

HIGHWAYS

APPELLANT TEXT



Proof of Evidence of John Wilde

On behalf of Foreman Homes

Land at Satchell Lane, Planning Appeal

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1 Introduction

1.1.1 My name is John Wilde. I am a transport planner, traffic engineer and Director of Charles & Associates Consulting Engineers Ltd (C&A) which is a specialist Engineering practice providing consultancy services in transportation, highways and infrastructure Engineering. I hold a BEng (hons) degree in Civil Engineering from the University of Southampton and have been a full member of the Chartered Institute of Highways and Transportation for over 15 years.

1.1 Experience

1.1.1 I have over 20 years of post-qualification experience in the field of transport planning and traffic Engineering. Prior to forming C&A in 2012, I developed my career at a number of consultancies, providing support to the private and public sector, both in the UK and Asia. During my career I have specialised in providing support to the development industry, guiding developers on aspects of transport planning, traffic engineering and sustainable travel through the planning process. Latterly, I have expanded my experience and that of the practice, into providing technical support to Local Authorities and have represented both private and public sector organisations as an expert witness.

1.2 Instructions

1.2.1 In the autumn of 2021 C&A were approached by the Appellant regarding the refusal of planning permission which is now the subject of this Appeal. C&A were not under instructions from the Appellant at the time of the submission of the Appeal Scheme; the application was supported by a Transport Assessment prepared by iTransport (December 2020). C&A do however have in-depth knowledge of this site, and its highways impact, as we had previously supported the then appellant; including through to an earlier planning appeal that was ultimately upheld.¹

1.2.2 C&A are now instructed by the Appellant to provide support on the current Appeal.

¹ PINS ref. APP/W1715/W/18/3194846

1.3 Planning Context

- 1.3.1 As noted, a scheme materially consistent with that now considered here was granted at appeal following a refusal by the Eastleigh Borough Council (the LPA), the report for which I have included in **Appendix JW1**. That appeal considered one reason for refusal on sustainable accessibility which has been largely carried over as a reason to refuse the current Appeal Scheme. That earlier appeal decision is in my view relevant, and I propose to refer to it where appropriate in this statement.
- 1.3.2 The current Appeal Scheme was also refused on grounds of there being a severe residual cumulative highway impact, despite Hampshire County Council as Local Highways Authority (HCC) not having objected to the previous scheme and it not being refused on that basis. The emergence of this new reason for refusal is understood to relate to changes in local context, including recent planning decisions. Accordingly, I will need to make reference to those. In particular reference was made within the Delegated Report by the Case Officer to the GE Aviation decision² (**Appendix JW2**).
- 1.3.3 I prepared a Highways Statement submitted along with the Appeal Statement of Case, which considered in detail the highways and transport reasons for refusal. With confirmation that the Appeal is to continue as a full inquiry, I have revisited and updated that Highways Statement for the purposes of evidence to that inquiry. This proof of evidence should be considered to supersede the previous statement.

1.4 Scope of Evidence

- 1.4.1 The scope of my evidence is based on the relevant aspects of the Reasons for Refusal (RfR). In particular my evidence deals with RfRs 2, 3 and 4 (in part).
- 1.4.2 RfR2 indicates that the application was refused due to the site being unsustainable and therefore not consistent with local or national policy, stating:

‘The site is considered to be in an unsustainable and poorly accessible location such that the development will not be adequately served by sustainable modes of travel including public transport, cycling and walking. The application is therefore contrary to the requirements of Saved Policy 100.T of the Eastleigh Borough Local Plan Review (2001-2011), Draft Policies S13 & DM13 of the Submitted Eastleigh Borough Local Plan (2016-2036) and the provisions of the National Planning Policy Framework.’

- 1.4.3 RfR4 expands a little on the above, stating as follows:

² PINS ref. APP/W1715/W/20/3255559

‘The proposal, by means of its scale, form, layout, design and appearance would result in a poor quality and car dominated development, which fails to take the opportunity to provide safe and appealing footpath routes, fails to provide well integrated and attractive recreational spaces and landscaping, and fails to provide a defined sense of place which takes account of its surroundings...’

1.4.4 I have understood the comments within RfR4 to be supportive of and an extension to RfR2 and therefore I have dealt with these comprehensively under the topic of ‘sustainable development’. My evidence does not deal with matters of layout, design or appearance.

1.4.5 RfR3 raised the matter of a perceived severe impact on the ‘free flow’ and operation of the local road network, arising from ‘significant traffic movements’. This is stated as:

‘The proposal involves development that cannot be reconciled with the National Planning Policy Framework in that the significant traffic movements generated by the proposed residential development could not be accommodated adequately on Hamble Lane and its junctions with adjoining roads. This would result in a severe impact on the free flow and operation of the local transport network contrary to the provisions of the National Planning Policy Framework, Saved Policies 100.T, 101.T and 102.T of the Eastleigh Borough Local Plan (2001-2011) and Draft Policy DM13 of the submitted Eastleigh Borough Local Plan (2016-2036).’

1.4.6 Accordingly, my evidence will consider the matter of traffic impact on the network surrounding the Appeal Site and respond to the conclusion of the LPA that the residual cumulative impact is severe.

1.4.7 Whilst RfR3 makes reference to policies that, in the most generalised sense include aspects of highway safety, no reference is made to highway safety in the reasons for refusal. In this regard, I have also reviewed the Assessment of Proposal comments provided by the Case Officer in the Delegated Report under the heading of ‘Traffic Movement and Highways Safety’. Whilst this commentary makes passing reference to the terms of para. 111 of the NPPF with respect to highway safety the discussion itself provides no commentary on the matter of highway safety, rather focusing only on matters of traffic capacity impact such that in this respect it is consistent with the stated RfR.

- 1.4.8 In full transparency, I note that HCC made reference to highway safety concerns in their statutory consultation response. These appear to me largely consistent with comments made to the previous application, which gave rise to a specific highway safety reason for refusal by the LPA on that application. That reason was tested at the subsequent planning appeal, with the Inspector not accepting it as valid. The decision was dismissed by Mr Justice Garnham at the High Court, finding the Inspector's reasoning to be unimpeachable³. Whilst I acknowledge that HCC maintain their historical position on this matter, it had been my understanding that this was purely on the basis that it informs their position with respect to sustainable accessibility. The specific concern on residual highway safety has evidently not been carried forward by the LPA in determination. Had the LPA intended to refuse this application on the basis of highways safety there was every opportunity to make this clear in the reasons for refusal, as was the case in the previous application.
- 1.4.9 In advance of the exchange of evidence, I have engaged with HCC in their capacity in support of the LPA to agree a Statement of Common Ground. The parties were unable to agree matters on highways safety with Mr Grantham of HCC clarifying the LPA's concern on this matter. My understanding of the LPA's case is that it represents one of residual highway safety impact, arising from the perception that future residents may opt to use the quickest route to a destination, in preference to the safer. Focus here is placed on specific user groups who are perceived to find the longer, but safer route, 'prohibitive'.
- 1.4.10 Whilst the scope of my evidence was not anticipated to need to cover the matter of highways safety, except insofar as it represents a contributing factor in the determination of sustainable accessibility, I have now sought to include commentary on this point, albeit proportionally given the lack of a specific reason for refusal. This is without prejudice to the option to provide broader evidence in rebuttal should the LPA's evidence include highway safety as a main matter and on the presentation of a more comprehensive policy justification for this position, which has thus far not been presented.
- 1.4.11 Noting the above, I consider the main topics to be as outlined below, separated in to the two topics requested during Case Management Conference.

³ Eastleigh BC v SSHCLG - Case No. CO/371/2019 (ref. Appendix JW1)

Sustainable Accessibility

- 1.4.12 In this first section of my evidence, I will consider whether the proposed development can be considered sustainable development in the context of the prevailing national and local policy requirements as stated in RfR2.
- 1.4.13 I will seek to largely place reliance on information already made available in the submitted transport assessment to avoid repetition. However, I will also refer to information and conclusions from the previous appeal decision.

Traffic Impact

- 1.4.14 Here I consider whether, when making appropriate allowances for the cumulative context, the proposals can be reasonably determined to result in a severe impact.
- 1.4.15 This is acknowledged by all parties to have not been a reason for refusal attributed to the previous application. The Delegated Report by the Case Officer places considerable reliance on changes in context and recent decision making. It is incumbent on me to consider those also. I have therefore sought to strengthen the evidence base beyond that provided in the submitted Transport Assessment to inform this Appeal.

2 Sustainable Accessibility

2.1 Summary of LPA's Case

- 2.1.1 The LPA's position on this matter is set out in the Statement of Case, including with reference to Appendix 6 prepared by HCC as Local Highway Authority. It can be summarised as follows - in the absence of upgrades to the footway linkages on Satchell Lane to the north that would provide a safe route for pedestrians the alternative route options to some local facilities would be insufficient to reasonably conclude that the development was sustainable in terms of accessibility. The LPA's case is that this would result in a car dependent development.
- 2.1.2 The LPA's case is in my view informed by two separate aspects. Firstly, the LPA have determined that the shorter, preferred route is currently unsafe and can only be made usable through upgrades for which there is no reasonable prospect of delivery. Secondly, they have determined that other routes would not provide adequate alternative access to an appropriate range of services.
- 2.1.3 The LPA's position on these two aspects is most comprehensively set out in the Delegated Report by the Case Officer and thereafter reiterated in the SoC. When considering the latter point, specific focus is placed on perceived shortcomings in pedestrian access to secondary education, healthcare and rail connectivity. I have framed this statement as a response to those specific points, so will provide more detail on the LPA's case in the relevant sections below.
- 2.1.4 I note at para. 78 of the SoC the LPA express disagreement with the previous Inspector's decision that the alternative longer routes could be considered reasonable. As I mentioned, this decision by the previous Inspector was upheld in the High Court and Mr Justice Garnham's discussion deals specifically with this point of continued disagreement by the LPA on what is essentially the same matter now being challenged at this appeal. Mr Justice Garnham noted at para. 35 that it *'...does not mean that the site is not adequately served by a perfectly adequate, safe walking route. It is. The southern route is longer but safe.'*
- 2.1.5 It is important to note that, as was the case in previous appeal, the LPA have not challenged the acceptability of the routes or distances to facilities south of the Appeal Site, referred to as being Hamble Square. Accordingly, I do not consider it necessary or useful to revisit a comprehensive assessment of these matters.

2.1.6 During discussion on the SoCG with HCC on behalf of the LPA; a further matter of dispute was identified. The parties were unable to agree as to whether cycling could be considered an acceptable means of travel via the northern route. I have therefore sought to provide some supplementary evidence on this matter.

2.2 Suitability of Northern Route

2.2.1 The LPA acknowledge that the Inspector for the previous Appeal accepted the northern route to not be safe and suitable for pedestrians. Without prejudice to my own view on the appropriateness of routes to the north I do not consider it to be necessary or expedient to re-examine this point for this evidence. I accept that for the purpose of this evidence it can be assumed that pedestrians would not reasonably be able to safely make use of the route to the north.

2.3 Overall Sustainable Accessibility

2.3.1 The planning application was supported by a comprehensive Transport Assessment prepared by iTransport. Included in this was a detailed breakdown of the site's access by sustainable modes of travel with local context provided from p13 onwards and specific appraisal of accessibility from p30 onwards. For expediency I will not repeat that information here.

2.3.2 The application was also supported by a Travel Plan, prepared by iTransport, setting out a package of measures designed to encourage and facilitate sustainable travel to and from the site. Following initial scoping with the highway authority a Travel Plan had not been deemed necessary for the previous application given the limited scale of the development. A Travel Plan was submitted and ultimately conditioned for delivery as part of the previous scheme approved at appeal. It is therefore appropriate that the current Appeal Scheme also benefits from this measure.

2.3.3 The submitted Transport Assessment, when read alongside the Travel Plan, concluded at para. 5.6.3:

'Taken together, the Sustainable Transport Strategy, which will be delivered by the Travel Plan represents a comprehensive package of measure to promote sustainable transport and ensure that the opportunities for sustainable travel are taken up. In this regard, the proposal complies with local and national transport planning policy.'

2.3.4 In this regard the conclusions of the TA were consistent with the findings of the previous appeal scheme Inspector's conclusion who stated at para. 42:

'...the appeal site is sustainable in locational terms having regard to the proximity of and accessibility to local services and facilities. It complies with policy LPR 100.T'

- 2.3.5 There has not, to my knowledge, been any material change in the prevailing conditions or context that would give rise to a need to re-evaluate this conclusion. I have set out below the local context with respect to access to local services by means of sustainable modes of transport, which remains essentially unchanged. The routes available to pedestrians remain now as they did at the time of the previous determination. Later in my evidence under Chapter 3 I have provided more detail on matters of context that, whilst aimed at the highway capacity topic, further reinforces the absence of material change.
- 2.3.6 I therefore agree with the conclusions set out in the application TA, however the LPA do not and in determining the Appeal Scheme have refused it on the grounds of shortcomings of sustainable access. I have framed my evidence in the context of the four specific areas of concerns that the LPA discuss in the Officer's comments within the Delegated Report.

Measured Distances

- 2.3.7 Before considering the accessibility of the site to the relevant land uses, it is important to examine some of the differing measurements of distance presented across the planning application and appeal documentation. To be concise, I will only refer here to access to education, health and rail services.
- 2.3.8 At the time of determination, decision makers were presented with two sets of measurements. On the one hand, the accessibility appraisal in the iTransport TA (included at Table 5.2 on p33) provided a comprehensive set of distances to services. Contradicting this, the LPA included in their Delegated Officer's report a paragraph highlighting some of their estimated distances. I have compared these, each by means of the assumed safe southern route, in Table 2.1 below.

Table 2.1 – Distances to Relevant Destinations

Destination	iTransport	LPA Officer's Report
Hamble Railway Station	2.45km	3.2km
Hamble School (Secondary)	2.95km	3.8km
Local Health Centre	3.0km	'Similar to above' 3.8km
Hamble Lane Primary	1.8km	2.5km

- 2.3.9 Appended to the LPA's SoC was a response from HCC, which included in its own Appendix 1 a plan showing various walking distance. This is referred to in the statement but only with reference to the distance to Hamble School (Secondary) as being '*...approximately 2,947m*'. Whilst no other specific southern route measurements are referred to, it can be derived from this measurement figure that the distance to the railway station must inherently be notably less than to the secondary school, as it is passed on route along a straight section of Hamble Lane which can be directly measured to be around 340m. It can thus be inferred from the HCC plan that the distance to the station would be their measured 2,947m to the school less 340m, or 2.61km.
- 2.3.10 Similarly, the Hamble Primary School is largely on the same route but closer still to the site, some 680m south along Hamble Lane. Again, deducting this from the distance to the station would derive an estimate of around 1.93km, albeit it is accepted that some minor diversion from the route is required.
- 2.3.11 Likewise, it can be seen that HCC have measured the additional distance to the health centre to be 211m, totalling 3.16km.
- 2.3.12 In comparing to the distances in Table 2.1 I note a general consistency between the iTransport and HCC measurements, with a maximum difference being only 160m. In contrast, the discrepancies in the LPA Officer's report are considerable, at up to 850m.
- 2.3.13 I note that, whilst the original Officer's report made specific reference to the range of services that lie an unacceptable walk distance; with the benefits of the more accurate measurements provided by HCC, both the main LPA SoC and the appended HCC response now only focus on access to the secondary school. Nonetheless I will continue to provide evidence in relation to all of the destinations identified originally.
- 2.3.14 I do not propose to burden this evidence with a further set of distances; but can confirm that my own estimates are consistent with those of iTransport, which largely correlate with HCC's measurements in the SoC.

2.4 Access to Primary Education

- 2.4.1 The LPA indicate that due to the 2.5km distance or 30-minute walk to the primary school it would be unrealistic to expect residents to regularly walk these distances. The condition and facilities of this southern route are not challenged by the LPA, only the distance.
- 2.4.2 Despite the apparent error in these distances, the LPA's position is maintained in the SoC which benefits from the more accurate HCC measurements.

- 2.4.3 I am not aware of any planning policy stipulating maximum walk distances, either within nationally or locally adopted policy, nor in my opinion would any be appropriate given the need for balance to be applied based on the locational characteristics set out in para. 110(a) which states:
- ‘...appropriate opportunities to promote sustainable transport modes can be – or have been – taken up, given the type of development and **its location**’ (My emphasis)
- 2.4.4 Historically, references to 2km and 5km reasonable maximum distances for walking and cycling respectively were enshrined within the now superseded PPGs, but I am not aware of these having been carried forward to the NPPF or supporting planning practice guidance.
- 2.4.5 In the absence of these, reference is on occasions made to the CHIT Guidance Planning for Walking para 2.1 (refer to **Appendix JW3**) which confirms that approximately 80% of journeys shorter than 1 mile (1.6 km) are made wholly on foot. This is supported by the land use planning for pedestrians section on page 8 of the same document which states; ‘*Most people will only walk if their destination is less than 1 mile away*’. In my opinion, this confirms that while desirable walking distances may vary for each walking attractor, 1 mile or 1.6km is an acceptable distance. However, in my view this should not be considered an absolute limit for all walking attractors.
- 2.4.6 Looking specifically at walking to school, HCC’s “Home to School Transport Entitlement Policy” (refer to **Appendix JW4**) confirms the accepted walking distance for children under the age of 8 is 2 miles (3.2km) and those above age 8 is 3 miles (4.8km).
- 2.4.7 Whilst the primarily school is only marginally beyond the CHIT desirable walking distance of 1.6km, it is well within the 3.2km stated by HCC in their school transport entitlement policy for the younger age group (both referenced above).
- 2.4.8 It is my view that the LPA were incorrect to conclude that it would be unrealistic to assume that future residents wouldn’t regularly walk these distances and therefore that development would be car dominated⁴.
- 2.4.9 Whilst I reach this conclusion based on the acceptability and therefore suitability of the walking route and distance, I am of the view that the LPA were in error in failing to properly consider other modes.

⁴ Fourth para. page 30, Delegated Report

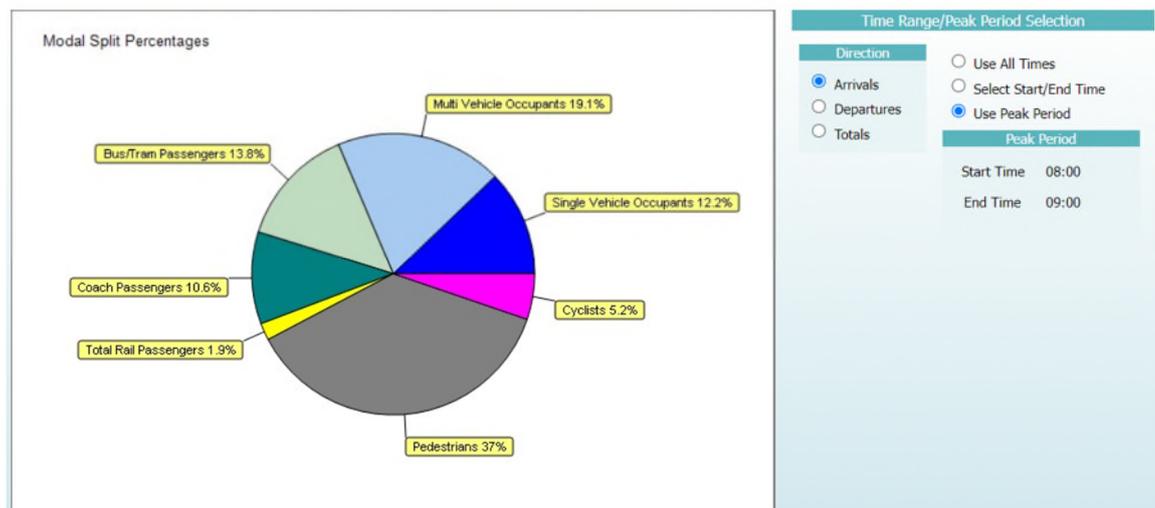
- 2.4.10 The LPA makes passing reference to the option to use a combined walk and bus journey, dismissing this on the basis that this would add considerably to the journey time. It is unclear to me what comparison is being made here and against what other journey, but regardless I do not consider it to have merit. It is generally accepted that a combined walk and bus journey will take longer than a car journey; but this does not render the bus journey unviable. Such modes clearly have scope to contribute to the overall sustainable travel offering and should not in my opinion be dismissed.
- 2.4.11 In a similar manner the LPA refers to the cycle time between the Appeal Site and primary school but thereafter it is seemingly not factored into their evaluation. In my opinion an 8-minute cycle to school by a younger child accompanied by a parent is a very realistic, a highly sustainable transport solution and again contributes to other travel options from the Appeal Scheme.
- 2.4.12 Noting the walk distance and other opportunities for non-car modes of travel it is my opinion that the Appeal Scheme is evidently suitably located relative to primary education facilities and will ensure that opportunities for sustainable travel can be taken up, in the manner required by both Saved Policy 100.T and the NPPF.

2.5 Access to Secondary Education

- 2.5.1 The LPA's analysis on access to secondary education is largely consistent with that of primary education and the other identified destinations. In Appendix 6 of the SoC, HCC provide some additional detail regarding access to Hamble School. HCC accept that at around 3km this '*...could be described as being within a reasonable walking distance...*' but that '*...it does exceed the maximum desirable walking distance of 1.6KM recommended by CIHT...*'. In my opinion this highlights a significant shortcoming of the LPA and HCC approach. They fail to acknowledge how differences in destinations influence the appropriate evaluation of travel options.
- 2.5.2 HCC's school travel entitlement policy differentiates acceptable walk distances based on pupil age, such that an evaluation of secondary school accessibility will be inherently different to that of primary education. This is not evident in the LPA's commentary.

- 2.5.3 As noted previously, the LPA's original decision was based on estimates to the secondary school which are some 850m or 28% longer than those latterly identified by HCC. Notwithstanding this discrepancy, the distance stated is well within the distance deemed acceptable for over 8-year olds to walk to access education as defined by HCC policy. The policy (including in **Appendix JW4**) makes clear that secondary school pupils can be expected to walk up to 4.8km to access education; a distance considerably greater than the Appeal Site lies from The Hamble School.
- 2.5.4 I have highlighted above the importance of assessing destinations individually for their propensity to support and encourage sustainable travel, which the LPA appear to have failed to do. This is particularly important when considering sustainable modes other than walking.
- 2.5.5 The LPA have failed to give any genuine consideration to the availability of other sustainable modes of transport for travel to secondary school. This is, in my opinion, particularly problematic given the attractiveness of cycling and bus travel for access to secondary schools. This can be demonstrated through an interrogation of the TRICS database, presented in **Figure 2.1** below, which shows that pedestrians represent 37% of the average modal split, with public transport (including bus, coach and rail) representing 26.3% and cycling 5.2%.

Figure 2.1 – Overall TRICS



- 2.5.6 The Appeal Site lies a very short cycle from the secondary school and is also accessible via a combined walk and bus journey.

2.5.7 It is therefore my opinion that the secondary education is evidently accessible by sustainable modes of transport from the development. The implications of perceived longer walk distances, arising from the lack of a suitable and safe walking route to the north have been significantly overstated by the LPA and they have failed to consider overall sustainable accessibility appropriately.

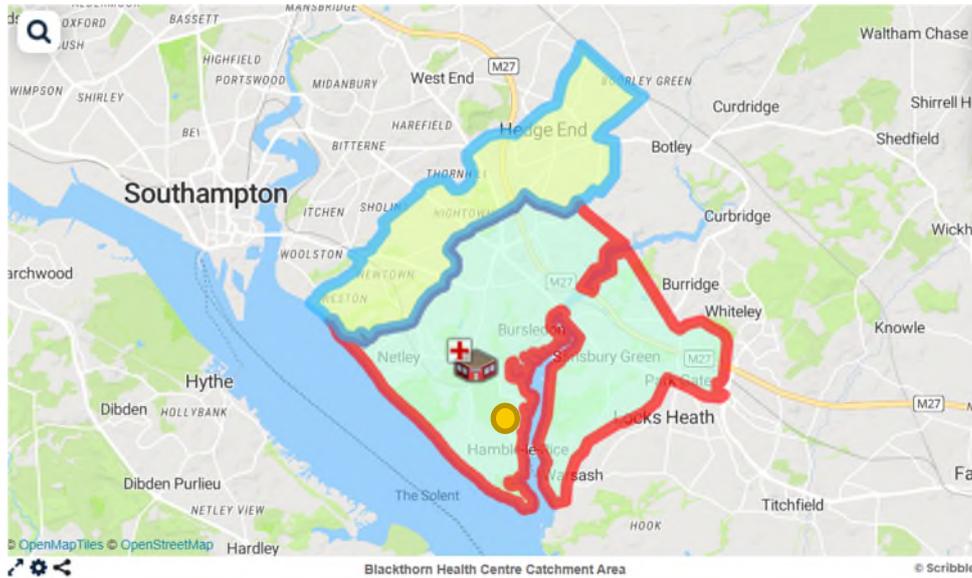
2.6 Access to Healthcare

2.6.1 The nearest healthcare offering to the development and to Hamble-le-Rice more generally is the Blackthorn Health Centre on Satchell Lane. As with access to the secondary school, the shortest route to the health centre would be to the north along Satchell Lane, which is accepted for the purposes of this Proof as unlikely to be a suitable pedestrian route. Cycling remains a very practical option on this route with the overall journey being around 1300m or around a 5-minute cycle. Walking would require residents to adopt the southern route; which at approximately 3km is a distance which will be practical for many in my opinion.

2.6.2 Evaluating accessibility to healthcare should in my opinion be approached with appropriate regard to the nature and frequency of trips. For most people attendance at a health centre is not a daily or even regular event. Such journeys are therefore notably less sensitive to travel time penalties than regular journeys might be. I accept that this irregularity means that for a number of people there may be tendency to default to travel by car, potentially irrespective of walk distance. The simple fact that this is journey to access healthcare facilities is likely to decrease the propensity for travel on foot and cycle, due to ailments etc. Access to a car will not be an option for all, however, and development should be planned such that sustainable modes of travel are generally available in a manner that ensures accessibility for those who don't have access to a car and to reduce the perceived need for residents to retain such access. In this regard, a walk of just 30 minutes to access a substantial healthcare offering is not in my opinion unacceptable.

2.6.3 Looking more holistically, we can see from the Blackthorn Health Centre's own website that its patient catchment is significant, as shown in **Figure 2.2** below.

Figure 2.2 – Blackthorn Health Centre Patient Catchment⁵



2.6.4 I have annotated (yellow dot) on **Figure 2.1** the Appeal Site location. This shows that in relative terms, the Appeal Site is closer to the medical centre than much of the remainder of its catchment. This is not unique to this location. Medical facilities have increasingly large catchments due to consolidation of services into fewer and larger facilities. It would therefore be wholly unreasonable in my opinion to negatively appraise the sustainability of a development due to perceived shortcomings in proximity to medical facilities. Whilst the LPA do not specify what they might consider would be an acceptable walk distance, I presume it would be the 1.6km distance often applied. It is clear that this is an unrealistic parameter to apply to development access to medical facilities and would likely render a considerable amount of otherwise highly sustainable development sites as unacceptable, if applied rigidly.

2.6.5 Regardless it is my view that by any reasonable evaluation the Appeal Scheme has very good access to medical facilities that would support the objective of ensuring that opportunities for sustainable travel are taken up.

2.7 Rail Connectivity

2.7.1 Again, the LPA have grouped access to the rail station with other destinations in their appraisal of walking. As a mode of transport itself this approach is flawed. The rail station is for the most part not a destination but a transit point for onward travel by another mode and should be considered in this context.

⁵ <https://www.blackthornhealthcentre.co.uk/join-the-practice>

- 2.7.2 It is apparent that access to rail services can play a role in enhancing opportunities for the take up of sustainable travel options. However, access to rail is not essential to achieve the objectives and the contribution it can make must be judged in the locational context.
- 2.7.3 Hamble station lies on the Portsmouth to Southampton line, which is served by an approximately hourly service. Whilst interconnection is available at main terminals; direct services are limited to those lying between these destinations. Southampton Central is an approximate 20-minute journey by train from Hamble station. This same journey is provided for by the City Red 6 bus service from Hamble Square to Southampton City Centre which operates with twice the service frequency and is accessible from stops closer to the Appeal Site. Whilst the travel time is slightly longer (35 plus minutes depending on time of day) this remains an entirely reasonable overall journey time and is likely be considered a more appealing alternative to rail services. It is my opinion that access to rail will therefore have a more limited contribution to make to the overall sustainable travel options and therefore the materiality of any perceived shortcomings in accessibility to the station would be limited.
- 2.7.4 Notwithstanding this, I remain of the opinion that access to the rail services will complement the sustainable travel options for the Appeal Site. Having a station within a short 6-minute cycle ride will certainly add to the travel options for residents as a combined mode journey that can be realistically and effectively promoted through the Travel Plan in line with the objectives of national and local policy.

2.8 Highway Safety

- 2.8.1 As I discussed earlier, in contrast to the previous application, the Appeal Scheme was not refused on specific grounds of highway safety. However, I note that additional emphasis is placed on this matter in the LPA's SoC and in the appended HCC response. The parties were also unable to reach agreement prior to exchange of evidence, despite there having been a very clear judgement at the High Court in dismissing a review of the previous Inspectors decision on this specific matter. I will return to this later, but it is important to highlight that a specific ground for the lodging of the review was a belief by the LPA that the Inspector had failed to properly account for the highway safety matter. This was considered by the Judge and dismissed.

- 2.8.2 Noting the findings of the previous appeal scheme Inspector, I consider there to be common ground between the parties that the pedestrian route to the north along Satchell cannot be considered sufficiently safe and secure as to reasonably contribute to the overall sustainable accessibility of the proposals.
- 2.8.3 Where I differ from the LPA is in the implications of this. It is my understanding that the LPA and HCC are of the view that because the northern route represents the shortest means for pedestrians to access the school; it will invariably be used by those pedestrians in favour of the longer route and thus will create a highway safety issue. Whilst HCC and LPA present this as one homogenous issue of sustainability and safety; I do not agree with this position. I accept that the safety of the northern route has a bearing on how the sustainability of the site should be appraised and I have dealt with this above. It is an entirely different question as to whether the mere presence of a route perceived to be unsafe creates a highway safety issue – which as I understand it is the Council's case. I consider this to be a question of residual highway safety implications, separate to the sustainability point.
- 2.8.4 The position of the LPA is therefore that a specific route, and importantly the shortest one, must be safe and suitable for the development to be acceptable in policy terms. I do not agree with this position as there is no policy requirement for a specific route to be safe; only that there must be a suitable, safe and secure route from the development to key facilities, which I have set above to be the case here. As I mention above, the mere presence of an alternative route which is considered to be unsafe, does not undermine the acceptability of others or the development more generally. By extension the LPA's position could render a considerable number of highly sustainable development sites unacceptable, simply as a result of there being a potentially more preferential (when considering time and distance), but unsafe, pedestrian route.
- 2.8.5 The Inspector in the previous appeal scheme did not accept the LPA's position and summarised at para. 42 that "Overall, there is no policy requirement that a specific walking route should be acceptable, especially when other routes and transport modes exist." going on to conclude that "It complies with policy LPR 100.T".
- 2.8.6 As outlined above, this specific matter formed the basis of a legal challenge to the decision of the Inspector in *Eastleigh BC v SSHCLG*. Mr Justice Garnham dismissed the review, finding at para. 34 that the Inspector '*...did not err in this approach to this issue.*' He went on to state '*...there is nothing, express or implied, in either policy [100.T or para. 35 of NPPF] that requires every possible route from the development to be safe. What matters is whether there was a safe route, and there was.*'

- 2.8.7 Whilst the NPPF has been updated and policy 100.T superseded by the adopted Local Plan, the LPA have not identified any policy change that would undermine the earlier conclusions nor am I aware of such a shift. For the reasons I indicate above, a policy requiring any and all routes to be safe would be entirely impractical and fundamentally unsound if applied in this manner.
- 2.8.8 In his judgement, Mr Justice Garnham goes on to note at para. 35 that there is no obligation on the decision maker to assess whether residents of the development are likely to make use of unsafe routes between the site and particular facilities. He specifically notes that 14-year-old children living on the site may well be tempted to use the shorter less safe route; but that this would not mean that the site is not adequately served by safe alternatives. In my view, in this statement Mr Justice Garnham is not only relying on the absence of a policy position requiring this but is reinforcing the absurdity of requiring a development to be free from any residual risk arising from poor decision making on the part of future residents, when other safer and acceptable choices are available to be made.
- 2.8.9 The LPA's case is expressly in contradiction to the views of Mr Justice Garnham. Whilst the LPA's case places some considerable reliance on the decision to not allocate residential development at another site in the vicinity, at Mercury Marina (policy HA2), this does not appear to me have been on the basis of this residual highway safety point nor did that decision address the fundamental issue with the LPA's case, namely their contention that there is a perceived policy requirement for a specific route to be safe; not simply that an acceptable and safe route should be available.
- 2.8.10 In this regard, it is my opinion that the LPA would be wrong to seek to refuse the application on the basis of this perceived residual highway safety impact.

2.9 Summary

- 2.9.1 In refusing the application on the basis of reason no.2 the LPA have concluded that the site is unsustainable and poorly located with respect to sustainable modes of travel including public transport, cycling and walking. However, the Case Officer's commentary on this matter in the Delegated Report focuses almost entirely on perceived excess distances to only a limited number of trip attractors (destinations) and only for journeys on foot. In fact, more latterly and with the benefits of corrected distances provided by HCC that are consistent with those of the original application TA, focus is only placed on secondary school access.

- 2.9.2 In my opinion these specific concerns are without merit and the Appeal Site is in fact in a location that is accessible to these destinations on foot. Furthermore, in my view these perceived deficiencies would not, in isolation, be sufficient to undermine the Appeal Scheme's ability to ensure opportunities for sustainable travel are taken up, in a manner consistent with the policy requirements in the NPPF and locally.
- 2.9.3 My conclusion is consistent with the findings of the previous appeal scheme Inspector that the site is sustainable in locational terms having regard to proximity of and accessibility to local services and facilitates. I am aware of no material changes in the local context; development proposals or relevant policy in the intervening period that would undermine these conclusions.

3 Cumulative Traffic Impact

3.1 Summary of the LPA's Case

- 3.1.1 RfR3 sets out the LPA's case and can in my view be simply summarised as being an NPPF para. 111 argument that the residual cumulative impacts on the road network would be severe.
- 3.1.2 The wording of the RfR highlights that the LPA consider the traffic movements from the development to be significant and it specifies that the impact would manifest itself most acutely on Hamble Lane and its junction with adjoining roads.
- 3.1.3 It is well established that neither the NPPF nor the planning practice guidance notes provide parameters for what constitutes a severe impact. None of the saved policies (100.T, 101.T or 102.T) or the emerging policy DM13 expressly adopt a 'severity' test, although the latter indicates that development should not *'have a significant detrimental impact on the operation of safety of the highway network'*.⁶ While there may be scope to interpret these policy requirements slightly differently, it is my view that both are essentially setting the same threshold of acceptability for development – namely that it is incumbent on the decision maker to conclude that not only is there impact from the development, but also that it would be severe or significant. Henceforth I will retain the term 'severe' to encapsulate both.
- 3.1.4 In my view the wording of both DM13 and para. 111 of the NPPF reflect the practical reality that almost any development, regardless of scale, has the scope to cause some impact. This impact might be barely perceptible and entirely impractical to mitigate such that it would be inappropriate to resist development unless the impact were severe.
- 3.1.5 Furthermore, looking at the chronology of relevant policy in this regards, the release of the NPPF in 2012 was a notable shift away from previous planning policy and approach to assessing traffic impact; where typically development was expected to achieve 'nil-detriment' – a higher bar than now set by the NPPF at Para 11.
- 3.1.6 In the period since the submission of the Appeal, I have sought to engage with Hampshire County Council pursuant to a Statement of Common Ground on matters. In the course of this, we received the response included in **Appendix JW5** from Matt Grantham at HCC Highways. This raises a relevant point which I now consider appropriate to respond to. In the e-mail, Mr Grantham states as follows:

⁶ <https://www.eastleigh.gov.uk/media/3484/final-local-plan-document-june-2018-print.pdf>

'It is the view of HCC and Local Highway Authority that the Hamble Lane corridor already has delays that could be described as severe for its users. Any additional traffic brought forward via new development will exacerbate this situation further, and as such to ensure severe delays are not allow to become even more severe, as outlined in the previous documents, no further development outside of that already allocated in the adopted EBC Local Plan should be permitted....'

- 3.1.7 Whilst Mr Grantham does not make specific reference to NPPF in this e-mail, I consider the use of the term 'severe' was implicitly in relation to the para. 111 test.
- 3.1.8 In my opinion, NPPF para. 111 is quite clearly a test of severity of development impact relative to the local context and not simply an appraisal of the prevailing conditions as is offered by Mr Grantham. Mr Grantham's interpretation is in my opinion flawed because he is using the adjective 'severe' without reference to the correct and critically important noun of the paragraph, 'impact'. The term 'severe' is meaningless in isolation.
- 3.1.9 Mr Grantham applies 'severe' as a modifier to the wrong object, by applying it to the prevailing conditions and not the development impact. This is quite evidently not the NPPF test. To quote the Cambridge Dictionary, impact is '*a powerful effect that something, especially something new, has on a situation or person*'. Clearly impact must have both an effect (the development) and a context (the existing situation).
- 3.1.10 The decision by Mr Grantham to describe the context of the local network as already being 'severe' therefore merely generates a semantic association with the terminology in para. 111, it does not apply the intended test of development impact correctly.
- 3.1.11 I do not seek to underplay the importance of establishing the quantum of impact that might reasonably be deemed as severe. This remains a key point of dispute and should in my opinion be the fundamental question that is considered in this Appeal, through appropriate evidence. Thus, pursuant to an agreed SoCG, I sought to separate out the dispute on the proper application of the para. 111 test from the reasonably disputed matter of quantum of impact. In discussions regarding this Mr Grantham (**Appendix JW6**) maintained his assertion that the prevailing conditions could be defined as severe, going on in my view to imply that this largely rendered the modelling assessment irrelevant. It is for these reasons that I afford time in my evidence to this matter of how to apply the para. 111 test.

- 3.1.12 Mr Grantham's approach would permit any and all development, no matter how limited its impact, to be refused simply by defining the prevailing conditions as 'already severe'. Mr Grantham's approach would deprive the decision maker of any opportunity or in fact need to understand the extent of development impact and evaluate the weight to be attributed to it in the planning balance. In my view this is against the very spirit of the policy, which was expressly intended to avoid scenarios where development would be refused even where impact is only very limited, a shift from the policy requirement to achieve nil-detriment.
- 3.1.13 In my experience, much of the debate that followed publication of the NPPF centred on what constituted a quantum of development impact that might be deemed as 'severe'. In the recently and locally relevant case of GE Aviation that both the LPA and HCC refer to in their statements (ref. **Appendix JW2**), the Inspector discusses how he has quantified the severity of impact, a matter I return to later in my evidence. In all cases, however, the debate is how to quantify the development impact, relative to the local context. Applying the para. 111 test in the manner suggested by Mr Grantham would negate the need to even establish the scale of development impact. My evidence in contrast focuses on quantifying and understanding the development impact, in the context of para. 111.
- 3.1.14 I have referred once again to the Delegated Report by the Case Officer to understand the LPA's own basis for concluding that the traffic impact of development would be sufficiently severe to merit refusal.
- 3.1.15 The Delegated Report acknowledges that the previous application was not objected to by HCC or refused by the LPA on the grounds of severe traffic impact. The report also acknowledges that the Appeal Scheme represents a reduction in scale and therefore overall traffic impact against the previous scheme. I would add to this that the national policy context in which the application was previously assessed has also not materially changed.
- 3.1.16 It is my understanding that the LPA's position, and that of HCC, is that the local context has changed in manner that has given rise to a re-evaluation of the severity of impact, albeit in a flawed manner in my view. The discussion on this matter provides no actual evidence of what local context has changed or in fact the nature of the impact. Instead, reliance appears to be placed entirely on the outcome of the other recent planning appeal⁷ (ref. **Appendix JW2**) for a larger development which I referred to above, located elsewhere on the Hamble Peninsula.

⁷ GE Aviation in Hamble (*Application O/18/84191, Appeal Ref APP/W1715/W/20/3255559*)

3.1.17 Given the nature of the LPA's refusal I will seek to assist the Appeal by providing a review of the local context and how it might have changed in the intervening period with reference to information contained within the Transport Assessment. I will thereafter cite that assessment and further evidence I have prepared to evaluate the impact of the development and acknowledging the basis for the LPAs' refusal, I place this in the context of the recent GE Aviation decision.

3.1.18 In defining the scope of my evidence, I make reference to the comments of HCC as reported in the Delegated Report which identified two junctions requiring further modelling/assessment should the applicant have wished to advance the application further. In advance of submission of this Appeal, C&A had sought to engage with HCC pursuant to scoping this assessment. Whilst aspects of that scope and assessment were agreed it was not concluded. Nonetheless I will place reliance on those matters that were discussed and agreed, including the need to expand the scope of assessment to include an additional junction.

3.2 Change in Local Context

3.2.1 Between late 2017/early 2018 and August 2021 the views of HCC with respect to the severity of impact of development on the Appeal Site shifted markedly. Despite the proposed development now being of a smaller scale and with an agreed lower traffic generating nature as a result, HCC felt it had become necessary to object on these grounds.. In light of a reduction in development impact this can only reasonably be based on a change in local context.

3.2.2 However, my own understanding of the local context and prevailing traffic conditions are that there has been no notable change in conditions and HCC/the LPA provide no evidence to substantiate such a shift in position. In my opinion such changes might include a significant uplift in traffic including that observable and that which might arise from substantial committed traffic generating land uses; or changes in the actual or anticipated highway network capacity itself. I will review both here.

Change in Traffic Conditions

3.2.3 I have been advised by the Appellant and their advisors that there have been no materially relevant traffic generating land use planning permissions in the period since the original application in 2017, with the exception of the resultant permission of the previous appeal scheme itself, which has since lapsed. While it is accepted that traffic patterns can nonetheless increase over time there is no reason to suppose that there would be any other committed development induced change to the local traffic conditions not apparent within observations.

3.2.4 It is therefore most appropriate to seek to understand any change in traffic conditions with reference to such observations. **Table 3.1** below provides Annual Average Daily Traffic (AADT) flows collected by the Department for Transport (DfT) at a number of locations around the Hamble Peninsula in 2016, 2017, 2018, 2019 and 2020.

Table 3.1 – DfT Link Flow Data

Location	AADT All Motor Vehicles (vehs)				
	2016	2017	2018	2019	2020
A3025 Hamble Ln (N of Lionheart Way)	26,575	25,997	25,813	26,041	20,234
A3024 (Link to M27)	36,170	36,443	36,654	36,637	34,438
A27 (E of A3024)	14,277	14,301	14,007	14,121	10,986

3.2.5 Whilst I accept that data from 2020 is unlikely to make a useful contribution towards this exercise due to the implications of the COVID19 pandemic, data from 2016 through to 2019 can provide a useful context of how traffic has changed in the period since the original application. The data clearly indicates that traffic movements through the area have remained largely consistent over the period. In my opinion it is reasonable to correlate overall traffic demand to network performance, where there are no reasons to suppose the patterns of movements or network capacity would affect performance.

Highway Network Changes

3.2.6 I am aware of no significant changes to the local highway network of Hamble Lane, implemented during the intervening period between the applications that would undermine the operational capacity of the network. Such measures might have included significant new road space reallocation projects, such as bus lanes, or pedestrian priority schemes, none of which I am aware have taken place.

- 3.2.7 The HCC Highway Officer's comments in the Delegated Report and again in the appendix of the SoC make reference to a March 2019 (thus in the interim period) report to the Executive Member for Environment and Transport in the context of as yet undelivered improvements along the Hamble Lane corridor. This report is included in my **Appendix JW6**. The Officer relies on a specific quote from this report, (at para. 3.2 of p23) which indicates that any traffic generating development would be inappropriate prior to the implementation of the enhancement scheme for Hamble Lane. It is understood at the time of writing this scheme remains unfunded and therefore its delivery is uncertain.
- 3.2.8 However, I consider it misleading to present this as a change in context. Improvements to Hamble Lane to address existing congestion issues are not a new concept that emerged in 2019. They have been aspired to, actively developed and funding sought for over several years before even the original application was considered by HCC. At the time of that application a scheme for Hamble Lane improvements was proposed but neither committed nor funded. Both then and now there were aspirations for, but considerable uncertainties about, the delivery of a Hamble Lane improvement scheme. In this regard the context remains unchanged.
- 3.2.9 The reference made by the HCC Officer to the March 2019 report may however be interpreted as a policy change that has emerged in the intervening period. To understand this, my colleagues approached the HCC project lead for the Hamble Lane improvements and received the response in **Appendix JW7** which stated:
- 'These reports do not constitute formal County Council Policy, and in terms of the sentence you cite below [The sentence quoted in the Delegated Report], this was used as contextual information behind the need for the Hamble Lane improvement scheme and did not form part of any formal Decisions or Recommendations that were approved.'*
- 3.2.10 It is clear that there has been no formal relevant policy change in this period and the statement relied upon by the HCC Officer should be seen rather as a comment of context, for what was a report promoting a proposed highway scheme. In my view it therefore carries little to no policy weight in decision making. Whilst I have been unable to locate records of the meetings referred to in the above e-mail, it appears to me that this general view of conditions was prevailing at least as far back as November 2017, before determination of the previous scheme.

- 3.2.11 In the HCC response in the SoC further reference is made to the context of the Hamble Lane improvements being the justification for the change in position to object to this development. It is explained that between 2015 and 2019, including the period when the previous scheme was not objected to, a package of relevant improvements works were being investigated in conjunction with neighbouring authorities, but funding remained to be secured. The response goes on to indicate that at the current time similar improvement schemes continue to be pursued, and as before funding remains to be secured.
- 3.2.12 As I indicated above, it is unclear to me how this constitutes a change in circumstances. Whilst I can appreciate that there may be growing frustration by the highway authority in failure to secure the necessary funding, there is no evidence to suggest that either the need for the improvements are any greater now than they were at the time of the previous application, nor was there a demonstrably greater or lesser prospect of the scheme coming forward then than there is now.

Summary of Change in Context

- 3.2.13 It is apparent to me that there has essentially been no material or policy change in the Hamble Lane context between the original application and the determination of the Appeal Scheme. The overall traffic picture now remains the same as it was then. HCC had identified a need for and were promoting a Hamble Lane corridor improvement scheme then, as they are now. Uncertainty on the delivery of such a corridor scheme existed then, as it does now. In my opinion local context does not represent a reasonable or justifiable reason for the change in position with respect to severity of traffic impact.
- 3.2.14 As confirmed by HCC themselves (ref **Appendix JW8**) statements by the Executive Member for Environment and Transport (EMET) do not constitute any formal policy and should in my view be attributed an appropriately limited weight in decision making. However, were some weight to be attributed to it then I consider it important to note the status of development on the Appeal Site in the timing of that statement. The comment by the EMET was made after development on the Appeal Site had been originally approved such that it may be reasonable to assume that the EMET was of the opinion that no further development beyond that should be granted on the Hamble Peninsula.

3.2.15 The Appeal Scheme now comes forward in a context where that permission has lapsed and will replace it if approved with a smaller scheme. As I will discuss below, it is my opinion that the impact of both the previously consented development and the current Appeal Scheme are immaterial on the Hamble Lane corridor. However, this is not the position of HCC or the LPA, who contend that it would be very material to the extent that it would be severe. In my view if HCC or the LPA seek to rely on the position of the EMET in March 2019, then it would also be necessary to give due consideration to the material impact of the previous consent lapsing.

3.3 Appraisal of Highway Impact

3.3.1 The LPA's position as stated throughout the Delegated Report and enshrined in Reason for Refusal no.3 is that the traffic impact from the development will be sufficiently significant as to be severe. Here I have considered the nature of the assessment provided with the planning application submission and that used by HCC and the LPA to determine the application. Thereafter I have provided further assessment that I consider will aid this Appeal process.

Planning Application and LPA Assessment

3.3.2 Noting the position of HCC on traffic impact in the previous application, the Transport Assessment supporting the submission of the Appeal Scheme did not undertake local junction modelling beyond the site access. Likewise, HCC undertook no modelling analysis of their own. Both appraisals were based on an assessment of relative impact of development traffic against forecast baseline conditions.

3.3.3 It is my understanding that both parties relied upon the same forecasts, namely those set out in section 6.6.6 onwards of the iTransport TA, and HCC did not question the accuracy or appropriateness of these. The disparity between the parties arises solely in the interpretation of whether that forecast impact can be considered severe.

3.3.4 The original TA highlighted that the development would give rise to an additional 27 two-way vehicle movements through the Satchell Lane/Hamble Lane junction in the morning peak hour, against a baseline of 2,161 vehicles – a 1.25% increase resulting from development. The TA acknowledged that a greater proportional impact would be experienced on Satchell Lane but that this remained at less than one additional vehicle every three minutes which it concluded was small and would not be noticeable when compared to existing conditions.

- 3.3.5 In contrast HCC and subsequently the LPA reached a conclusion that the impact would be severe. That conclusion relies heavily on the findings of the recent appeal decision on GE Aviation (ref **Appendix JW2**). That development was considerably larger (148 dwellings) than the Appeal Scheme considered here (61 dwellings) and was located elsewhere in the Hamble Peninsula. HCC accepted this in their own summary, noting that the impact would be lower for the Appeal Scheme.
- 3.3.6 Accordingly, I do not consider it appropriate to simply assume that because the GE Aviation proposals impact was severe, the impact of the Appeal Scheme would inherently be the same. However, this appears to be the approach HCC have taken in reaching their conclusion. Their comments rely on a perceived ‘intimation’ by the GE Aviation appeal Inspector that no further development should take place on Hamble Lane prior to the improvements works. I have only been able to identify the Inspector quoting the aforementioned March 2019 HCC report, rather than reaching this conclusion himself. Rather, my interpretation of the Inspector’s comments is that they were more subtle and nuanced than suggested by HCC, and therefore the LPA, and merit a closer interrogation.
- 3.3.7 At para. 43 of the Inspectors report on GE Aviation he states:
- ‘The impacts should be considered as a whole and there would be a mix of positive and negative results at each junction. At both the morning and evening peaks, some junctions would experience a decrease in queue delays when comparing the two scenarios. Most of the queue delay increases would be under 10 seconds. However, there would be some notable negative impacts in specific locations.’*
- 3.3.8 He goes on to provide considerably more detailed discussion on those specific locations namely the Tesco Roundabout junction and the Portsmouth Road junctions along Hamble Lane, including stating at para. 44:
- ‘For the Hamble Lane north arm of the Tesco Roundabout junction in the evening peak, the queue length would increase substantially in the preferred development scenario. This equates to an increased time delay of over a minute to give an overall delay of three and a half minutes. In the morning peak, the worst affected junction would be the A3025 Portsmouth Road right turn with nearly half a minute time delay and an overall delay of three and a half minutes.’*
- 3.3.9 The Inspector concluded in the para. 45, which was subsequently quoted by HCC in their comments, that the impact from this specific development in those specific locations was in his view severe.

- 3.3.10 In my view the Inspector's comments provide some very useful boundaries against what he considered to be severe. In the earlier comment, it is clear he is dismissing concerns where additional queue delays were less than 10seconds. In the latter paragraphs the Inspector expresses concerns about additional queuing delays of 1 minute at the Tesco Roundabout and half a minute at Portsmouth Road.
- 3.3.11 Whether this definition of severity is appropriate remains open to interpretation. However, in my view it is useful to consider the impact of the development within these parameters, given the significant weight attributed to this appeal decision by HCC and the LPA.
- 3.3.12 In my opinion it is also useful to highlight that the Inspector in this case was considering the relative impact of the development against local context, using the phrase *'when comparing the two scenarios'*. Whilst the prevailing conditions evidently contributed to their appraisal, the determination of severity was derived through this comparison. I would highlight the contrast between this and the approach seemingly adopted by HCC in recent communications, that relies solely on the prevailing context to define severity.
- 3.3.13 Regardless, the information put before the highways and planning authorities in the Transport Assessment does, I accept, not provide analysis that allows for direct appraisal in the terms set out in that Inspector's report. The Transport Assessment did not benefit from a modelling assessment of the Hamble Lane corridor that facilitates this exercise nor did HCC utilise any such modelling themselves to my knowledge. In the absence of modelling the relative percentage impacts cannot be readily translated into time delay. This in my view explains the request from HCC in their consultation response for modelling of the Satchell Lane and Hound Road junctions with Hamble Lane. It remains my view that severity of development impact can in this case be readily established by application of professional judgement by comparing development impact given the lack of any material contextual change. However, without prejudice to that opinion and to assist the appeal I have provided further appropriate modelling assessment which is detailed below.

Scope of Assessment

- 3.3.14 HCC identified two junctions requiring further modelling analysis within their consultation response. These were the priority-controlled junction between Satchell Lane and Hamble Lane along with the roundabout to the north with Hound Road, both in relatively close proximity to the Appeal Site.

- 3.3.15 Following scoping with HCC since determination of the application (ref. **Appendix JW9**) a further junction was added for consideration; that being an isolated location some way to the north, between Hamble Lane and Portsmouth Road. Given the distribution of traffic heading north from the development including routes to/from the west via Pound Road, the relative development impact at the Portsmouth Road junction is even more limited, at 0.71%, 0.30% and 0.52% in the AM, Inter and PM peak periods respectively. In my opinion these impacts can clearly be deemed not severe without the need for further modelling. Notwithstanding this for the benefit of this Appeal I have advanced further modelling of this junction.
- 3.3.16 As requested by HCC the modelling has been undertaken in the three, one-hour periods requested. I consider the assessment of the network in one-hour periods to be appropriate and consistent with normal practice.

Underlying Assumptions and Base Data

- 3.3.17 As with any assessment of traffic impact there is a need to make forecast assumptions and establish baseline conditions. The following assumptions were set out in the original Transport Assessment, were not challenged by HCC or the LPA in the Delegated Report nor in the most recent '*Statement of Case - Appendix 6*' and therefore have been retained for my assessment:
- Background growth to 2025 (five years post application);
 - Trip rates for proposed the land use;
 - Trip distribution and assignment on to the road network (as far as Hound Road);
- 3.3.18 It has been necessary to supplement information from the Transport Assessment as follows:
- Supplementary base data, by undertaking new more comprehensive traffic surveys (based on the timing and scope agreed with HCC, ref **Appendix JW10**);
 - Additional assumptions on distribution and assignment to extend the assessment to the supplementary junction of Portsmouth Road (assuming development traffic patterns replicate those observed);
 - Development of base models that are fit for the purpose.

Base Model Development

- 3.3.19 Appropriate base models are necessary to allow forecasting of development impact. It is common practice to utilise industry standard traffic modelling software to development such base models. Software that can be used in the modelling of priority-controlled junctions and roundabouts is developed by TRL and known generally as JUNCTIONS, although the specific components of PICADY and ARCADY are still referred to as the tools for assessing priority and roundabout junctions respectively.
- 3.3.20 During pre-appeal scoping with HCC the use of these model components was discussed. An initial response from HCC indicated a requirement for such models to '*...be validated with appropriate queue length data.*' (Ref **Appendix JW10**). This was challenged on the basis that TRL, the developers of the software, do not endorse queue lengths as a validation criterion. The issue with the use of queue data is well established, but I believe can be usefully summarised as follows:
1. There is no agreed definition of what constitutes a queue such that variation between the manner of observation and modelling can differ substantially to the point of rendering the comparison of no value. For example, a queue might reasonably be defined to form when vehicles slow to below a certain speed and the gap to vehicles in front reduces. However, what relative speed and how reduced the gap needs to be to constitute a queue is not universally defined. Even if defined, it would be impractical to reliably observe such occurrences with any reliability and in manner consistent with the recording of such data within the model.
 2. It can often be impossible to attribute a queue to a single source during observations. If a queue forms at a stop-line or give-way at junction, it will often propagate back through other network features, such as other junctions, which add to the queue. The queue would manifest on the ground as a single line of vehicles; but its scale would be the compound of numerous sources. In contrast, most conventional modelling is only assessing the queue forecast to be generated by the original source, undermining any value in comparison.
 3. In a similar manner to (2), queues might form at a junction being observed and assessed but which arise due to queuing that has extended from another source, downstream of that junction. This is typically termed an 'exit constraint'. In such cases, an observation would record a queue at the junction being observed/modelling as the surveyor would be unable to differentiate the source of the queue.

- 3.3.21 HCC acknowledged the issues with queue validation in the e-mail exchange presented in **Appendix JW10** prior to submission of the Appeal but continued to highlight the need to ensure that the models were comparable and realistic, inviting further discussion where this is not achieved.
- 3.3.22 Pursuant to agreement I submitted the technical note included in **Appendix JW11** setting out a base model development exercise for the three junctions in question, which in accordance with guidance from TRL, did not seek to calibrate the models against queue observations. Nonetheless queue observations had been recorded in the surveys and for full transparency tabulated comparisons were provided along with explanations for what were some notable discrepancies between the modelled and observed queues. No response was received on this prior to submission of the Appeal.
- 3.3.23 In the most recent comments in Appendix 6 of LPA SoC, HCC do provide a response to that technical note (ref. **Appendix JW11**) but they reiterate their view that *'Models to be validated with appropriate queue length data'*. The HCC comments again question the validity of the models based on the disparity of modelled and observed queues and no attempt is made to respond to my comments in the Highways Statement on this matter.
- 3.3.24 It is my firm opinion that attempting to validate or calibrate TRL JUNCTIONS models to observed queue data severely undermines the integrity of the models. In the case of these junctions the disparity in queuing arises due to features of the network that are beyond the scope of the software to model, as explained in the note in **Appendix JW11**. This software models individual junctions and has limited capability to model networks or external constraints. Manipulation of other criteria within the model to achieve calibration against queues is in my view inappropriate and counterproductive.
- 3.3.25 This latter point is in my view critically important. The objective of undertaking a localised model within TRL JUNCTIONS is to understand how that individual junction will respond to changes in traffic demand and/or interventions. This may be used as precursor to understand whether impact at that junction is severe and how, if it is deemed necessary, mitigation might be achieved. Manipulating or calibrating a model of such a junction in order that it produce queues which are caused by network features other than the junction itself, such as an exit constraint, entirely undermines the validity of the model for its intended purposes. It could lead to conclusions being drawn that mitigation at this junction would be necessary or effective and lead to wholly inappropriate interventions on the network.

- 3.3.26 In the case of the Portsmouth Road/Hamble Lane junction, whilst modelled queues were generally lower than observed the general pattern was the same (ref Table 3.1 in **Appendix JW11**). The notable exception was the left turn movement from Portsmouth Road which was observed to be blocked in a manner that could not be reliably modelled and therefore the disparity between the modelled queue and that observed was significant. There is scope within the software to undertake a process of manipulation in the manner suggested by HCC, allowing adjustment of parameters until such time as modelled queues matched observed. This is sometimes performed and is often seen as a 'quick' fix to models seen as uncalibrated. However, for reasons I have highlighted above, it would be a technically flawed and misleading exercise and I could not endorse doing it in this case.
- 3.3.27 As a means to forecast the relative impact of this development at this isolated junction, as was requested by HCC, the JUNCTIONS base model set out in the note at **Appendix JW11** can in my opinion be considered fit for purpose. My opinion is, in part, informed by judgement on the proportionality of assessment necessary in this particular case. As will be evident from my comments below, there are alternative means for assessing development impact on the highway network that can more comprehensively model the implications of 'network' operation, including queuing between junctions. However, as is widely acknowledged, including by the Inspector in the GE Aviation case, these are a costly and onerous exercise in terms of data collection and technical input. In this case such an exercise would require modelling of a much wider network of junctions, including those to the north which are beyond the scope of that required by HCC.
- 3.3.28 In my view HCC were quite correct to have scoped out the assessment of these junctions because the dispersal of traffic is such that development impact is immaterial and would not demonstrably increase the occurrence of queuing back into the Portsmouth Road junction. To be required to model this wider network of junctions simply to provide a perceptually better model of the Portsmouth Road junction would in my opinion be entirely disproportionate to the scale of impact of this development. Whilst I acknowledge that the use of such modelling approaches could provide a broader understanding of the forecast future situation; this does not undermine the suitability of the JUNCTIONS software as a tool to assess the relative impact at the junction that HCC have identified as requiring assessment and which remains the pertinent test in terms of para. 111 of NPPF.

- 3.3.29 Whilst in my view a similar conclusion could be reached with respect to the other two junctions identified by HCC to be assessed, it is clear that the scale of impact at these junctions is greater. I am also aware that the two junctions appear to have a notable influence on each other and operate as a small network, rather than being affected by wholly external influences. It is also evident from Appendix 6 of the LPA SoC that HCC have not accepted the validity of base models of Hamble Lane/Hound Road and Hamble Lane/Satchell Lane. Therefore, I have considered it appropriate to explore alternative means to model the impact of development in these specific locations.
- 3.3.30 In this regard, I have noted the GE Aviation Inspector's opinion on the value of micro-simulation modelling to assess impact local networks where junctions interact. I also noted the reference to an existing model of the Hamble Lane corridor, used by HCC themselves to assess impact. Unfortunately, following contact with HCC our request for access to this model was declined. As I noted above, the Inspector in the GE Aviation case noted that such models are costly to develop such that while I consider it significantly disproportionate to model the Portsmouth Road junction in such a manner; it could assist the Appeal to have a microsimulation model available for the Hound Lane, Hamble Lane and Satchell Lane network of junctions. Accordingly, **Appendix JW12** provides a Local Model Validation Report (LMVR) for a VISSIM microsimulation model of that network. The VISSIM software has been used because it is apparently available and accepted by HCC who have utilised it for the Hamble Lane corridor study themselves.
- 3.3.31 An initial VISSIM base model was produced using data collected in November 2021. This was submitted in the Highways Statement in support of the Appeal and was used to derive an assessment of development impact. The base model was developed using the survey data available prior to the lodging of the appeal and with limited scope to supplement this. Whilst I maintain that the model was fit for purpose, I did identify the benefit of further data collection to allow a greater depth of validation. The clarification in process of the Appeal provided the scope to undertake these surveys prior to preparation of this evidence. Accordingly, further data collection was undertaken in early July 2022 which has informed a revalidation and update to the model, including the outputs from it. Whilst the model is substantially the same as that previously submitted, the updated LMVR and the results set out here should now be seen to supersede that provided in the Highways Statement.

- 3.3.32 I refer to **Appendix JW12** for details of this updated base model but to summarise, the model was developed with traffic survey data and local observations of the network, conducted originally in the period agreed with HCC and with further data collected in July 2022. It is my opinion that this represents an appropriate base model that is fit for the purpose of forecasting the impact of the Appeal Scheme to be used alongside the standalone PICADY model of the Portsmouth Road junction.
- 3.3.33 Upon receipt of the LPA's SoC I noted that the HCC response, expressly prepared in response to the Highways Statement submitted with the appeal, failed to include a reference to the VISSIM microsimulation submitted. It was also surprising to note that the HCC response made reference to the shortcomings of earlier PICADY and ARCADY modelling of the Hound Lane and Satchell Lane junctions, which were not relied upon in that statement.
- 3.3.34 Pursuant to establishing matters of agreement; Mr Grantham at HCC was directly approached to ascertain whether he would be able to comment on this and to establish whether the fundamentals of the modelling might be agreed. That response is included in **Appendix JW5**. In his comments Mr Grantham acknowledges that *'In terms of the results of the VISSIM modelling, whilst theoretically useful, the accurateness of the future year 2025 results is unclarified and as such its reported results of a 2025 base year plus development scenario cannot be fully relied upon'*.
- 3.3.35 Whilst I will continue to engage with Mr Grantham pursuant to a SoCG at present I have been unable to reach an agreed position on this point and feel it is appropriate to respond to this in evidence as the point raised by Mr Grantham appears to challenge the very premise of forecast modelling, not only that which is presented here. Mr Grantham refers to the modelling being 'theoretically useful', something I can of course agree with. All forecast modelling is theoretical. It is logically impossible for a forecast model to be anything other than theoretical as the only alternative would be to practically implement the change and observe. In the case of future year forecasting this would require awaiting the passage of time. The fundamental premise of forecast modelling is that it represents a theoretical test of a scenario, prior to its implementation or occurrence. Similarly, I'm entirely unfamiliar with the concept of 'clarifying' a future year model as Mr Grantham suggests. I do not understand this to form any part of accepted industry practice, nor can I envisage how it might occur. The accepted practice is to validate a base model against observed data in a manner fit for the intended purpose and thereafter forecasting the impact of the change, either in demand or supply.

3.3.36 Therefore, whilst I note Mr Grantham’s comments, I remain of the firm opinion that using appropriate models to forecast the implications of development is not only accepted industry practice but represents the most readily available means of assessing impact.

Portsmouth Road/Hamble Lane Modelling

3.3.37 **Appendix JW13** includes full outputs of the PICADY modelling of this junction, using the base model discussed above. The results of the 2025 forecast base and 2025 forecast base plus development scenarios are summarised in **Table 3.2**.

Table 3.2 – Portsmouth Road/Hamble Lane Modelling Outputs

	2025 Forecast Base			2025 Forecast Base Plus Development		
AM Peak						
Arm	RFC	Delay (s)	Queue (vehs)	RFC	Delay (s)	Queue (vehs)
Portsmouth Road (left)	0.81	31.47	4.2	0.82	32.23	4.3
Portsmouth Road (right)	0.03	57.07	0.0	0.03	59.50	0.0
Hamble Lane right turn	0.90	29.29	16.2	0.91	30.18	17.1
Interpeak						
Arm	RFC	Delay (s)	Queue (vehs)	RFC	Delay (s)	Queue (vehs)
Portsmouth Road (left)	0.68	19.30	2.1	0.68	19.35	2.1
Portsmouth Road (right)	0.02	36.75	0.0	0.02	37.07	0.0
Hamble Lane right turn	0.95	43.98	22.9	0.95	44.17	23.2
PM Peak						
Arm	RFC	Delay (s)	Queue (vehs)	RFC	Delay (s)	Queue (vehs)
Portsmouth Road (left)	0.63	16.06	1.7	0.63	16.12	1.7
Portsmouth Road (right)	0.01	33.51	0.0	0.01	33.97	0.0
Hamble Lane right turn	0.99	62.88	38.2	0.99	63.50	38.2

- 3.3.38 The modelling shows that this junction is forecast to operate very close to its theoretical capacity in isolation and irrespective of any of the external influences discussed above. I accept that the actual observable performance of the network in the vicinity of this junction by 2025 might be assumed to be worse than presented here, given that the network is impacted by off-site constraints that manifest as queues in and around the junction. However, it is my view that the model remains appropriate for assessing the relative impact of the development traffic and it shows that the impact of the Appeal Scheme is negligible and close to imperceptible, which in my opinion is to be expected given the very limited development demand at this location.
- 3.3.39 To place this in the context of the recent appeal decision which HCC and the LPA rely upon in refusing the Appeal Scheme, reference can be made to change in delay between the forecast base and development scenarios. The very highest increase in delay occurs on the Portsmouth Road arm, during the AM peak, with a forecast average increase of between 2-3 seconds per vehicle. In all other cases the additional delay is less than one second.
- 3.3.40 It is important to note that, like the Inspector in GE Aviation case, I am focusing here on the change in delay caused by the development trip generation. I concede that the overall delay presented in either the forecast base or development scenarios may not be representative of what might actually be experienced in 2025. This would not only be due to the limitations of the model to assess the overall network, but also because traffic modelling is not generally intended to make absolute predictions of the future. The primary purpose of a traffic model is to provide the framework to forecast the implications in changes to finite and defined variables. In this case, the variable is the change in traffic associated with the development.
- 3.3.41 Noting that the planning test here is that of the impact generated by the development, in my opinion this impact cannot reasonably be deemed to be severe. As I outlined above, the GE Aviation appeal Inspector's criteria suggested that impacts of less than 10 seconds per vehicle across the peak periods could not reasonably be considered severe but that delays of over 30seconds would, in that Inspector's opinion and that context be severe The impact of the Appeal Scheme is evidently well within the range of impact which that Inspector determined was not severe.

Satchell Lane, Hamble Lane and Hound Road

- 3.3.42 Given its proximity to the development site the relative impact of the Appeal Scheme at this junction is greater. By application of the forecast development traffic and reasonable assumptions of growth to the base VISSIM model, the scale of this impact can be determined.
- 3.3.43 Microsimulation models such as VISSIM are not empirically based in the same manner that the JUNCTIONS software is; instead using a ‘stochastic’ method of modelling traffic behaviour. Accordingly, VISSIM does not determine ‘a capacity’ of the network, rather any assessment is generally undertaken as relative between multiple scenarios. However, this is appropriate as it allows a comparison to be made of the relative impact of the development traffic against the forecast baseline.
- 3.3.44 The software allows the output of a wide range of measurement parameters but there is no default output template as with JUNCTIONS. I have selected criteria typically used to appraise network performance and which in my opinion will assist this Appeal; namely overall network performance criteria and queuing, presented in **Table 3.3** and **3.4** below. I have also provided the full model files to HCC for their own evaluation. In accordance with the HCC scoping performance criteria this is presented for each of the three one-hour peaks.

Table 3.3 - Overall Network Performance Indicators

Model Output	2025 Base	2025 Base + Development
AM Peak		
Congestion Related Delay (mean secs per veh)	30	39
Average Speed (mph)	16	15
Interpeak		
Congestion Related Delay (mean secs per veh)	14	14
Average Speed (mph)	18	18
PM Peak		
Congestion Related Delay (mean secs per veh)	18	19
Average Speed (mph)	18	18

Table 3.4 – Queue Length (Average PCUs)

Model Output	2025 Base	2025 Base + Development
AM Peak		
Hamble Lane Southbound to Roundabout	12	14
Hamble Lane Northbound to Roundabout	0	0
Hound Lane Eastbound to Roundabout	1	1
Satchell Lane to Priority Junction	10	16
Interpeak		
Hamble Lane Southbound to Roundabout	0	0
Hamble Lane Northbound to Roundabout	0	0
Hound Lane Eastbound to Roundabout	0	0
Satchell Lane to Priority Junction	7	8
PM Peak		
Hamble Lane Southbound to Roundabout	0	0
Hamble Lane Northbound to Roundabout	2	2
Hound Lane Eastbound to Roundabout	1	1
Satchell Lane to Priority Junction	9	10

(All queues rounded to non-zero integers)

3.3.45 The results presented above are for the two forecast years, one with and one without the development. A comparison of these two scenarios represents a test of the impact of development in the context of a cumulative forecast baseline and is consistent with the test set out in para. 111 of NPPF, discussed exhaustively above.

- 3.3.46 I note that in discussions with Mr Grantham pursuant to the SoCG reference is made to the need to understand the impact of the development relative to the observed conditions and thus an indication that the above tables should include observed queuing. I do not agree with Mr Grantham's position on this. Firstly, to compare the forecast with-development scenario against observed conditions would be to assess the impact of the development and the background growth/committed development. This would not be an assessment of development impact. Secondly, for reasons explained earlier, comparison of modelled queues to observed queues cannot in my opinion be technically or professionally supported and thus cannot be provided. The method of quantifying observed and modelled queues would differ to such an extent as to render comparison largely worthless. The same issue is not true for comparison of two modelled forecast scenarios, as both assuredly adopt the same quantification method.
- 3.3.47 With this in mind, the results set out above provide what I consider to be a realistic assessment of the forecast scenario. In the AM peak congestion is noted, with overall delays through the network of around half a minute, average vehicle speeds around 15mph below typical; and excess queuing on two of the four approaches. This is the case regardless of the development. Whilst a forecast model, this is broadly consistent with current conditions, which notes levels of congestion for a notable portion of the AM peak hour. Further interrogation of the modelling not easily presented here shows this congestion being most acute during the earlier part of the period and clearing by the end of the hour. This is important as it indicates that the network experiences a very contained and limited peak period, that was noted to be less than one hour in duration (as observed). With the development scenario, as with the forecast baseline and observed conditions, excess delays are not retained throughout and beyond the peak hours and have cleared by the end. That is to say that the network is able to accommodate peak hour demand within the same period, albeit some level of 'surge' demand can lead to relatively brief periods of excessive delay. Such scenarios are common across the highway network, particularly in the vicinity of schools.
- 3.3.48 In contrast the interpeak period sees relatively limited congestion. In the PM peak the modelling shows some queuing on Satchell Lane, there was some additional congestion related delay and vehicle speeds were again below typical desirable.

- 3.3.49 Whilst I appreciate this may contrast with some perceptions; from my own observations and the survey data suggests that any congestion in these periods is very occasional; lasts for a very short period of time (a few minutes); appears to occur as a result of short-term surge demand and clears very rapidly. While the model reflects these variations they are not practically or appropriately reflected in the peak hour performance statistics against which the impact is appropriately assessed. This suggests that the network is largely able to accommodate the demand effectively in these peaks.
- 3.3.50 The impact of the development in the interpeak and PM peak was very low, essentially imperceptible, so in my view it is sensible to focus on the AM peak hour. This impact can be seen by a comparison against the forecast base. The average delay per vehicle in the AM peak resulting from the development impact increases by 9 seconds; there was a reduction in average vehicle speed of 1mph and a maximum increase in average queue on Satchell Lane of 6 vehicles.
- 3.3.51 As before, the delay per vehicle output is most useful as this can be considered in the context of the GE Aviation appeal decision on which HCC and the LPA have sought to rely. The Inspector in that appeal concluded that a number of parts of the network were not subject to severe impact as *'Most of the queue delays increases would be under 10 seconds'*. The Inspector in that appeal highlighted concerns and judged severe impact for other parts of the network which were subject to over 30 second delays.
- 3.3.52 Without prejudice to my own view on the appropriateness of these criteria, it is clear that HCC and the LPA have sought to rely upon these and in this context and that of the modelling set out above, it would in my view be unreasonable to conclude that the development impact on these junctions was severe, given that the congestion related delay was a maximum of 9 seconds per vehicle in only one period.

Summary of Traffic Modelling

- 3.3.53 Without prejudice to my opinion that professional judgement on the relative impact of development traffic generation is sufficient to establish the lack of severity of impact on the local network, I have provided the above modelling assessment to respond to HCC's request and to aid this appeal.
- 3.3.54 The modelling has been based on a sound methodology and in the case of the Hound Road and Satchell Lane junction has adopted a complex and costly microsimulation modelling approach, consistent with techniques used by HCC themselves elsewhere on the Hamble Lane corridor.

- 3.3.55 I have shown that when the modelling impact is considered in the context of threshold parameters of severity implied within the appeal decision upon which HCC and the LPA rely on, it remains that the development impact would not be severe. Albeit based on the simpler PICADY modelling, this conclusion is even more apparent at the Portsmouth Road junction.
- 3.3.56 It is my opinion that this modelling clearly reinforces the position that the traffic impact from the development cannot reasonably be judged to be severe in the context of NPPF para. 111.

3.4 Mitigation of Hound Road/Satchell Lane Junctions

- 3.4.1 I note the strong assertion from the LPA and in particular HCC that no development should come forward until such time as adequate mitigation has been developed. Entirely without prejudice to my opinion that the impact of the development is demonstrably not severe, I consider it would be useful to the Inquiry to consider the likely scope and deliverability of such mitigation.
- 3.4.2 It is apparent to me that notwithstanding my views on the impact, any mitigation would invariably need to be focused on the junctions closest to the Appeal Site, namely those between Hound Road and Satchell Lane.
- 3.4.3 The development of the validated microsimulation base model of these junctions, as detailed in the LMVR (**Appendix JW13**), provided a detailed insight into the nature of the current operation of the network in this location. Much of this is detailed in that report. This identified the key issue of interaction between vehicular traffic and pedestrians crossing Satchell Lane. This gave rise to an impact, which was carefully modelled in VISSIM, of drivers giving way to pedestrians when turning in to Satchell Lane and disrupting the traffic flow on Hamble Lane. This was noted to occur on occasions if only a single vehicle was turning left into Satchell Lane.
- 3.4.4 As noted in the LMVR, this occurrence of giving way to pedestrians is now enshrined in the Highway Code and thus a resolution to this would not be to influence this behaviour. Nor would it be desirable to move pedestrians away from their desire line of crossing at the junction. Instead, a mitigation measure has been explored which simply seeks to gain storage space for vehicles turning in to Satchell Lane to minimise disruption of movement on Hamble Lane. A concept scheme is included in **Appendix JW14**.
- 3.4.5 To understand the effectiveness of this relatively modest mitigation, the proposals have been assessed by adapting the validated base model discussed above. The results are presented, alongside the earlier forecast model outcomes.

Table 3.5 – Overall Network Performance Indicators

Model Output	2025 Base	2025 Base + Development	2025 Base + Development + Mitigation
AM Peak			
Congestion Related Delay (mean secs per veh)	30	39	20
Average Speed (mph)	16	15	18
Interpeak			
Congestion Related Delay (mean secs per veh)	14	14	8
Average Speed (mph)	18	18	19
PM Peak			
Congestion Related Delay (mean secs per veh)	18	19	21
Average Speed (mph)	18	18	18

Table 3.6 – Queue Length (Average PCUs)

Model Output	2025 Base	2025 Base + Development	2025 Base + Development + Mitigation
AM Peak			
Hamble Lane SB to Roundabout	12	14	3
Hamble Lane NB to Roundabout	0	0	0
Hound Lane EB to Roundabout	1	1	1
Satchell Lane to Priority Junction	10	16	8
Interpeak			
Hamble Lane SB to Roundabout	0	0	0
Hamble Lane NB to Roundabout	0	0	0
Hound Lane EB to Roundabout	0	0	0
Satchell Lane to Priority Junction	7	8	4
PM Peak			
Hamble Lane SB to Roundabout	0	0	0
Hamble Lane NB to Roundabout	2	2	2
Hound Lane EB to Roundabout	1	1	1
Satchell Lane to Priority Junction	9	10	11

(All queues rounded to non-zero integers)

- 3.4.6 The results forecast a significant improvement in the performance of the network in the morning and interpeak and very minor deterioration in the afternoon peak. This approach is to be expected as the mitigation focuses on addressing the congestion related implications of vehicle and pedestrian interaction that occurs to large extent as a result of school pedestrian movements in the AM and Inter peaks. In the afternoon peak, there is very little benefit from the mitigation and the slight deterioration likely arises from the small change to vehicle paths when turning in. However, this is almost imperceptible and needs to be considered alongside the gains in the morning peak in particular.
- 3.4.7 I note that even this modest mitigation proposal gives rise to a significant residual betterment, with the network operating better than in the forecast baseline. Whilst arguably this is disproportionate to the development impact, this is quite often the case in highway mitigation where step changes in performance tend to occur. This is particularly the case where development impact is so limited.
- 3.4.8 Again, without prejudice to my opinion that no mitigation is necessary in this case, the above analysis does demonstrate the feasibility of a minor improvement scheme at this part of the network. Should the decision maker be minded to conclude that mitigation is needed, a scheme consistent with that shown in **Appendix JW14** could be secured by means of a suitable condition.

4 Conclusions

- 4.1.1 This evidence on transport matters has been produced as part of an Appeal against refusal of development at Land at Satchell Lane. A similar, but slightly larger development on the Appeal Site was also refused, in part on similar grounds, by the LPA and a previous appeal subsequently upheld and that decision was upheld by the High Court. That permission has however lapsed.
- 4.1.2 The LPA refused the application on grounds that included perceived shortcomings on sustainable accessibility and specifically in relation to suggested walk distances to a limited number of destinations. These aspects of the Appeal Scheme remain unchanged from the previously determined appeal and this specific matter was determined as part of the upholding of that appeal.
- 4.1.3 Nonetheless and irrespective of that earlier determination, I have presented evidence that demonstrates the failings of the LPA's decision on this matter, and which confirms that the Appeal Site would be wholly consistent with the aspirations and objectives of both national and local policy on sustainable transport.
- 4.1.4 Despite not having cited traffic impact as a reason for refusal on the last application, and the Appeal Scheme generating less demand, HCC and the LPA have now concluded that the residual cumulative impact would now be severe. I have set out how there has been no evidence of a change in context that would merit this change in position and that HCC's and the LPA's sole reliance on a recent appeal decision nearby was generically applied and thus the conclusion drawn without merit.
- 4.1.5 I have nonetheless set out supplementary evidence on traffic modelling, using methods including advanced microsimulation to forecast the actual development impact. When placed in the context of the parameters of severity arising from the appeal decision HCC and the LPA rely upon, it is clear to me that the impact of the Appeal Scheme cannot reasonably be considered severe and thus is not contrary to the relevant policy in para. 111 of the NPPF or the emerging local equivalent.
- 4.1.6 Notwithstanding my opinion on the severity of impact, I have considered the scope for mitigation of the Hound Road and Satchell Lane junctions and have shown that a feasible scheme could be delivered to provide significant net betterment, more than mitigating the development impact.

- 4.1.7 It is therefore my opinion that, when considering matters of highways and transportation, the Appeal Scheme is consistent with both local and national policy and that the application should not have been refused on the basis of RfR's 2, 3 and 4 (the relevant parts).