transport Assessment as part of the submission of the proposed development. Oxfordshire County Council as Local Highway Authority (LHA) has been consulted on the application and have considered the submission. The LHA does not have an objection to the proposal; however, this is subject to a S106 contribution relating to highway works, public transport services, travel plan monitoring, an obligation for a S278, and conditions.

Conclusion

9.58. It is considered that the proposed development would not have a negative impact on the road network given the comments from the LHA.

9.59. On this basis, the proposal is considered acceptable in highway terms and compliance would be possible with the above planning policies."

- 1.14 It should be noted that there was also no statutory objection to the application from National Highways (NH).
- 1.15 In respect of the second RfR, my evidence addresses the infrastructure contributions/transport mitigations as set out in the OCC Regulation 122 Compliance Statement and demonstrates that the proposed development is acceptable, in line with the view taken by both OCC and NH, at application stage.
- 1.16 My evidence also addresses comments raised by a Rule 6 party, Dorchester Living, in their Statement of Case (SoC) prepared by Pegasus Group and dated 21st September 2023; and by Mid Cherwell Neighbourhood Plan Forum (MCNPF), in their SoC dated 20th September 2023, albeit I understand that MCNPF have since withdrawn from the Appeal process as a formal Rule 6 party.
- 1.17 Notwithstanding the content of this proof, it should be noted that I reserve the right to respond to any new evidence on highways submitted during the Appeal process.
- 1.18 Finally, my evidence will conclude that there are no sound transport or highways reasons why the proposed residential development should not be delivered.



2.0 Site Context

Site Location and Local Facilities

- 2.1 The site is located to the east of Upper Heyford and borders the approved Heyford Park sustainable urban extension (SUE) on the former RAF airfield site.
- 2.2 The site is bounded by Camp Road to the south, Chilgrove Drive to the east, the proposed commercial development area of the Heyford Park development to the north, and the recently approved Pye Homes residential development site to the west.
- 2.3 A site location plan is shown on **Figure H1**.
- 2.4 The context of the site in relation to the Heyford Park development and local facilities is shown on **Figure H2**.
- 2.5 The local facilities in the vicinity of the site are set out in the table below.

Facility	Distance		
Heyford Park School	800m		
455 Bar & Bowling	805m		
Baton Restaurant	830m		
Sainsbury's Local	850m		
Heyford Bike Service & Repair/Spokes Coffee	900m		
Heyford Smiles Dental Clinic	900m		
Heyford Park Innovation Centre	1200m		
Heyford Park Community Centre/Shop	1200m		
Heyford Park Chapel	1250m		
Heyford Park Gym	1700m		
Heyford Park Nursery	1700m		

(Distances shown from centre of site)

- 2.6 The site is sustainably located, within a comfortable walking and cycling distance of Heyford Park local centre and the future employment development.
- 2.7 In recent correspondence with OCC, they requested that a 'Pedestrian and Cycle Access Plan' be provided, to be attached to the S106; during those discussions, OCC also requested that the cycle provision within the scheme be extended to connect through the POS and into the adjacent Pye Homes site.
- 2.8 The appellant has also agreed with BDW (who are taking the Pye scheme forward) to provide an additional pedestrian connection into their scheme.
- 2.9 The Pedestrian and Cycle Access Plan is shown on **Figure H3**.



Public Transport

- 2.10 In respect of public transport, the no. 25 bus route serves Camp Road on an hourly basis at present and contributions have been agreed with the appellant to help support and enhance the route, in order to provide a frequency of up to four buses per hour between Heyford Park and Bicester.
- 2.11 OCC's strategy for the area is for the no. 25 bus route to be enhanced by developer contributions in order to provide an *"attractive, credible alternative to car use and to help attain a high modal share for sustainable transport from new developments in the area"*.
- 2.12 The agreed contribution for the appeal site is set out in OCC's Regulation 122 Compliance Statement which is detailed in Section 3.0 of my evidence.
- 2.13 Bus route no.25 connects directly with Bicester Village Rail Station, which provides two direct trains per hour to both Oxford and London Marylebone, from early morning until late at night.
- 2.14 The train journey to Oxford takes approximately 20 minutes, and to London Marylebone approximately 1 hour.
- 2.15 It is worth noting that OCC did not object to the proposed development site in respect of sustainability.



3.0 OCC Regulation 122 Compliance Statement

Introduction

- 3.1 In this section of my evidence, I will address the infrastructure contributions/transport mitigations that are set out by OCC in their Regulation 122 Compliance Statement.
- 3.2 The background to the transport contributions is set out in section 5.2 of the OCC statement, whilst sections 5.3 to 5.12 set out the relevant contribution amounts.

OCC Statement

3.3 At paragraphs 5.2.3 and 5.2.4, OCC state that:

"For the smaller application sites within PV5, it has been agreed that they should make a proportionate financial contribution. With the exception of the public transport contribution, which is based proportionately on dwellings, the contribution amounts have been calculated on a trip generation basis, taking into account the employment element of PV5, by predicting the expected morning peak hour vehicle trip generation for each site (it is the morning peak that creates most pressure on the network).

Assuming the same residential trip generation rate as agreed for the main application, the site would generate 135 am peak vehicle trips, compared to the total am peak trip generation of 1,550 passenger car units for PV5."

- 3.4 In response to the above, it should be noted that the principle of a proportional financial contribution to the PV5 mitigation package of works was agreed with OCC in July 2022, following submission of the Transport Assessment (TA) report for the appeal site.
- 3.5 The email correspondence confirming agreement to a financial contribution is provided as **Appendix H1**.
- 3.6 At section 5.3, OCC set out a highway works contribution of £1,682,237 (index-linked) towards a package of works, as follows:

"• New signalised junction of Camp Road/unnamed road/Chilgrove Drive – location labelled A on the map above

- Traffic calming and ped/cycle facilities on Camp Road labelled B
- Off carriageway cycle route on unnamed road linking Camp Road to the B430, plus signalisation of the junction with the B430 labelled C
- Signalisation of the junction of the B430 and Ardley Road in Ardley labelled D
- Capacity improvements at the junction of the A4260 and B4030 labelled E

It also requires the construction of a new loop road linking Chilgrove Drive back into the existing development north of Heyford Village Centre. This is required to relieve HGV traffic through Heyford Village Centre and to allow the development to be served by the new bus service. This is labelled F and G on the map."

3.7 The map indicated above is also included within **Appendix H1**.



- 3.8 In response to the above, I consider that this contribution is fairly and reasonably related to the Appeal site.
- 3.9 At section 5.4, OCC set out a bus service contribution of £453,155 (index-linked), which is required to *"provide an acceptable public transport level of service to and from Heyford Park, offering a credible alternative choice of mode to the private car."*
- 3.10 In response to the above, I consider that this contribution is fairly and reasonably related to the Appeal site.
- 3.11 At section 5.5, OCC set out a cycle route contribution of £84,374 (index-linked), which is required to *"allow OCC to upgrade an existing bridleway linking the A4095 at Bicester and the B430 north of Middleton Stoney, to provide a surface suitable for year-round cycling, and including a commuted sum for maintenance over a 20-year period."*
- 3.12 In response to the above, I consider that this contribution is fairly and reasonably related to the Appeal site.
- 3.13 At section 5.6, OCC set out a village traffic-calming contribution of £57,704 (index-linked), which is required to address cumulative impacts of the Appeal site alongside the PV5 allocation that will result in *"likely environmental impacts requiring mitigation by traffic calming or measures of similar benefit."*
- 3.14 In response to the above, I consider that this contribution is fairly and reasonably related to the Appeal site.
- 3.15 At section 5.7, OCC set out a Middleton Stoney Mitigation Contribution of £99,455 (index-linked), which is required to address cumulative impacts of the Appeal site alongside the PV5 allocation *"on the route of the bus service linking Heyford Park and Bicester. A contribution is required to enable OCC to deliver a scheme to improve the reliability of the bus service which would likely be used by residents to access Bicester and the A34."*
- 3.16 In response to the above, I consider that this contribution is fairly and reasonably related to the Appeal site.
- 3.17 At section 5.8, OCC set out an M40 J10 Contribution of £308,508 (index-linked), which is required to address the cumulative impacts of the Appeal site alongside the PV5 allocation due to a *"predicted significant increase in congestion at M40 J10, in particular causing a safety hazard due to slip road queues extending back onto the main line of the motorway."*
- 3.18 In response to the above, I consider that this contribution is fairly and reasonably related to the Appeal site.
- 3.19 At sections 5.9 and 5.10, OCC set out Safety Improvement Contributions of £6,630 and £7,139 (both indexlinked), which are required to address cumulative impacts of the Appeal site alongside the PV5 allocation due to *"a significant increase in turning movements"* at the crossroads junction of the A4026 and the road through North Aston and Duns Tew, and at the staggered junction of the A4026 and B4027, which exacerbate the risk of collisions.
- 3.20 In response to the above, I consider that this contribution is fairly and reasonably related to the Appeal site.



- 3.21 At section 5.11, OCC set out a Local Weight Restrictions Contribution of £5,892 (index-linked), which is required to address cumulative impacts of the Appeal site alongside the PV5 allocation *"on congestion and bus reliability at the crossroads junction of B320 and B4030 in Middleton Stoney."*
- 3.22 In response to the above, I consider that this contribution is fairly and reasonably related to the Appeal site.
- 3.23 Finally, at section 5.12, OCC set out a Travel Plan Monitoring Contribution of £1,558 (index-linked), which is required to allow OCC to regularly review the Travel Plan for the Appeal site.
- 3.24 In response to the above, I consider that this contribution is fairly and reasonably related to the Appeal site.

Summary

- 3.25 The principle of a financial contribution to mitigate the cumulative impacts of the Appeal site, alongside the wider PV5 allocation, has been agreed with OCC since July 2022.
- 3.26 As set out above, OCC's statement sets out the latest position in respect of the requested contributions; all of which I consider to be fairly and reasonably related to the Appeal site.
- 3.27 The statutory consultee has no objection to the scheme, subject to the obligations set out above. I am advised that the views of the statutory consultee are to be given *"great"* or *"considerable weight"* and that departure from those views requires *"cogent and compelling reasons"*. (See, for example: Shadwell Estates Ltd v Breckland DC and Pigeon (Thetford) Ltd, para. 72; Visao v Secretary of State [2019] EWHC 276 (Admin) at paragraph 65; Swainsthorpe Parish Council v Norfolk CC [2021] EWHC 1014 (Admin) at [70]).
- 3.28 Notwithstanding the above, as set out in Sections 3.0 and 4.0 of my proof, in addressing comments raised by Dorchester Living (as a Rule 6 party), I have undertaken further traffic capacity analysis at a number of junctions across the highway network.



4.0 Rule 6 Parties

Introduction

4.1 In this section of my evidence, I will primarily address the issues raised by Dorchester Living (DL) in their Statement of Case (SoC) under the heading of:

Issue 2 Traffic and Transportation

4.2 In addition, I will also address some of the issues raised by DL under the headings of:

Issue 3 Accessibility and integration of new development

and

Issue 4 Infrastructure

- 4.3 Section 6 of the DL SoC states that written evidence will be prepared in advance of the Inquiry, in respect of 'Traffic and Transportation including infrastructure provision/mitigation', by Mr David Frisby.
- 4.4 I have therefore understood that the case set out in Section 7 of the DL SoC, regarding Issue 2 above, has been provided by Mr Frisby.
- 4.5 However, prior to addressing the issues, it is important to set out the chronology of the DL response to the appeal site proposals, which I have provided below.
- 4.6 In addition to the above, I will also address the issues raised by Mid Cherwell Neighbourhood Plan Forum (MCNPF) in their SoC dated 20th September 2023.

DL Chronology

Application

- 4.7 DL responded formally to the planning application for the appeal site on 6th May 2022, and included within that response a Technical Note undertaken by Stantec on 29th April 2022, which was a review of the Transport Assessment (TA) report that supported the application.
- 4.8 It is worth noting that Stantec largely agreed with the methodology and parameters used for the assessment work undertaken in the TA report, on the basis that it followed that used for the PV5 allocation.
- 4.9 In addition, it is important to highlight paragraph 3.9 of that technical note which states:
 - 3.9. A review of the proportional impact of the development has been undertaken which has demonstrated that traffic impacts are less than 1% at 14 of the junctions tested. No further testing of these junctions was undertaken which is considered appropriate.



4.10 Therefore, at the time of the application, DL's view was that a 1% threshold to determine testing of junctions across the highway network in the TA was appropriate.

DL SoC

- 4.11 As set out in detail below, the DL SoC dated 21st September 2023, sets out a response to the transport work undertaken for the application by stating that the 1% threshold is now *"wholly unwarranted"*.
- 4.12 The DL SoC subsequently states that three junctions should have been tested; those being the A4260/B4030 (Hopcrofts Holt), Chilgrove Drive/B430/Unnamed Road signals, and Ardley Road/B430 signals. These are identified as junctions 17, 24 and 25 in the DL SoC.
- 4.13 Whilst, as I set out below, we did assess the Chilgrove Drive signals scheme in the TA report, it is clear from the DL SoC that they take issue with a lack of assessment at two further junctions. One of these the Ardley Road/B430 signals was also raised by Stantec as not having been assessed in their technical note response to the application on behalf of DL.
- 4.14 Stantec did not raise an issue regarding the Hopcrofts Holt junction, as they had accepted the testing threshold parameter.
- 4.15 Following the preparation of the DL SoC, in an effort to seek common ground with DL, I had a call with Mr Frisby who subsequently sent through an email dated 4th October 2006 listing a further set of requirements, over and above those set out in the DL SoC; that email and my response to the issues raised within, is included as **Appendix H2**.
- 4.16 It is worth highlighting that the additional request now made on 4th October was that the assessment work for the Appeal should now include *"junctions where Dorchester have an impact (for ease please see the attached junction locations highlighted in red) and be assessing those for completeness".*
- 4.17 The junction plan sent through now included an additional five junctions that Mr Frisby considered should be assessed.
- 4.18 Notwithstanding the above, in order to seek to agree common ground with Mr Frisby, I have agreed to undertake the additional analysis requested; however, in an email dated 16th October 2023 (also included in Appendix H2), Mr Frisby then asked whether a cumulative assessment was also being undertaken with the committed developments and schemes in place.
- 4.19 Essentially, it is quite clear from the above chronology, that DL and their consultants have sought to undertake a 'fishing exercise' in respect of the assessment work needed to placate their objection; in particular, it is clear that as soon as a request from Mr Frisby has been agreed to, the goalposts immediately move with another request.
- 4.20 The DL SoC requested that three junctions be assessed (of which one was already done); the subsequent email correspondence requested a further five junctions within the context of the absence of the committed PV5 allocation and mitigation; the next correspondence then added in a cumulative assessment of all of those junctions, i.e. with the committed PV5 allocation and mitigation.



- 4.21 Notwithstanding this, I have sought to undertake additional assessment work in line with the requests made, such that common ground can be established with DL.
- 4.22 It is of note that whilst DL questions some of the information provided by the Appellant, it has not produced any positive evidence of its own in respect of highway impacts, and it was confirmed in the CMC that it would not be placing any such evidence before the Inquiry.
- 4.23 I now turn to the specific issues raised in the DL SoC by Mr Frisby.

Issue 2 Traffic and Transportation

Junction Capacity Assessment

4.24 At paragraph 7.16, Mr Frisby states that:

"The Appellant has used trip rates, distribution and traffic modelling methodologies in line with the wider allocated and consented masterplan at Heyford Park, which demonstrates a consistent approach to the assessment of transport impacts."

- 4.25 At paragraph 7.17, Mr Frisby sets out a list of 26 junctions; 25 of which are the same highway network junctions considered as the study area for the transport assessment work that supported the wider Heyford Park development site (as per the consistent approach noted by Mr Frisby in paragraph 7.16), plus the site access junction for the Appeal site.
- 4.26 At paragraph 7.18, the Mr Frisby states:

"However, the Appellant applies a wholly unwarranted sifting approach and discounted detailed assessment of 14 of those junction based on traffic impact of below 1.0% in both peak hours. Whilst this may on the surface seem like a reasonable approach, such an approach was removed from best practice a number of years ago because the approach does not consider the sensitivity of the junction or if other applications are to deliver mitigation at these 14 junctions and what impacts the Appellants development may have on them and the timing of their delivery."

- 4.27 In response to the above, it is worth highlighting that undertaking a proportional impact analysis for the Appeal site was simply a continuation of the *"consistent approach"* referred to by Mr Frisby at paragraph 7.16.
- 4.28 Either Mr Frisby is unaware of, or simply ignoring, the assessment that was undertaken by Peter Brett Associates (PBA) on behalf of DL, within the TA that supported their planning application for the wider Heyford Park development site.
- 4.29 The relevant section of the PBA TA report is Section 7, and I have included this as **Appendix H3**.
- 4.30 However, it is worth highlighting the first paragraph of that section of the PBA TA report which is shown below:



- 7.1.1 The proportional impact of the development on the junctions within the study network, identified in Section 6.3, is demonstrated in the tables below. Any junction at which the development is considered to have a significant impact required further capacity testing. It was considered that junctions with an increase in flows due to the development of 10% on a single arm, or an increase in flows of 5% on the junction as a whole, required further capacity testing. This approach was agreed with OCC at a meeting on the 11th May 2017. The arms and junction totals that exceed these thresholds have been shown in red in the tables below, highlighting the need for further capacity testing.
- 4.31 It is clear from the above that PBA used a 10% single arm threshold, or a 5% whole junction threshold, when considering which junctions within the study area warranted further capacity testing.
- 4.32 The TA undertaken for the Appeal site, to which neither OCC nor NH had a statutory objection, nor DL previously objected to, used a far more robust 1.0% threshold; had the exact same approach been taken as per the PBA TA report, of the junctions listed in paragraph 6.9 of the TA report for the Appeal site, only Junctions 11 (B430/Unnamed Road) and 25 (Camp Road/Chilgrove Drive) would have warranted further capacity testing, in addition to the proposed site access junction.
- 4.33 The TA undertaken for the Appeal site tested nine junctions across the highway network based on the more robust 1.0% threshold.
- 4.34 Notwithstanding the above, a response is also warranted in respect of the statement Mr Frisby makes regarding best practice, where he states:

"Whilst this may on the surface seem like a reasonable approach, such an approach was removed from best practice a number of years ago...".

- 4.35 Although not explicitly stated, Mr Frisby is making reference to the Institute for Highways and Transportation (IHT) *'Guidelines for Traffic Impact Assessment'* (1994), which set out percentage impact thresholds below which assessment wasn't required.
- 4.36 This approach was subsequently updated by the Department for Transport (DfT) in 2007, in their *'Guidance on Transport Assessment'* document, where they stated the following at paragraph 4.92:
 - 4.92 If the TA confirms that a development will have material impact on the highway network, the level of impact at all critical locations on the network should be established. A particular example of material impact would be a worsening of congestion. In congested areas, the percentage traffic impact that is considered significant or detrimental to the network may be relatively low (possibly below the average daily variation in flow), and should have been determined in discussions with the relevant highway authorities. For the avoidance of doubt, the 1994 guidance regarding the assessment thresholds of 10 per cent and 5 per cent levels of development traffic relative to background traffic is no longer deemed an acceptable mechanism, since it creates an incentive in favour of locating development where high levels of background traffic already exist.
- 4.37 More recently, in March 2014, the DfT updated their guidance on transport assessment work, which I have attached as **Appendix H4**; with relevant extracts set out below:



Local planning authorities must make a judgement as to whether a development proposal would generate significant amounts of movement on a case by case basis (ie significance may be a lower threshold where road capacity is already stretched or a higher threshold for a development in an area of high public transport accessibility).

The need for, scale, scope and level of detail required of a Transport Assessment or Statement should be established as early in the development management process as possible as this may therefore positively influence the overall nature or the detailed design of the development.

It is important to give appropriate consideration to the cumulative impacts arising from other committed development (ie development that is consented or allocated where there is a reasonable degree of certainty will proceed within the next 3 years). At the decision-taking stage this may require the developer to carry out an assessment of the impact of those adopted Local Plan allocations which have the potential to impact on the same sections of transport network as well as other relevant local sites benefitting from as yet unimplemented planning approval.

- 4.38 What the above guidance essentially advises is that judgment is required regarding the significance of traffic flows associated with any proposed development site, but that the parameters for assessment should be agreed with the LHA (in this case OCC) as early as possible; having set this out within the TA report for the Appeal site, both the parameters for assessment and the thresholds for further assessment were agreed with OCC (and subsequently NH who also offered no objection to the application).
- 4.39 The guidance also advises that consideration must be given to cumulative impacts of other committed development this was undertaken within the TA for the Appeal site, on the basis that we utilised the Bicester Transport Model (BTM) Reference Case, which also includes the embedded mitigation associated with the committed development, as is normal practice within such strategic modelling.
- 4.40 Although Mr Frisby accepts in the DL SoC that this represents a consistent approach to the transport assessment work, the suggestion is made that that the use of a 1.0% junction impact threshold is *"wholly unwarranted"* and not *"best practice"*; despite, of course, the DL application for the wider Heyford Park site using a 5% junction impact threshold, as set out above.
- 4.41 My view is that *"best practice"* essentially requires discussion and agreement with the relevant highway authority regarding the parameters used for any transport assessment work, and that such discussions are ongoing during the consultation process post-submission.
- 4.42 The reason why I chose to use a 1% threshold to inform the transport assessment work for the application, was to ensure that a robust assessment of the development proposals was undertaken in terms of the traffic impact, particularly given the wider development coming forward. The 1% threshold is significantly lower than the



widely accepted normal daily variation in traffic flow across highway networks of up to 10%, and this figure would not have been agreed by the highway authority if it was not a reasonable and robust figure.

- 4.43 However, I have also considered how Mr Frisby's practice, Mode Transport Planning Ltd (of which he is the founding Director), approach transport assessments.
- 4.44 I have attached extracts from some Mode TAs as **Appendix H5**; it should be noted that these have been undertaken after March 2014, i.e. post the DfT update to the TA guidance.
- 4.45 The Keresley TA extract is email correspondence in late 2018 between Mode and Coventry City Council (as LHA) regarding the parameters for the transport assessment.
- 4.46 It is worth noting the statement on Page 3 of that email chain, from Mode to the LHA, as follows:

Following on from my email from last week and our recent receipt of the CASM V/C plot maps from WSP, we have now identified the scope of junctions that will be assessed as part of the Bellway 550 dwellings DS1 scenario – please see attached a plan which illustrates the junctions that we will assess within our TA; these are also listed below, for your reference:

- 1 Tamworth Road / Fivefield Road priority junction;
- 2 Tamworth Road / Long Lane 3-arm roundabout;
- 3 Long Lane / Brownshill Green Road / Coundon Wedge Road / Wall Hill Road 4-arm roundabout;
- 4 Bennetts Road S / Penny Park Lane priority junction;
- 5 Bennetts Road S / Watery Lane priority junction; and,
- 6 Bennetts Road / Fivefield Road priority junction.

These junctions were selected and considered relevant, by reviewing and analysing the data that has come out of the CASM model outputs. The V/C plot maps (DM and DS1 outputs appended for reference) demonstrate that the links surrounding the site will experience a negligible increase as a result of the development proposals. However, we have chosen the junctions in the vicinity of the site in which the development generates a meaningful level of traffic through (using the development traffic flow bundles).

- 4.47 The Mode approach to the traffic thresholds in their initial assessment at Keresley was to choose *"junctions in the vicinity of the site in which the development generates a meaningful level of traffic through"*.
- 4.48 There was no definition set out in respect of what this statement actually means in real terms, nor any consideration of the sensitivity of the adjacent highway network, the latter of which Mr Frisby is now suggesting is fundamental to the acceptability of the Appeal site.
- 4.49 In fact, having undertaken the TA work for two Keresley development sites immediately adjacent to the site that Mode prepared their assessment for, I can confirm that the Coventry Area Strategic Model (CASM) uses specific thresholds to determine the Area Of Influence (AOI), i.e. scope of assessment, as follows:



The criteria applied to identify the network which falls within the AOI are as follows:

- Links which witness an increase or decrease in flow greater than 5 percent and more than 15 vehicle flow difference; or
- Links which witness a change in AADT traffic flows exceeding 200 vehicles.
- 4.50 Therefore, Mr Frisby's firm used a strategic model with a 5% link threshold parameter to define further assessment, but he is now questioning the use of a similar approach, at a much lower threshold of 1.0%, for the Appeal site.
- 4.51 In respect of the Mode TA for 'Land at Bow Farm, Ripple' (November 2019), Table 6.5 sets out a direct impact assessment of the likely morning and evening commuter periods, as shown below:

Table 6.5: A38 Weekday Traffic Flows (including Staff Movements) and Percentage of Total

Direction	AM (06:00 – 07:00)	PM (18:00 – 19:00)		
Northbound	249 (4%)	427 (2%)		
Southbound	165 (6%)	821 (8%)		
Two-way	414 (4.8%)	748 (2.7%)		

- 4.52 The TA report then states at paragraph 6.4.6 that "The introduction of these staff movements onto the local highway network is minimal in comparison to the existing total traffic flows along the A38. The staff movements will implement an insignificant increase of traffic flows onto the local highway network during the proposed commuter hours."
- 4.53 The summary then states:

6.5 Summary

- 6.5.1 Overall, the proportion of proposed HGV development traffic and staff movements in comparison to the total traffic flows along the A38 is negligible. When this is coupled with 90% of HGV development traffic expected to utilise the motorway network, no adverse safety or capacity impacts are expected to arise as a result of the introduction of the proposed quarry at Land at Bow Farm.
- 4.54 Finally, in respect of the Mode TA for 'Airfield House, Former Long Marston Airfield' (September 2020), I have included extracts from Chapter 7 of that report as this relates to their 'Network Assessment'.
- 4.55 The relevant paragraphs are set out below:
 - 7.6.8 The level of development traffic impact should be considered in context to the WebTRIS data outlined above. The highest concentration of additional trips are forecast along the link to the east of Billesley Crossroads during the AM peak. The closest A46 link to this location for which obtainable data is held within the WebTRIS database, is the section to the west of the A46 / A435 roundabout. The 10 additional two-way trips forecast along the A46 to the east of Billesley equates to circa 1% of the average two-way



flows recorded along the section to the west of the A46 / A435 during the 2031 Reference Case + Development Scenario.

7.6.9 Overall, the development proposals are unlikely to have a material impact on the operation of the modelled links of the A46, when comparing the 2031 Reference Case + Development and 2031 Reference Case scenarios.

and

- 7.7.12 Overall, the greatest impact recorded for northern settlements is in the village of Clifford Chambers. The resultant increase in two-way vehicle flows associated with the proposed development and LMA Bare are 6% of the 2031 Reference Case baseline flow and equate to circa 1.5 additional vehicles per minute on the network. It is therefore considered that the proposed development and the forthcoming application at LMA Bare Land are unlikely to have a significant impact on the settlements situated to the north of the site.
- 7.7.25 Overall, the resultant increase in two-way vehicle flows associated with the proposed development and LMA Bare are 6% of the current baseline flow and equate to circa 1 additional vehicles per 2 minutes on the network. It is therefore considered that the proposed development and the forthcoming application at LMA Bare Land are unlikely to have a significant impact on the settlements situated to the south of the site.
- 4.56 Again, it is clear from the above two examples that Mr Frisby's firm has used and relied upon impact threshold analysis of between 1% and 6% in order to determine that no further assessment is necessary, and that development traffic will not have a material impact on the operation of the highway network in the vicinity of those sites.
- 4.57 Yet Mr Frisby advises that a similar approach for the Appeal site is "wholly unwarranted" and not "best practice".
- 4.58 At paragraph 7.20, Mr Frisby states that the TA undertaken for the Appeal site has not made assessment of junctions 17 (A4260/B4030 (Hopcrofts Holt)), 24 (Chilgrove Drive/B430/Unnamed Road) and 25 (Ardley Road/B430).
- 4.59 This is not correct; the TA report for the Appeal site clearly sets out the assessment work for junction 24 (the Chilgrove Drive junction with Camp Road and the Unnamed Road) between paragraphs 6.16 and 6.27, with the results of the analysis set out in Tables 7 and 8; demonstrating that the junction will remain within capacity with the traffic from the Appeal site on the highway network.
- 4.60 In respect of junction 17, the TA report set out that the development traffic impact at this junction is 0.23% in the AM peak hour and 0.30% in the PM peak hour; as such, assessment was not considered warranted.
- 4.61 In respect of junction 25, the development traffic impact just to the north of this junction was 0.55% in the AM peak hour and 0.10% in the PM peak hour; as such, assessment was not considered warranted.
- 4.62 However, notwithstanding the approach taken in the TA report, on the basis of seeking to agree common ground with Mr Frisby, Section 4.0 of my evidence sets out capacity analysis of both of these junctions.



- 4.63 At paragraph 7.21 of the SoC, Mr Frisby states that if it can be demonstrated that the mitigation identified by others is sufficient to accommodate the traffic associated with the Appeal site, then it would be expected that the *"Appellant would at least be making a proportionate contribution to the delivery of those measures and calculated on a pro-rata basis based on overall housing numbers and their associated vehicular trip generation as part of the wider PV5 allocation."* it should be noted that the Appeal site is doing exactly that, as set out in the OCC Regulation 122 Statement.
- 4.64 Mr Frisby also suggests that the Appeal scheme would need to be held back until such time as the mitigation was in place I do not accept that this is necessary and the analysis in Section 4.0 of this report demonstrates why this is the case.
- 4.65 At paragraph 7.22, Mr Frisby states that the approach of the TA for the Appeal site has been to take a *"salami-sliced approach"* to the analysis I do not accept that this is the case on the basis that the TA approach was agreed with both OCC and NH, and analysis undertaken that subsequently confirmed that the embedded mitigation on the highway network could accommodate the additional development traffic, following which it was agreed that the Appeal site would contribute proportionately to that mitigation.

Access Junction

- 4.66 Turning to the site access junction, at paragraph 7.26, Mr Frisby states that Camp Road has been *"subject to the greatest number of accidents in the most recent 5-year period (2016-2021). Of a total of 20 accidents, Camp Road has experienced a quarter of them."*
- 4.67 Mr Frisby then states that OCC guidance requires a Stage 1 Road Safety Audit (RSA) and that the absence of an independent RSA *"where there has been a significant incident of accidents"* is unusual.
- 4.68 Taking each of these points in turn; Mr Frisby is suggesting that 5 accidents in a 5-year period along a road is *"a significant incident of accidents"*.
- 4.69 This is less than 1 accident per year on average along a road that is just over 2km in length through the centre of Heyford Park.
- 4.70 Notwithstanding this, it is worth noting the extracts below from the previously mentioned Keresley TA undertaken by Mr Frisby's practice:
 - 3.5.5 In total, 25 accidents were recorded within the study area between 15/01/2014 and 27/05/2018. 19 of the incidents that occurred were of a 'slight' severity; whilst 6 of the accidents were classified as 'serious'.
 4 of the 'slight' accidents that took place involved pedestrians and a further 2 highway incidents involved oyolists; one of which was categorised as 'serious'.
 - 3.5.14 It is considered that given the low level of accidents recorded over the study period and lack of a common design cause for accidents that are clustered or within the vicinity of the site (i.e. no accidents were attributable to the existing layout/design of the junctions and/or highway; there will be no requirement for any specific road safety issues to be addressed or mitigated as a part of the development proposals.



- 4.71 The full extract of the accident analysis is provided as **Appendix H6**.
- 4.72 It is clear from the above that Mr Frisby considered 25 accidents to be a *"low level of accidents recorded"* across a five-year period at Keresley; yet considers 5 accidents in a 5-year period to be *"a significant incident of accidents"* in respect of the Appeal site.
- 4.73 Notwithstanding the fact that OCC did not object to the proposed site access junction, in respect of the Stage 1 RSA it is also worth noting that the adjacent Pye Homes scheme also did not undertake this for their site access junction.
- 4.74 In fact, the extract attached as **Appendix H7** from the OCC consultation response (dated 13th December 2022), simply requests that a Stage 1 RSA is undertaken so that the access proposals can be adopted.
- 4.75 The DL response to the Pye Homes application, also included within **Appendix H7**, makes no mention of the lack of a Stage 1 RSA and nor does it state, as set out in their SoC for the Appeal site, that in the absence of such an audit *"it is impossible to determine if the application will or will not result in a safety impact on the surrounding highway network."* There has also been no Highway Authority objection on this basis (the absence of an RSA).
- 4.76 That said, given that I am seeking to agree common ground with Mr Frisby, I have commissioned a Stage 1 RSA; the details of the RSA and my designer's response are provided are set out in Section 5.0 of my evidence.

LPA Reason for Refusal 2

- 4.77 At paragraph 7.30, Mr Frisby states that the Appeal site will benefit from sustainable infrastructure proposals relating to the PV5 allocation sites, but that the TA submitted with the application *"makes little reference to, nor does it commit to contribute to, any of this proposed required infrastructure"*.
- 4.78 At paragraph 7.33, Mr Frisby states that it would still be expected for the Appeal site to contribute proportionately to the delivery of those measures, before also stating that the development will need to be held back with Grampian conditions.
- 4.79 I do not accept that the development will need to be held back with Grampian conditions, but rather that appropriate trigger points can be agreed in relation to all of the contributions.
- 4.80 As agreed with OCC, and set out in the OCC Regulation 122 Statement to this Appeal, the Appeal site will contribute proportionately to the delivery of the following infrastructure contributions:
 - A highway works contribution of £1,682,237;
 - A bus service contribution of £453,155;
 - A cycle route contribution of £84,374;
 - A village traffic-calming contribution of £57,704;
 - A Middleton Stoney Mitigation Contribution of £99,455;



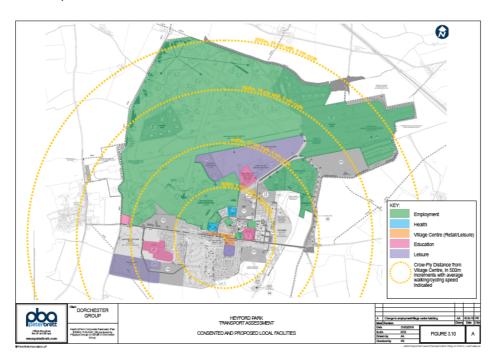
- An M40 J10 Contribution of £308,508;
- Safety Improvement Contributions of £6,630 and £7,139;
- A Local Weight Restrictions Contribution of £5,892;
- A Travel Plan Monitoring Contribution of £1,558.

Issue 3 Accessibility and integration of the new development

- 4.81 At paragraph 7.40, the DL SoC states that, without development to the west, the Appeal site represents an isolated development of 230 dwellings *"with no meaningful connectivity and integration with the new settlement community"*.
- 4.82 At paragraph 7.41, DL recognise that the land to the west of the Appeal site is in the adopted Local Plan, but suggest that even if permission is granted, the latest site layout shows no linkages apart from at the southeastern corner of the site.
- 4.83 At paragraph 7.42, the DL SoC states that the Appeal site has no proposed connections to the west, or to the north, and that the northwestern part of the site is particularly isolated as a result.
- 4.84 In response to the above, my understanding is that the adjacent Pye Homes site is providing a connection at the northeastern corner of that development such that a connection can be made between the two development sites.
- 4.85 However, even without this connection and just using the southeastern corner connection, the distance from the farthest property shown on the illustrative masterplan (within the northwestern part of the site referred to by DL), to the local centre facilities in Heyford Park, is 1.35km.
- 4.86 This is within a comfortable walking and cycling distance (a c.17-minutes by foot or c.5-minutes by cycle).
- 4.87 The route into the centre of Heyford Park is a surfaced and lit route, overlooked by existing residential properties and provides a c.1.2m to 1.5m width along the northern side of Camp Road, plus a c.3.0m wide shared footway/cycleway along the southern side of Camp Road.
- 4.88 As set out in paragraph 2.5 of my evidence, there are a number of facilities in the centre of Heyford Park, including Heyford Park School, 455 Bar & Bowling, Baton Restaurant, Sainsbury's Local, Bike Shop & Repair centre with Café, a Dental Clinic, and Community Centre & Shop, a Chapel and a Gym.
- 4.89 In respect of the sustainability of the site, the Officer's Report to Committee states, at paragraph 9.24, that "...as developed, Heyford Park is becoming one of the most sustainable settlements, along with the two towns of Kidlington. It is one of the four main strategic locations for accommodating growth needs. The existing settlement has a number of existing facilities, including community centre, shops, pharmacy, restaurant, bowling alley, pub, hotel, schools, etc. Additional facilities are proposed in line with the overall Masterplan for the site."
- 4.90 Neither the LPA nor the highway authority take any issue with the sustainability of the site.



4.91 In addition to the above, it is also worth noting the local facilities plan that was prepared for the DL Heyford Park site by PBA, which is provided below and indicates walk and cycle isochrones up to a 24-minute walk (or 2km distance):



4.92 The 2km distance threshold used by PBA is taken from Manual for Streets (MfS) at paragraph 4.4.1, which states that *"walking offers the greatest potential to replace short car trips, particularly those under 2km"*.

Issue 4 Infrastructure

- 4.93 Paragraphs 7.44 to 7.49 of the DL SoC set out the infrastructure and mitigation measures, and their trigger points, in relation to the wider Heyford Park site.
- 4.94 OCC has indicated that the proposed Appeal site is likely to be occupied prior to the delivery of the wider Heyford Park site, hence the need to make a proportional financial contribution to that mitigation.
- 4.95 Therefore, I consider that the only issue in relation to the PV5 mitigation, to which the Appellants accept a contribution is required, is timing/trigger points.
- 4.96 The DL SoC suggests Grampian conditions would be required, otherwise the Appeal scheme would be unacceptable.
- 4.97 I do not agree with this assertion and, as set out in Section 4.0 of my evidence, based on my latest assessment of the proposed development and relating this to the analysis as set out in the TA report that accompanied the application, have suggested appropriate trigger points for the delivery of the PV5 mitigation contributions.



MCNPF SoC

4.98 The MCNPF SoC raises only a single issue regarding traffic, as follows:

4. Impact on surrounding parishes

The impact of an unplanned increase to the population of the NP area not only affects Heyford Park itself, increasing pressure on the infrastructure and limited community facilities. It also affects the surrounding parishes. Rural roads are already impacted by rising traffic volumes which cause significant problems in several of the neighbouring villages.

4.99 The MCNPF statement is that rising traffic volumes cause significant problems across neighbouring villages; however, whilst it does not set out the problems in any detail, I have sought to establish the impact of the proposed development traffic on the villages, based on the manual assignment of development traffic across the highway network that has been used for the additional analysis provided in Section 5.0 of my evidence.

	Development Traffic by Phase								
Village	50 dwellings		100 dwellings		150 dwellings		230 dwellings		
	АМ	РМ	AM	РМ	AM	РМ	AM	РМ	
Ardley	13	10	25	20	38	30	58	47	
Bucknell	0	0	0	0	0	0	0	0	
Caulcott	0	0	0	0	0	0	0	0	
Chesterton	0	0	1	1	1	1	2	2	
Fritwell	0	0	0	0	0	0	0	0	
Kirtlington	1	0	1	1	2	1	3	2	
Lower Heyford *	10	8	19	16	29	23	44	36	
Middleton Stoney	8	6	16	13	23	19	36	29	
North Aston	0	0	0	0	0	0	0	0	
Somerton	0	0	0	0	0	0	0	0	
The Bartons **	1	1	2	2	3	2	4	3	
Upper Heyford ***	10	8	19	16	29	23	44	36	

4.100 The development traffic flows for each village are shown in the table below.

* Traffic via B4030; ** Traffic via Steeple Barton, Wescott Barton and Bartongate; *** Traffic via Camp Road/Station Road.

- 4.101 It is clear from the above table that the traffic flows through the majority of the villages is either negligible or nil.
- 4.102 At Lower and Upper Heyford, the traffic flows pass along the B4030 and Camp Road/Station Road, rather than through the villages themselves, and even at 230 dwellings result in less than one vehicle per minute in either direction during the morning and evening peak hours.



- 4.103 Through Middleton Stoney, the development traffic at 230 dwellings represents approximately one additional vehicle every two minutes in either direction; whilst through Ardley, it represents just below one additional vehicle per minute in either direction, during the morning and evening peak hours.
- 4.104 Notwithstanding the above, as set out in the OCC Regulation 122 Compliance Statement, the development will provide contributions towards the Middleton Stoney junction improvement, the Ardley signalised junction scheme, and the Village Traffic Calming proposals.



5.0 Traffic Capacity Analysis

Methodology

- 5.1 In order to provide further clarification regarding the impact of the Appeal site traffic on the adjacent highway network, this section of my evidence provides further analysis of a number of junctions.
- 5.2 Classified Turning Counts were commissioned at the following junctions and were undertaken on Thursday 7th September 2023:
 - A43/M40 Slip Road/B430 (Ardley Roundabout)
 - B430/Ardley Road
 - Chilgrove Drive/Unnamed Road/Camp Road
 - B430/Unnamed Road
 - B4030/Unnamed Road
 - B4030/B430 Ardley Road signals (Middleton Stoney)
 - B430/A4095
 - A4260/B4030 signals (Hopcrofts Holt)
 - A4260/Somerton Road/N Aston Road
- 5.3 The count data is provided as **Appendix H8** to my evidence.
- 5.4 In addition to the above, following email correspondence with Mr Frisby between 4th and 6th October 2023, I have agreed to include an additional two junctions in my analysis work, as follows:
 - A43/M40 Slip Road
 - Baynards Green Roundabout
- 5.5 It should be noted that I do not have traffic count data for the two junctions above, and thus proposed a methodology to Mr Frisby at a meeting on 12th October 2023, and confirmed in a Technical Note prepared on 13th October 2023 (attached as **Appendix H9** to my evidence), which Mr Frisby has agreed is a sensible starting point to identify triggers ahead of the DL mitigation schemes.
- 5.6 The baseline traffic count data for the above two junctions has been derived by utilising the 2031 Reference Case model flows from the BTM, removing committed development traffic and background traffic growth by applying negative TEMPro growth factors to the model flows, in order to derive a set of proxy 2023 Base traffic flows.



- 5.7 The scenarios tested at the above junctions are as follows:
 - 2023 Base
 - 2026 Base
 - 2026 Base + 50 dwellings
 - 2027 Base
 - 2027 Base + 100 dwellings
 - 2028 Base
 - 2028 Base + 150 dwellings
 - 2031 Base
 - 2031 Base + 230 dwellings
- 5.8 The above scenarios have enabled the traffic impacts of the Appeal site as a standalone development to be determined, such that appropriate trigger points for the S106 contributions can be derived based on the modelling results.
- 5.9 The methodology used to undertake the additional analysis was to manually assign the development traffic across the highway network in line with residential car driver trip distribution as set out in the Heyford Park TA report undertaken by PBA, as follows:

Destination	Residential % Car Trips		
M40 (N)	16.1%		
M40 (S)	7.3%		
A43 (N)	18.5%		
A34 (S) (Middleton Stoney)	16.1%		
B4030 (Bicester Outskirts)	1.5%		
A4260 (N)	13.1%		
A4260 (S)	13.1%		
B4030 (W)	3.1%		
Middleton Stoney Rd (Bicester)	8.3%		
B4027 (W)	2.9%		

- 5.10 The development traffic assignment and development traffic flows for each of the 50, 100, 150 and 230 dwelling tests across the highway network, is provided as **Appendix H10** to my evidence.
- 5.11 The resulting traffic flow diagrams for the scenarios listed in paragraph 5.7 above are provided as **Appendix H11** to my evidence.



Assessment Results

- 5.12 The results of the additional traffic assessment are set out in this section.
- 5.13 It should be noted that where traffic growth has been applied to the count data, I have used TEMPro version 8.1.
- 5.14 It should be noted that I have utilised the TEMPro 7.2 regional dataset, rather than the 8.0 Core scenario dataset, on the basis that the BTM was based on growth prior to the introduction of TEMPRo 8.0 and thus this provides the most appropriate comparison with the TA analysis already undertaken.
- 5.15 The growth rates used are set out in the table below.

Forecast Year	Peak Hour	7.2 Dataset (NTM Adjusted)
2023-2026	АМ	1.0350
2023-2020	PM	1.0366
2023-2027	АМ	1.0432
2023-2027	РМ	1.0451
2022 2020	АМ	1.0513
2023-2028	РМ	1.0536
2022 2024	АМ	1.0764
2023-2031	РМ	1.0797

- 5.16 In addition to the capacity analysis undertaken, I have also provided an update in respect of the junction and link impact percentages at each location, to demonstrate the impacts of the Appeal site traffic without the committed wider Heyford Park development, for the scenarios listed in paragraph 5.7.
- 5.17 The impact analysis is provided as **Appendix H12** to my evidence, and a summary of the 2031 + 230 dwellings scenario (i.e. the highest level of traffic impact) is set out below:

	2031 Base		2031 With Dev Difference			
Approach	AM	РМ	AM		РМ	
			Flow	% Impact	Flow	% Impact
A43 (E)	850	772	12	1.41%	25	3.24%
slips	1438	1572	2	0.14%	5	0.32%
B430	507	550	44	8.68%	16	2.91%
TOTAL	2795	2894	58	2.08%	46	1.59%

A43/M40 J10 (slips)/B430



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B430/Unnamed Road

	2031 Base		2031 With Dev Difference			
Approach	АМ	РМ	AM		PM	
			Flow	% Impact	Flow	% Impact
B430 (N)	773	423	14	1.81%	31	7.33%
B430 (S)	256	407	0	0.00%	0	0.00%
Unnamed Rd	216	184	44	20.37%	16	8.70%
TOTAL	1245	1014	58	4.66%	47	4.64%

B430/B4030

	2031 Base		2031 With Dev Difference			
Approach	АМ	РМ	AM		PM	
			Flow	% Impact	0	% Impact
B430 (N)	511	274	0	0.00%	0	0.00%
B4030 (E)	446	381	3	0.67%	6	1.57%
B430 (S)	300	469	6	2.00%	13	2.77%
B4030 (W)	420	343	27	6.43%	10	2.92%
TOTAL	1677	1467	36	2.15%	29	1.98%

A4095/B430

	2031 Base		2031 With Dev Difference			
Approach		DNA	AM		PM	
	AM	PM	Flow	% Impact	Flow	% Impact
B430 (N)	615	308	18	2.93%	7	2.27%
A4095 (E)	138	107	1	0.72%	1	0.93%
B430 (S)	184	303	5	2.72%	12	3.96%
A4095 (W)	217	267	0	0.00%	0	0.00%
TOTAL	1154	985	24	2.08%	20	2.03%

B4030/Unnamed Rd

	2031 Base		2031 With Dev Difference			
Approach		РМ	AM		PM	
	AM		Flow	% Impact	Flow	% Impact
Unnamed rd	337	198	27	8.01%	10	5.05%
B4030 (SE)	717	347	9	1.26%	19	5.48%
B4030 (W)	187	209	0	0.00%	0	0.00%
TOTAL	1241	754	36	2.90%	29	3.85%



A4260/Somerton Rd/N Aston Rd

	2031 Base		2031 With Dev Difference			
Approach			AM		PM	
	AM	PM	Flow	% Impact	Flow	% Impact
A4260 (N)	692	384	4	0.58%	10	2.60%
Somerton Rd	104	97	0	0.00%	0	0.00%
A4260 (S)	385	685	14	3.64%	5	0.73%
N Aston Rd	64	57	0	0.00%	0	0.00%
TOTAL	1245	1223	18	1.45%	15	1.23%

A4260/B4030

	2031 Base		2031 With Dev Difference			
Approach		РМ	AM		PM	
	AM		Flow	% Impact	Flow	% Impact
A4260 (N)	718	349	4	0.56%	10	2.87%
B4030 (E)	325	215	33	10.15%	12	5.58%
A4260 (S)	346	705	5	1.45%	12	1.70%
B4030 (W)	214	219	1	0.47%	2	0.91%
TOTAL	3241	1488	43	1.33%	36	2.42%

Camp Rd/Chilgrove Dr/Unnamed Rd

	2031 Base		2031 With Dev Difference			
Approach	АМ	DNA	AM		PM	
		РМ	Flow	% Impact	Flow	% Impact
Chilgrove Dr	2	0	0	0.00%	0	0.00%
Unnamed Rd (E)	254	185	14	5.51%	31	16.76%
Camp Rd (S)	220	226	9	4.09%	19	8.41%
Camp Rd (W)	438	317	70	15.98%	26	8.20%
TOTAL	914	728	93	10.18%	76	10.44%



B430/Ardley Road

	2031 Base		2031 With Dev Difference			
Approach		DNA	AM		PM	
	AM	PM	Flow	% Impact	Flow	% Impact
B430 (N)	670	453	14	2.09%	31	6.84%
Ardley Road (E)	207	160	0	0.00%	0	0.00%
B430 (S)	508	595	44	8.66%	16	2.69%
Ardley Road (W)	135	99	0	0.00%	0	0.00%
TOTAL	1520	1307	58	3.82%	47	3.60%

M40/A43

	2031 Base		2031 With Dev Difference			
Approach		РМ	AM		PM	
	AM		Flow	% Impact	Flow	% Impact
A43 (N)	1952	1639	6	0.31%	13	0.79%
A43 (S)	1529	2243	19	1.24%	7	0.31%
M40	1072	985	5	0.47%	12	1.22%
TOTAL	4553	4867	30	0.66%	32	0.66%

B4100/A43 (Baynards Green Roundabout)

	2031 Base		2031 With Dev Difference			
Approach	АМ	РМ	AM		РМ	
			Flow	% Impact	Flow	% Impact
B430 (N)	2564	1835	6	0.23%	13	0.71%
Ardley Road (E)	681	978	0	0.00%	0	0.00%
B430 (S)	1977	2735	19	0.96%	7	0.26%
Ardley Road (W)	242	190	0	0.00%	0	0.00%
TOTAL	5464	5738	25	0.46%	20	0.35%

- 5.18 The manual assignment impact analysis set out above and included in Appendix H12, demonstrates that even under the full development scenario of 230 dwellings, the impact of the additional traffic on the highway network (without the wider Heyford Park committed development) is negligible with only four of the junctions B430/Unnamed Road, B4030/Unnamed Road, Camp Road/Chilgrove Drive/Unnamed Road and B430/Ardley Road having an overall impact of more than 3%.
- 5.19 In respect of the 50 dwellings scenario, only one of the junctions has an overall impact of more than 1.0%; in respect of the 100 dwellings scenario, only one of the junctions has an overall impact of more than 2.25%; and for the 150 dwellings scenarios, only one of the junctions has an overall impact of more than 3.25%. In all three cases, the junction is the Camp Road/Chilgrove Drive/Unnamed Road immediately adjacent to the site.



- 5.20 The capacity analysis for each junction is set out below; it is worth noting that, of the junctions tested, Mr Frisby sets out in the DL SoC that only the following junctions are in issue:
 - A4260/B4030 (Hopcrofts Holt);
 - Chilgrove Drive/B430/Unnamed Road signals; and
 - Ardley Road/B430 signals.

A43/M40 Slip Road/B430 (Ardley Roundabout)

- 5.21 The results of the Junctions 10 ARCADY analysis for the Ardley Roundabout junction, for all of the scenarios, are provided in the table in **Appendix H13**.
- 5.22 The results of the analysis demonstrate that the impact of the Appeal site on the operation of the junction is negligible across all of the scenarios tested; with increases in queues of just a single PCU, and negligible increases in delay.
- 5.23 The M40 slip road junction approach operates marginally above practical capacity (0.85 RFC), but below theoretical capacity (1.00 RFC); however, it is also clear that the additional development traffic has a negligible effect on this approach arm.
- 5.24 The Junctions 10 outputs are also provided in **Appendix H13**.

B430/Ardley Road

- 5.25 The results of the Junctions 10 PICADY analysis for the B430/Ardley Road junction, for all of the scenarios, are provided in the table in **Appendix H14**.
- 5.26 The results of the analysis demonstrate that the impact of the Appeal site on the operation of the junction is negligible across all of the scenarios tested; with negligible increases in queues and delay.
- 5.27 All of the approaches to the junction operate well within their practical capacity in all scenarios tested.
- 5.28 The Junctions 10 outputs are also provided in **Appendix H14**.

Chilgrove Drive/Unnamed Road/Camp Road

- 5.29 The results of the Junctions 10 PICADY analysis for the Camp Road junction with Chilgrove Drive and the Unnamed Road, for all of the scenarios, are provided in the table in **Appendix H15**.
- 5.30 The results of the analysis demonstrate that the impact of the Appeal site on the operation of the junction is negligible across all of the scenarios tested; with negligible increases in queues and delay.
- 5.31 All of the approaches to the junction operate well within their practical capacity in all scenarios tested.



5.32 The Junctions 10 outputs are also provided in **Appendix H15**.

B430/Unnamed Road

- 5.33 The results of the Junctions 10 PICADY analysis for the B430 junction with the Unnamed Road, for all of the scenarios, are provided in the table in **Appendix H16**.
- 5.34 The results of the analysis demonstrate that the impact of the Appeal site on the operation of the junction is negligible across all of the scenarios tested; with negligible increases in queues and delay.
- 5.35 All of the approaches to the junction operate well within their practical capacity in all scenarios tested.
- 5.36 The Junctions 10 outputs are also provided in **Appendix H16**.

B4030/Unnamed Road

- 5.37 The results of the Junctions 10 PICADY analysis for the B4030 junction with the Unnamed Road, for all of the scenarios, are provided in the table in **Appendix H17**.
- 5.38 The results of the analysis demonstrate that the impact of the Appeal site on the operation of the junction is negligible across all of the scenarios tested; with negligible increases in queues and delay.
- 5.39 All of the approaches to the junction operate well within their practical capacity in all scenarios tested.
- 5.40 The Junctions 10 outputs are also provided in **Appendix H17**.

B4030/B430 Ardley Road Signals (Middleton Stoney)

- 5.41 The results of the LinSig analysis for the Middleton Stoney signals junction, for all of the scenarios, are provided in the table in **Appendix H18**.
- 5.42 The results of the analysis demonstrate that the impact of the Appeal site on the operation of the junction is negligible across all of the scenarios tested; with minimal increases in queues and delay.
- 5.43 In all but one of the scenarios tested, the junction operates within practical capacity; whilst in the 2031 Base + 230 dwellings AM peak test, the additional increases in queue and delay remain minimal at a PRC of -0.4%, whilst all approach arms of the junction remain within their theoretical capacity.
- 5.44 In reality, as the junction operates under MOVA control (variable cycle time), the impact shown above is a worst-case assessment, with automatic adjustment of the phase and stage timings expected to reduce the Appeal site traffic impact to some extent.
- 5.45 The maximum increase in queue on any approach arm at the junction is 1 PCU with delays increasing by just 8 seconds at most on the B4030 Bicester Road approach; but with delays on the B4030 Heyford Road approach reducing by 3 seconds.
- 5.46 Such an impact is minimal, and far from what could be considered to be severe (in the context of the NPPF).



5.47 The Junctions 10 outputs are also provided in **Appendix H18**.

B430/A4095

- 5.48 The results of the Junctions 10 PICADY analysis for the B430/A4095 junction, for all of the scenarios, are provided in **Appendix H19**.
- 5.49 The results of the analysis demonstrate that the impact of the Appeal site on the operation of the junction is negligible across all but one of the scenarios tested; with minimal increases in queues and delay.
- 5.50 All of the approaches to the junction operate well within their practical capacity in all scenarios tested.
- 5.51 The Junctions 10 outputs are also provided in **Appendix H19**.

A4260/B4030 Signals (Hopcrofts Holt)

- 5.52 The results of the LinSig analysis for the Hopcrofts Holt signals junction, for all of the scenarios, are provided in the table in **Appendix H20**.
- 5.53 It is worth noting that the 2023 base scenario assessments, whilst calibrating well to the observed operation of the junction (and queue surveys) for the B4030 approach arms, underestimates the capacity available on the A4260 approach arms and thus the model provides a worst-case assessment of the junction operation.
- 5.54 The reason for this is because the junction operates under MOVA (variable cycle time) control, which likely assists the A4260 arms, whereas LinSig is only able to model the junction using a fixed cycle time.
- 5.55 Despite this, the results of the analysis demonstrate that the impact of the Appeal site on the operation of the junction is negligible across all of the scenarios tested; with minimal increases in queues and delay.
- 5.56 All of the approaches to the junction operate within their practical capacity in all scenarios tested.
- 5.57 The Junctions 10 outputs are also provided in **Appendix H20**.

A4260/Somerton Road/N Aston Road

- 5.58 The results of the Junctions 10 PICADY analysis for the A4260/Somerton Road/N Aston Road junction, for all of the scenarios, are provided in the table in **Appendix H21**.
- 5.59 The results of the analysis demonstrate that the impact of the Appeal site on the operation of the junction is negligible across all but one of the scenarios tested; with minimal increases in queues and delay.
- 5.60 All of the approaches to the junction operate well within their practical capacity in all scenarios tested.
- 5.61 The Junctions 10 outputs are also provided in **Appendix H21**.



A43/M40 Slip Road

- 5.62 The results of the Junctions 10 ARCADY analysis for the A43/M40 Slip Road Roundabout junction (to the north of M40 J10), for all of the scenarios, are provided in the table in **Appendix H22**.
- 5.63 It is worth reiterating that this analysis has been undertaken by removing TEMPro growth from the 2031 BTM flows in order to obtain a set of 2023 base proxy traffic flows.
- 5.64 The results of the analysis demonstrate that the impact of the Appeal site on the operation of the junction is minimal across all the scenarios tested.
- 5.65 It is also worth noting that the results should be treated with caution, as the junction is operating well beyond the modelling capabilities of the software (as it is well beyond an RFC of 1.0); the cause of which is not attributable to the traffic relating to the Appeal site, but rather background traffic growth.
- 5.66 As noted in the tables within paragraph 4.17, the Appeal site traffic impact at this junction is less than 1% in both the AM and PM peak hours.
- 5.67 The Junctions 10 outputs are also provided in **Appendix H22**.

A43/B4100 Roundabout (Baynards Green)

- 5.68 The results of the Junctions 10 ARCADY analysis for the A43/B4100 Roundabout junction (Baynards Green), for all of the scenarios, are provided in the table in **Appendix H23**.
- 5.69 As with the A43/Slip Road roundabout, it is worth reiterating that this analysis has been undertaken by removing TEMPro growth from the 2031 BTM flows in order to obtain a set of 2023 base proxy traffic flows.
- 5.70 The results of the analysis demonstrate that the impact of the Appeal site on the operation of the junction is negligible across all the scenarios tested.
- 5.71 It is also worth noting that the results should be treated with a significant degree of caution, as the junction is operating significantly beyond the modelling capabilities of the software (as it is well beyond an RFC of 1.0 in the 2023 base scenario).
- 5.72 It is clear from recent site visits, and from Google traffic images (shown below) that, whilst congested, this junction does not currently suffer from queues of more than 430 PCUs in the AM peak hour and 450 PCUs in the PM peak hour; the junction model is materially underestimating the capacity of the A43 approaches to the roundabout, using the 2023 proxy flows, which is then taken forward into the subsequent future assessment year scenarios.

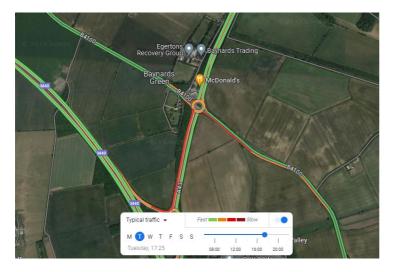
APP/C3105/W/23/3326761 Heyford Park Highways Proof of Evidence – James Parker



Google Traffic Image (Typical weekday AM peak):



Google Traffic Image (Typical weekday PM peak):



- 5.73 Despite this, the impact of the traffic associated with the Appeal site remains negligible.
- 5.74 As noted in the tables within paragraph 4.17, the Appeal site traffic impact at this junction is less than 0.5% in both the AM and PM peak hours.
- 5.75 The Junctions 10 outputs are also provided in **Appendix H23**.

Additional 2031 Cumulative Assessments

5.76 In addition to the standalone analysis provided above, it was subsequently agreed with Mr Frisby that cumulative assessments be undertaken at the four junctions listed below, as these were not undertaken with



the original TA report that supported the Appeal site application (due to the negligible development traffic impacts):

- B430/Ardley Road with mitigation scheme (signals)
- A4260/B4030 signals (Hopcrofts Holt), with mitigation scheme
- A43/M40 Slip Road
- Baynards Green Roundabout
- 5.77 Therefore, these junctions have been tested using the 2031 Reference Case and 2031 Reference Case + Development traffic flows from the BTM; the results tables and outputs are provided as **Appendix H24**.

B430/Ardley Road with mitigation scheme (signals)

- 5.78 The B430/Ardley Road mitigation scheme has been run using LinSig.
- 5.79 The results of the analysis demonstrate that, whilst some of the approach arms operate beyond their practical capacity in the AM peak hour, they remain within their theoretical capacity and the impact of the Appeal site on the operation of the junction mitigation scheme is clearly negligible in both peak hours.

Hopcrofts Holt with mitigation scheme

- 5.80 The Hopcrofts Holt mitigation scheme has also been run using LinSig.
- 5.81 The results of the analysis demonstrate that, whilst some of the approach arms operate beyond their theoretical capacity in the AM peak hour, they remain within their theoretical capacity in the PM peak hour, and the impact of the Appeal site on the operation of the junction mitigation scheme is clearly negligible in both peak hours.

A43/M40 Slip Road Roundabout

- 5.82 The A43/M40 roundabout mitigation scheme has been run using the LinSig software.
- 5.83 The results of the analysis demonstrate that the impact of the Appeal site on the operation of the junction is negligible in both the AM and PM peak hours.
- 5.84 The junction operates within capacity in all scenarios tested.
- 5.85 It is worth reiterating that, as noted in the tables within paragraph 5.17, the Appeal site traffic impact at this junction is less than 1% in both the AM and PM peak hours.

A43/B4100 Roundabout (Baynards Green)

5.86 The results of the analysis demonstrate that the impact of the Appeal site on the operation of the junction is negligible in both the AM and PM peak hours.



5.87 It is worth reiterating that, as noted in the tables within paragraph 5.17, the Appeal site traffic impact at this junction is less than 0.5% in both the AM and PM peak hours.

Assessment Summary and Proposed S106 Payment Triggers

- 5.88 The results and conclusions of the updated capacity assessments and the impacts of the traffic associated with the Appeal site are essentially the same as those provided within the TA report for the planning application.
- 5.89 The relevant test, as per paragraph 111 of the NPPF, is whether the proposed development would have a *"severe"* residual cumulative impact on the road network.
- 5.90 It is clear from the analysis undertaken that the impact of the traffic associated with the Appeal site is negligible both when considered within the context of the DL (Heyford Park) site/committed development and the agreed PV5 mitigation; and also when considered as a standalone development without the DL site/committed development and without the PV5 mitigation.
- 5.91 The LHA and NH have agreed that the impact of the proposed Appeal site across the highway network is acceptable or can be mitigated through proportional S106 payments in relation to the area wide PV5 mitigation package.
- 5.92 The proportional PV5 mitigation payments as set out by OCC in their Regulation Statement, come to a total of £2,706,652.
- 5.93 As such, following the additional assessment work undertaken within my evidence, I propose the following triggers for the S106 PV5 mitigation payments:
 - 25% payable prior to Occupation of the 25th dwelling;
 - 25% payable prior to Occupation of the 50th dwelling;
 - 25% payable prior to Occupation of the 75th dwelling; and
 - 25% payable prior to Occupation of the 100th dwelling.
- 5.94 On the basis of the above, the full PV5 mitigation S106 payment would be paid prior to the occupation of the 100th dwelling, i.e. well in advance of the completion of the site.
- 5.95 My evidence demonstrates that the impact of the 230 dwellings on the existing highway network will be negligible, thus it will be even lower at 100 dwellings.
- 5.96 Therefore, the Appeal site will mitigate any potential impact on the highway network well before completion of the development.



6.0 Stage 1 Road Safety Audit

Introduction

- 6.1 In order to assist the Inquiry, I commissioned a Stage 1 Road Safety Audit (RSA) of the proposed site access junction for the Appeal site.
- 6.2 The Stage 1 RSA was undertaken by RKS Associates Ltd in early October 2023 and is provided as **Appendix H25**.

Stage 1 RSA and Designer's Response

6.3 The Stage 1 RSA has provided five recommendations, all of which have been accepted, as follows:

ltem No.	Audit Team Recommendation(s)	Designer's Response
2.1	Ensure that adequate surface water drainage is provided and if necessary provide additional drainage.	Recommendation Accepted. Drainage details will be set out and agreed with the highway authority at detailed design stage.
2.2	Ensure that vegetation located behind the visibility splays is cut back and regularly maintained alternatively it should be replaced with a low-level variety.	
2.3	Ensure that appropriate visibility splays to and from the proposed development access is clear of obstructions such as hedgerows.	Recommendation Accepted. 17m forward visibility splays have been shown on our updated drawing T19562.001 rev B, which equate to a vehicle speed of 15mph.
2.4	Provide appropriate visibility splays to and from the proposed uncontrolled crossing for pedestrian and vehicles clear of obstructions such as hedgerows.	Recommendation Accepted. 17m forward visibility splays have been shown on our updated drawing T19562.001 rev B, which equate to a vehicle speed of 15mph.
2.5	Ensure that the existing ADS is relocated such that it does not cause hazard for pedestrians walking along the proposed footway	Recommendation Accepted. The ADS has been relocated 5m to the west of the current location where the build-out provides additional width, as shown on our updated drawing T19562.001 rev B.

6.4 The updated drawings are also provided within **Appendix H25**.



- 6.5 It is worth noting that RKS Associates Ltd also prepared an accompanying letter highlighting two issues with the consented zebra crossing facility combine with the carriageway narrowing on Camp Road, to the west of the proposed site access junction.
- 6.6 The RKS letter and my response is provided as **Appendix H26**.
- 6.7 It is important to note that **Drawing T19562.001 rev B** incorporates a minor amendment to the scheme design on Camp Road, to accommodate the recommendation made by RKS Associates Ltd.
- 6.8 It is also important to note that this issue would have been raised during a Stage 2 RSA of the consented scheme, i.e. at S278 detailed design stage; it is not related to the Appeal site proposals, but the Stage 1 RSA has provided the opportunity to address the issue at an early stage, which I have done.
- 6.9 **Drawing T19562.002 rev A** demonstrates that the swept path analysis for a large refuse vehicle can enter and leave the site comfortably within the revised proposals.

Stage 1 RSA Summary

- 6.10 The Stage 1 RSA has provided five recommendations, all of which have been accepted and have either been addressed within an updated design, or can be addressed at detailed design stage.
- 6.11 The Stage 1 RSA has also raised two issues with the consented zebra crossing scheme that I have also addressed within an updated site access design.
- 6.12 There are no outstanding safety issues to be addressed at this stage.



7.0 Summary and Conclusion

- 7.1 My evidence has considered the transport and highways issues relating to the Appeal site on OS Parcel 1570 Adjoining and west of Chilgrove Drive and adjoining and north of Camp Road, Heyford Park.
- 7.2 Whilst there is no objection to the proposed development from either OCC or NH, I have provided an update to the traffic capacity assessments across the highway network in order to address Rule 6 Party comments.
- 7.3 With reference to the above, my evidence concludes that:
 - The proposed access meets relevant design guidance, and is both safe and suitable to deliver access to the Appeal site.
 - The updated capacity assessments demonstrate that the impacts of the traffic associated with the proposed development can be safely and satisfactorily accommodated across the local highway network.
 - The results and conclusions of the updated capacity assessments are generally the same as those provided within the TA report for the planning application, to which OCC and NH agreed that the impact of the development across the highway network is either acceptable or can be adequately mitigated.
 - It has been demonstrated that the Appeal site is accessible to local service and facilities and would offer residents the ability to travel by non-car modes.
 - There are no highway safety issues across the local highway network, and that the proposed development scheme would not result in an unacceptable impact on highway safety.
- 7.4 I therefore conclude that, from a transport and highways perspective, there is no reason why planning consent should not be given to the proposed development scheme



FIGURES

