HighgateTransportation

Land at Peel Hall, Warrington
Reopened Inquiry

Proof of Evidence on
Highway and Transportation Matters

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on behalf of
Satnam Millennium Limited
(APP/M0655/W/17/3178530)

TEXT

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1.0 Introduction

1.1 My name is David Tighe, I am a Director of Highgate Transportation and my qualifications are BSc, CEng, MICE, and DipTpEng. I am a Chartered Engineer and a specialist Transportation Member of the Institution of Civil Engineers. I also hold a post graduate qualification in Transportation Engineering.

1.2 I have been actively involved in the field of transportation planning and traffic engineering since 1974, and since 1989 I have held senior director positions in engineering consultancies that operate within the development industry. I have given evidence as an expert witness on matters relating to traffic engineering and transport planning at numerous planning appeals and in the High Court.

1.3 I am fully familiar with the Peel Hall site and the surrounding area having been first instructed by the Satnam Group in the mid 1990's and having given evidence at the 2018 Inquiry.

1.4 The key principle in the evolution of the masterplan that supports the appeal proposals has been to make sure that the development is sustainable with high quality walking, cycling and public transport access to services and facilities required on a daily basis which will encourage sustainable travel at the expense of car trips whenever possible and minimise the need to travel.

1.5 A plan of the appeal site and local highway network is provided at **Appendix DT/1** and for ease of reference an A3 plan of the area to the south of the appeal site is also included as part of this appendix.

1.6 The key issues at the 2018 inquiry were:

i. Whether the information that under pinned the strategic modelling was too old to be relied on.

ii. The impact on the residential area to the south of the appeal site and if a package of mitigation measures such as extending the 20mph speed limit, verge parking and additional traffic calming are desirable or essential and, if essential, how should the package be secured. My evidence to that inquiry was that a package of measures was desirable, but should the Inspector consider it essential, then this obligation could be secured by a suitably worded planning condition.

1.7 From the Council's Development Management committee report of 1st July 2020, the key issue is apparently whether the appeal should be dismissed on the ground that there are one or more feasible alternative access strategies. From this committee report it is clear that issues such as mitigation at a specific location, for example at Delph Lane, are expected to be resolved and secured via a S106 obligation or a suitably worded planning condition.

1.8 This proof of evidence covers the following:

i. What the evidence was based on at the 2018 inquiry including the reasons why alternative Access Strategy Option B was withdrawn and the background to the 2020 inquiry.
ii. Matters arising from the Inspector's report.
iii. Further transport analysis since the 2018 appeal decision.
iv. Summary of the Transport Assessment Addendum (HTp/1901/TA/Addendum/01 - Core Document APN 120) issued in March 2020.
v. Summary of the response from highway officers to the Transport Assessment Addendum.
vi. Response to highway officer comments
vii. Response to Rule 6 and third party highway related comments.
viii. Mitigation package now proposed and S106 obligations/transport related planning conditions.
ix. Compliance with transport related planning policies.
x. Key issues arising including:
    - What is the increase in traffic through the residential area to the south of the appeal site? Does change necessarily mean harm and is mitigation in this area essential?
    - Whether the appeal should be dismissed on the ground that there are one or more feasible alternative access strategies?
xi. Areas of agreement and remaining areas of disagreement.

1.9 For this inquiry the highway evidence is supported by a Statement of Common Ground, which at the time of writing this evidence is still in draft form.

1.10 It should be noted that since the Inspector's 2018 report was published the employment content of the appeal scheme has been removed, although all other elements of the development profile remain as before. This followed concerns regarding the impact commercial traffic could have on the residential area to the south of Poplars Avenue. The proposed site access junctions also remain as before, and copies of the relevant plans are contained in **Appendix DT/2** for ease of reference.

1.11 It should also be noted that the Transport Assessment Addendum (ref: HTp/1901/TA/Addendum/01 – Core Document APN 120) issued in March 2020 to support this inquiry is based on Access Strategy Option A (no through route), as Option B (through route) was withdrawn at the 2018 inquiry (described at **paragraph 2.6(ii)** below).

1.12 This withdrawal followed strong opposition from the Council's highway officers and Highways England (mainly on the basis of the close proximity of M62 Junction 9 with the resultant new signalled junction on the A49 at Poplars Avenue, as well as their suggestion that the layout of this new junction needed to increase in size to accommodate more traffic and safer pedestrian movement resulting in the need for land outside the public highway); from Cheshire Police (on the basis of the impact the new signal junction would have on the M62); from the bus company (due to the rerouting of existing services); and from local residents. Also, the Council placed a Tree Preservation Order at the western end of Poplars Avenue on highway trees that would be affected by the proposed highway works. This matter is considered in detail in **paragraphs 2.7** to **2.16** and in **Section 11.0** of this proof of evidence.

1.13 Access Strategy Option A does not prevent the Council introducing Access Strategy Option B (or a variation of) in the future should they wish. Both access strategies are set out in detail in the Transport Assessment that supported the 2018 inquiry (ref: HTp/1107/TA/01/A – Core Document APN 101) issued in January 2018.

1.14 It should also be noted that since the 2018 inquiry the Peel Hall site is now proposed to be allocated for housing in the Council's Draft Local Plan (Core Document LP 26) and was accounted for in the strategic transport modelling that that supported the Council's Local Plan submission based on Access Strategy Option A (see correspondence at **Appendix DT/3**).

1.15 Each of the matters set out in **paragraph 1.8** are now considered in turn.

2.0 What the evidence was based on at the 2018 inquiry including the reasons why alternative Access Strategy Option B was withdrawn and background to the 2020 inquiry

2.1 The background to my evidence presented at the 2018 inquiry is that when the analysis to support the planning application began in early 2016, the area wide modelling information available at that time led to a bespoke transport model covering northern Warrington being created by the appellant (Peel Hall SATURN model) in agreement with the Council and Highways England. Once run, this model would help identify those junctions where stand-alone modelling would be carried out and help identify where mitigation measures should be considered.

2.2 The reason that highway officers wanted an area wide model to test development in this part of Warrington was that:

i. The main roads serving the area such as the M62, A49 and A50 can be congested at peak times.

ii. There are different choices of interconnected routes available to motorists over a wide area of northwest Warrington, including inside the study area such as Myddleton Road, Long Lane, Blackbrook Avenue, Delph Lane, Birchwood Way, Poplars Avenue, Capesthorne Road, Fisher Avenue, Sandy Lane, Sandy Lane West, Statham Avenue and Hilden Road.

iii. An area wide model of the A49 corridor had previously been prepared for Highways England and could be expanded to cover the Peel Hall study area.

2.3 The area wide approach to modelling allows the effect of the growth in background traffic between now and the design years on the network to be assessed, together with the development traffic that will displace some of this background traffic and the impact to be considered following this displacement.

2.4 In the immediate run up to the 2018 inquiry the Council's area wide SATURN model (WMMTM16) of the entire Warrington area, created to assess the impact of Local Plan and new infrastructure schemes, was close to becoming available, albeit too late to be made use of at the inquiry as the Transport Assessment that underpinned the evidence had to be submitted by the agreed date of 31st January 2018. The Inspector accepted {IR 13.40} that a line has to be drawn for modelling and evidence gathering.

2.5 The Transport Assessment that supported the 2018 inquiry set out the modelling results and suggested package of mitigation measures and this formed the basis of my evidence to the 2018 inquiry.

2.6 Two access strategies formed the basis of the 2018 inquiry evidence, as follows:

i. A non-through route access strategy, with the development served off six separate access points including a new roundabout on Mill Lane to the east. This is the strategy that was submitted with the planning application and is referred to as Option A. This was the only access strategy that was before the Council's Development Management Committee when the planning application was determined in February 2017. See drawings contained at **Appendix DT/2**.

ii. At the request of the Council, a through route access strategy that connects the proposed new roundabout junction on Mill Lane with the A49 via Poplars Avenue with a new signalised arrangement at the A49/Poplars Avenue junction close to M62 Junction 9 was also tested. This strategy is referred to as Option B. See drawings contained at **Appendix DT/4**.

2.7 In the run up to the 2018 inquiry, despite requesting through-route Access Strategy Option B to be included, the Council were very negative of Option B, as set out below, and considered in detail in **Section 11.0**.

2.8 In terms of the proposed new signalled A49/Poplars Avenue junction required as part of Option B, paragraphs 6.2.6 to 6.2.8 of Mike Taylor's proof of evidence to the 2018 inquiry (see **Appendix DT/5**) stated:

6.2.6 "The junction itself has been modelled in such a way as to maximise vehicular capacity; with the A49 Winwick Road northbound straight ahead and right-turn movements proceeding at the same time as A49 Winwick Road southbound straight-ahead and left-turn movements. As highlighted in paragraph 6.2.7 in reality this would not be acceptable and additional stages would be required to separate conflicting movements; this will have an impact on movements through the junction and on the capacity of it."

6.2.7 "*There are concerns in respect of the design of the new A49 traffic signal junction in that the localised widening proposed often improves the theoretical capacity of junction but in practice the outside lane is underused. It also creates overtaking and merging manoeuvres that currently don't exist. In addition, the design of the junction*

includes for pedestrians crossing Poplars Avenue in two stages, having to wait on the refuge island. However, the island is considered too small to accommodate a safe waiting area. It is considered that this presents an unacceptable hazard to pedestrians. As highlighted in paragraph 5.2.6 it would also appear, from the associated modelling that the right turn arm from A49 Winwick Lane (northbound) into Poplars Avenue operates at the same time as the A49 Winwick Lane (southbound); this means that right-turning vehicles have to cross three lanes of traffic on a 40mph speed limit road and would not be acceptable."

6.2.8 "*The concerns over the capacity assessment and the design elements of such a key junction on the transport network raises concerns over accessibility, economic growth, safety and amenity. This would be seen as contrary to Policies CS1 (7th & 11th bullet), QE6 (10th bullet), QE7 (3rd bullet), MP1, MP3, MP7 and MP10 of the Local Plan Core Strategy for Warrington*."

2.9 The objection letter from Cheshire Police (see **Appendix DT/6**) stated:

"*The close proximity of the junction of Birch Avenue to the Motorway roundabout at junction 9 is a concern as is the proposed signalised junction at Poplars Avenue*.

It is inevitable that drivers will utilize Birch Avenue and Poplars Avenue as a 'Rat Run' to avoid the congestion on Winwick Road thereby increasing the traffic within the development area and the signalized junction with Poplars Avenue will only delay the movement of traffic on Winwick Road despite the introduction of the third lane southbound. This lane is a token gesture to try and avoid tailbacks from the traffic lights onto the Motorway and will be totally ineffectual as it will increase the potential for rear end shunts on the approach and nearside to offside coming together collisions on the exit where drivers vi to return to two lanes. This will also increase the potential for so called 'Road Rage' incidents. We are not convinced that the traffic light timing at this junction can be configured to accommodate existing queues on Winwick Road coupled with the increased vehicle movement created by the development and will undoubtedly have a detrimental impact on the Motorway and traffic movement in general."

2.10 In terms of the effect Option B would have on local bus routes paragraph 6.2.3 of Mike Taylor's 2018 proof of evidence (also contained in **Appendix DT/5**) stated:

"*Bus access for Option B - This option prevents bus movements between Cotswold Road and Poplars Avenue with no detail provided as to either how these movements can be accommodated or of any discussions related to this option with Network Warrington (the local Public Transport Authority). This would be seen as contrary to Policies CS1 (7th & 11th bullet), QE6 (10th bullet), QE7 (3rd bullet), MP1, MP4, MP7 and MP10 of the Local Plan Core Strategy for Warrington*.

2.11 By switching the existing route of services 20/21 from the Cotswold Road to Cleveland Road Network Warrington's concern was that the area between the A49 and Cotswold Road would no longer be well served by a frequent and well-used bus service.

2.12 The Operational Director of Network Warrington (the previous name of Warrington's Own Buses) in his email of 12th April 2018 to Mike Taylor (see **Appendix DT/7**) stated:

"*Following our telephone conversation, I have given some thought to the proposals for funding of bus services as part of the peel hall planning application.*

Our principal concern is the proposal to direct our existing 20/21 services via Cleveland Road. This is not acceptable to us and I am unable to comment on the other proposals until that issue is resolved. The 20/21 is a key service for the company and to curtail 10 minute frequency services which in effect give that section of the route a bus every 5 minutes and replace with a bus every 30 minute is not appropriate."

2.13 A letter received by Highways England's consultants ATKINs on the eve of the first day of the 2018 inquiry (23rd April 2018 – contained in **Appendix DT/8**) set out that the, "*local highway authority considered the proposals (through-route and junction onto A49) to be unacceptable*", and that it was the opposed right-turn movement from the A49 south and the reduced size of pedestrian refuge island that caused the most concern, combined with impact on the M62 Junction 9.

2.14 It should be noted that during the first week of the 2018 inquiry the appellant became aware that the Council had placed (14th March) a Tree Preservation Order on the trees along Poplars Avenue close to the A49, which had the effect of frustrating the principle of the through-route access strategy let alone the detail. This was confirmed to PINS by the Council on 30th April 2018 (see details and correspondence contained in **Appendix DT/9**).

2.15 There was also strong objection from local residents to the through-route proposal, mirroring the comments above. They also raised an additional concern regarding the significant increase in traffic that would occur on the western part of Poplars Avenue off the A49, which is a cul-de-sac at present.

2.16 Access Strategy Option B was withdrawn at the end of the first week of the inquiry following the Inspector's accompanied site visit, when it was clear that in addition to the above concerns, Highways England were continuing to raise additional concerns regarding the ability of the proposed A49/Poplars Avenue junction to work in conjunction with the M62 Junction 9.

2.17 Following the publication of the Inspector's report and before the Secretary of State's decision was quashed, scoping meetings were held with highway officers on 11th February and 29th March 2019 (**Appendix DT/10**). This was in respect of a possible further planning application for the Peel Hall site based on the Council's WMMTM16 model which was about to be made available for developer use for the first time, since until then it had been used to support the Council's Local Plan submission. The outcome was that Satnam would fund modelling runs that would include both Option A and Option B (again at the Council's request).

2.18 Alternative access options, in addition to A and B, were first raised by the Council's consultant in their Modelling Scoping Note provided in February 2019 when a second planning submission was being discussed further to the pre-application meeting of 11th February referred to in **paragraph 2.17** above. The WSP Modelling Scoping Note and associated email correspondence is contained in **Appendix DT/11**.

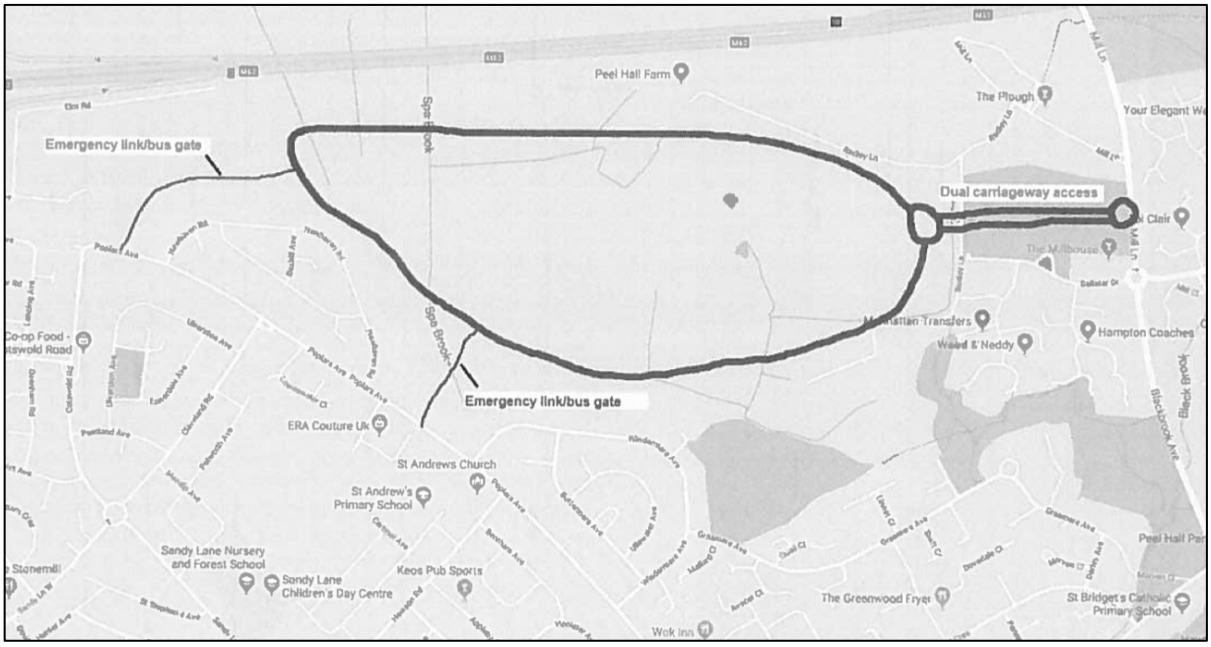
2.19 These alternative access strategies consisted of two variations as follows:

Option B2 – based on Option B, but without the through route. The appeal site would be split with the two main Option B access points (i.e. one on the A49 to the west via Poplars Avenue and the other on Mill Lane to the east) each serving a proportion of the site. The Option B accesses onto Poplars Avenue (central), Birch Avenue and the Mill Lane extension would remain under Option B2.

Option C – single vehicular access at Mill Lane with an internal loop road serving all 1,200 dwellings, local centre, primary school and care home with no vehicular access on to Poplars Avenue except for emergency and bus use.

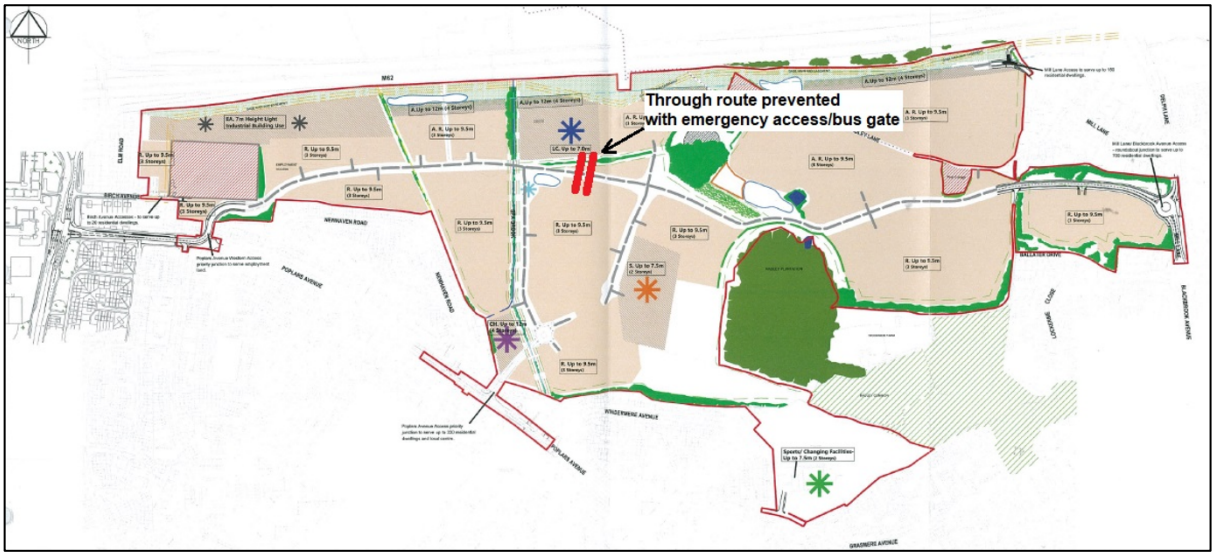
2.20 A preliminary illustrative plan showing the concept of Option C was provided in the WSP Scoping Note and this plan is provided in **Appendix DT/12** with an extract shown in **Figure 2.1**.

Figure 2.1 – Option C - Preliminary illustrative concept plan



2.21 To illustrate Option B2, Mike Taylor's email of 4th April 2019 (see **Appendix DT/11**) contained the appellant's Option B masterplan that was in front of the 2018 inquiry, but with two lines through the access road to show the location of the split. This would indicate around 180 dwellings and care home accessed via Poplars Avenue, 240 dwellings accessed via the A49 and 610 dwellings, the primary school and the local centre accessed from Mill Lane (NB 150 dwellings still accessed from the Mill Lane extension and 20 dwellings from Birch Avenue). The preliminary illustrative concept plan showing Option B2 also forms part of **Appendix DT/12** with an extract shown in **Figure 2.2**.

Figure 2.2 – Option B2 - Preliminary illustrative concept plan



2.22 From the 4th April 2019 email it can be seen that the officer's contention is "*these are proposed as feasible options without prejudice and do not indicate a preference or an agreed solution.*"

2.23 A proforma and scoping report (TN/03 provided at Transport Assessment Addendum Appendix 3, Core Document APN 120) required for the use of WMMTM16 to test Options A and B was submitted to the Council in April 2019 who in-turn provided this to their consultant, AECOM. The proforma (Transport Assessment Addendum Appendix 8) was agreed in June 2019 with the Council and AECOM, including the highway officer and their consultant following a meeting on 17th June 2019.

2.24 Email correspondence relating to this meeting between Highgate, highway officers, their transport consultants WSP and their WMMTM16 modelling consultants AECOM regarding use of their area wide model for Peel Hall assessments is contained in **Appendix DT/13** and confirms that no further access strategies beyond Option A and B (i.e. as at the start of the 2018 appeal) were being taken forward for assessment.

2.25 The scoping report (TN/03) set out the confirmed development profile, access arrangements, access strategies (A and B), vehicle trips and discounting, years of assessment, study area, growth and the following committed developments to be modelled:

- J9 Retail Park (2016/29425)
- Parkside Phase 1 (2018/32247)
- Birchwood Park (2015/26044)

2.26 During the time from June to September 2019, a number of conference calls were held between the Council, their highway consultant (WSP), AECOM, and Highgate, and working versions of a Peel Hall SATURN Modelling Technical Note were provided by AECOM throughout this time during the development of the base model (final version contained in Transport Assessment Addendum Appendix 10). This related to access strategies A and B only as agreed.

2.27 The model runs for Option B were produced and analysed, although not taken further by the appellant team once it was known that the inquiry would be re-opened, given that Option B had already been withdrawn, beyond a sensitivity test in Section 12.0 of the Transport Assessment Addendum. The sensitivity test showed difficulties with this strategy mirroring the comments from the 2018 inquiry.

2.28 A progress meeting with the Council (January 2020), confirmed the next steps in terms of stand-alone junction modelling for the forthcoming March 2020 Transport Assessment Addendum (agreed meeting note provided as **Appendix DT/14**). This was all detailed work on the basis of the modelling of Option A and Option B; alternative access strategies further to Option B were not raised by the Council. It should be noted that this meeting also discussed issues such as potential mitigation in the area to the south.

2.29 However, on the penultimate page of Mike Taylor's June 2020 consultation response (extract contained in **Appendix DT/15**) under the sub heading Alternative Access Strategy he states:

"*Access Strategy Option B (forming a new all-movements junction at A49 Winwick Road/Poplars Avenue) formed part of the appellant's original appeal submission with the conclusion that the development could be accommodated without impacting on the existing road network and specifically without impacting on the operation of M62 J9.*

It is clear that the latest appropriate modelling highlights particular issues with this access strategy, as was always suggested by the Council, but no further work has been undertaken to assess whether alternative junction designs or development access strategies (e.g. allowing only part of the development to be accessed here) suggest that a solution is feasible. No work has ever been undertaken on other alternative access strategies.

As highlighted above it is considered that the impact on the residential roads south of the development is such that alternative access strategies must be explored. "

2.30 It is noted that reference is made the previous objections raised by the Council in respect of Option B, but they are now apparently seeking to rely on untested alternative access strategies.

2.31 Also, in the July 2020 committee report (**Appendix DT/16**) under the sub heading Highways Impact Summary where the Council set out their case for this inquiry, paragraphs 9.22 to 9.27 state:

" 9.22. The Council maintains an objection to the proposal in respect of the impact of the development on the highway network with the following key issues to be fully examined:

1. *Impact on Sandy Lane West arm of A49 Winwick Road/A574 Cromwell Avenue signal junction, particularly queuing.*
2. *Impact on A50 Orford Green/Hilden Road roundabout.*
3. *Impact on Poplars Avenue and Capesthorne Road (and surrounding residential roads by association) due to increased level of traffic.*
4. *Impact on Delph Lane due to level of traffic.*

9.23. The Council's position will be that a new access strategy and significant mitigation is needed to overcome the key issues identified with the appeal proposal.

9.24. Point 3 is the most serious impact and the key reason a new access strategy is required.

9.25. Nos. 1, 2 and 4 may potentially be addressed by appropriate mitigation secured by condition/S106, this would require the further design work and review of possible mitigation measures and would require agreement with the appellant on how the mitigation is secured and delivered.

9.26. A Highways Statement of Common Ground, as required under the inquiry procedures, will be progressed with the appellant particularly having regard to mitigation and conditions relevant to points 1, 2, and 4.

9.27. Subject to further discussion regarding points 1, 2, and 4 - the Council's main case will relate to point 3 and unacceptable impact on Poplars Avenue and Capesthorne Road (and surrounding residential roads by association) due to increased level of traffic, contrary to Local Plan policies CS1; QE6 ; QE7 ; MP1; MP3; MP4; MP7 ; MP10."

2.32 At the time of writing this evidence, there is no indication from the Council how any alternative access strategy could or would overcome the key issues identified at paragraph 9.23 of the Council's committee report.

3.0 Matters arising from the Inspector's report

3.1 The Inspector in his report {IR13.10 to IR13.13} Core Document OD 15 confirmed that the substantive dispute at the inquiry was whether the use of the Peel Hall model, which was based on what could by then be considered to be superseded origin and destination (OD) data, rather than the use of the WMMTM16 model, mattered.

3.2 His concern was that the use of WMMTM16 could sufficiently change the assignment of development trips to the network that would require different junctions to be assessed and alter the mitigation measures proposed {IR13.35}, including the area to the immediate south of the appeal site {IR13.49}.

3.3 The Inspector was prepared to adjourn the inquiry for the Council to use its WMMTM16 model {IR13.15}, but as this would have taken several months to carry out and complete the significant amount of follow-on analysis, this course of action was not considered realistic.

3.4 However, the inquiry was adjourned for a short period to enable a sensitivity test to be carried out which allowed the up to date OD information from WMMTM16 to be compared against the OD information within the Peel Hall model. This confirmed that the list of junctions identified by the Peel Hall model for stand-alone modelling remained unaltered and it was accepted {IR13.35} that any mitigation needed could in principle be accommodated within the bounds of existing highway land.

3.5 However, in IR13.41 the Inspector's judgement was that the most up to date SATURN model (WMMTM16) should be used to provide the most accurate and reliable impact of the appeal scheme. IR13.41 led to the Inspector to conclude in IR13.42 that the appellant failed to demonstrate that the impact from the development could be satisfactorily mitigated so that it does not create an unacceptable adverse impact upon the safety and efficiency of the local and strategic highway network.

3.6 Since the appeal decision in December 2018, the appellant has commissioned the use of WMMTM16 (in agreement with the Council) to assess the impact of the appeal scheme. As a result, a significant amount of transport analysis has been carried out using the information provided by the Council's modelling team at AECOM.

3.7 It should be noted that to access, set up, run and analyse the WMMTM16 to support the evidence at this inquiry has taken around 12 months. This does not include the time to carry out all the follow-on modelling and assessment work and agree the mitigation arising.

3.8 Once the WMMTM16 information became available a VISSIM model was commissioned to test the impact of the development traffic on the A49 corridor, including the M62 Junction 9 roundabout with the A49.

3.9 This SATURN and VISSIM work, together with stand-alone modelling elsewhere on the network, form the basis of the Transport Assessment Addendum.

3.10 A section of the Inspector's report considered the effect of the proposed development on the character of the area to the south {IR 13.45-13.53}. In IR 13.50 he noted that the, "*level of increase in flow of traffic along them (roads in the area to the south of the development), whether technically appropriate or not, would, inevitably, make them less pleasant routes along which to walk (or cycle) and, indeed to drive. They would be busier, noisier and potentially, more difficult to cross for certain residents*".

3.11 However, he also noted at IR.13.48 that, "*most vehicles do not appear to travel at speed, streets are straightforward to cross, and it is a pleasant area through which to walk (although this situation changes on some streets during the peak hours)*".

3.12 At IR 13.49, the Inspector accepted that, "*the appeal proposal would be unlikely to have any impact on the majority of residential streets in the area … having regard to the 'without development' scenarios, peak hour flows along those streets that serve as routes into and out of the residential area, chiefly Poplars Avenue, Capesthorne Road, Cleveland Road, Cotswold Road, Howson Road and Sandy Lane would increase significantly. Sandy Lane West, Poplars Avenue and Capesthorne Road would see Annual Average Daily Traffic (AADT) levels reach over 10,000 by 2030.*"

3.13 The Inspector noted the proposed employment land use and the resultant increase in the number of HGVs on the streets to the south of the Peel Hall site {IR13.52} "*The nature of the vehicles using the area would change too. Class B1 (c) uses and a local centre can sit comfortably with residential development [9.85]. But that is not the point. The potential presence of an employment area and a local centre, accessed through the extant residential area, would result in an increase in commercial vehicles, including a, albeit probably limited, number of HGVs, on streets that currently have, on the basis of my observations, few such vehicles upon them*."

3.14 The original Transport Assessment at the inquiry (1107/TA/01/A – Core Document APN 101), set out that there could be up to nine HGV movements in the busiest peak hour associated with the employment land use, with less at other times. The employment land use has now been removed in agreement with the Council, and therefore the concerns in this respect have now fallen away.

3.15 He concluded this section of his report in {IR13.53}, which states, "*All of this may be considered as an inevitable consequence of any new development. In addition, change does not necessarily equate to harm. Thus, the weight to be attributed to this issue may not be considered very significant. Even so, in this instance, I conclude that the appeal proposal would have an adverse impact upon the character of the area, which would gradually, as the appeal site was built out, change to become a busier and, for pedestrians at least, noisier area through which to travel*".

4.0 Further transport analysis since the 2018 appeal decision

4.1 Since the original appeal decision in December 2018 the work and progress carried out is set out in **Section 2.0** (**paragraphs 2.17** to **2.28**) as well as the following:

i. AECOM calibrating and running WMMTM16 for the agreed study area with the Peel Hall development (June to September 2019).

ii. AECOM providing the Peel Hall WMMTM16 SATURN outputs (September to December 2019) for checking and analysis. By October 2019 it was known that we were working to a re-opened inquiry rather than a second application.

iii. Agreement of AADT24 and AAWT18 factors (November 2019)

iv. Providing Technical Note TN/09 (February 2020) to the Council reviewing the impact of link capacity in the area to the south. See Transport Assessment Addendum Appendix 15, Core Document APN 120.

v. Providing Technical Note TN/10 (February 2020) to the Council reviewing parking and potential mitigation measures in the area to the south. See Transport Assessment Addendum Appendix 16, Core Document APN 120.

4.2 Additional information was also provided to inform our Air Quality and Noise assessment team based on the WMMTM16 model outputs from the Peel Hall development runs.

4.3 The follow-on work as a result of the WMMTM16 SATURN modelling outputs included capacity assessments with stand-alone modelling (PICADY, ARCADY and LinSig) using the WMMTM16 data for agreed junctions within the study area to test development impact further and devise mitigation where required.

4.4 The list of junctions agreed for further consideration comprised:

i. Golborne Road/Myddleton Lane

ii. Delph Lane/Myddleton Lane

iii. A50/Hilden Road roundabout, linked with the A50/Poplars Avenue

iv. A50/Hallfields Lane

v. Site Access junction – Birch Avenue/A49

vi. Site Access junction – Poplars Avenue (West)

vii. Site Access junction – Poplars Avenue (Central)

viii. Site Access junction – Mill Lane/Mill Lane

ix. Site Access junction – Mill Lane/Blackbrook Avenue new roundabout

x. Blackbrook Avenue roundabout with Enfield Park Road and Ballater Drive
xi. Blackbrook Avenue roundabout with Enfield Park Rd/Capesthorne Road
xii. Poplars Avenue roundabout with Capesthorne Road

4.5 A VISSIM model using the SATURN data from WMMTM16 was commissioned (Autumn of 2019) to test the impact of the development traffic on the A49 corridor. The scope of the modelling was agreed with the Council and Highways England. This corridor includes the following junctions:

i. A49/Winwick Link Road signalised roundabout
ii. Delph Lane (B&Q) signal junction with A49
iii. M62 Junction 9 signalised roundabout with the A49
iv. Sandy Lane West/Cromwell Avenue/A49 signalised roundabout (linked with Cromwell Avenue/Calver Road junction)
v. Junction 9 Retail Park signalised junction with the A49
vi. A50/A49 signalised junction

4.6 It was agreed with the Council that the VISSIM negated the need for additional stand-alone modelling on the A49 corridor.

4.7 An updated bus mitigation package that will serve the appeal site was agreed with the Council's Public Transport Team in conjunction with Warrington's Own Buses. This based on a service subsidy for extending two existing bus services into the site, in the east and south and comprises:

i. Extension of bus service 25 into the eastern area of the site from Mill Lane (once 180 dwellings, total, off the two Mill Lane accesses are occupied).
ii. Extension of bus service extension 20 or 21 to serve the southern and western areas of the site (once 180 dwellings are occupied or the local centre and care home are operational – whichever comes first)
iii. The option for a demand-led extension of the second (20 or 21) bus service from Poplars Avenue, should the need arise.

(**Appendix DT/17**)

4.8 The above are addressed within the Transport Assessment Addendum.

4.9 It should be noted that prior to the Council formally responding to the Transport Assessment Addendum (17th June 2020) they did comment on TN/09 - Link Capacity (see **paragraph 4.1 (iv)** above) and TN/10 – Parking and Mitigation in the Area to the South (see **paragraph 4.1 (v)** above). In terms of TN/09 their comments related to not accepting the methodology for assessing existing capacity due to parking on street, frontage accesses, pedestrian movements and existing traffic calming although no practical suggestion for calculation of capacity was provided.

4.10 In terms of TN/10 they agreed that the work was informative and could be used as the basis for potential mitigation (parking within verges, further traffic calming, cycle measures and improved pedestrian crossing points, but not the 20mph speed limit extension). However, despite further correspondence no details were provided by the Council, even though it had previously been confirmed that there was ongoing internal discussions regarding potential measures that could address the impact within the Poplars Avenue residential area and that, "*this is likely to involve the provision of parking bays, the replacement of measures along Capesthorne Road with more appropriate traffic calming and additional traffic calming/traffic management measures in the wider area*". See correspondence in **Appendix DT/18**. At the time of writing this evidence, despite many requests as set out in **Appendix DT/18**, nothing specific has come forward.

4.11 These Technical Notes have since been updated (TN/09/A and TN/10/A) and are provided at **Appendix DT/19** and **Appendix DT/20** respectively. These are discussed at **paragraphs 11.2** to **11.38**, **Section 11.0**.

5.0 Summary of the Transport Assessment Addendum

5.1 The Transport Assessment Addendum issued in March 2020 is an addendum to the Transport Assessment that was issued in January 2018 to support the 2018 inquiry. The Transport Assessment Addendum takes account of the assessment work carried out since the Inspector's report was issued in December 2018.

5.2 In summary the Transport Assessment Addendum set out:

i. A summary of the site access junction capacity assessments.
ii. A summary of the off-site junction capacity assessments.
iii. A summary of the VISSIM assessments.
iv. A summary that quantified and explained the implications of increased traffic flows on local roads to the south in terms of link capacity and if it results in a change in road function.
v. A proposed package of mitigation.

5.3 Each of the above is now considered in turn.

Site Access Junctions

5.4 The site access junctions have been modelled to assess the impact of development traffic and the results are summarised in **Table 5.1** for the future year of 2032.

Table 5.1 - Summarising the site access junction capacity assessments 2032

Junction	AM Peak Hour			PM Peak Hour		
	Max RFC	Queue Length (veh)	Delay (sec)	Max RFC	Queue Length (veh)	Delay (sec)
Mill Lane/ Blackbrook Avenue R/A	57%	2	7	43%	1	5
Poplars Ave. (central)	15%	1	10	20%	1	11
Poplars Ave. (west)	16%	1	9	10%	1	8
Mill Lane/ Delph Lane	30%	1	16	22%	1	15

5.5 From the above it can be seen that all the site access junctions will work well within capacity in 2032.

Off-Site Junction Capacity Assessments

5.6 In **Table 5.2**, Do Minimum is the forecast flows on the local highway network with growth and committed development. Do Something is Do Minimum plus development traffic. Results are shown for the busiest peak hour.

Table 5.2 - Summarising the off-site junction capacity assessments 2032

Junction	Do Minimum			Do Something		
	Max RFC/DoS	Queue Length (veh)	Delay (sec)	Max RFC	Queue Length (veh)	Delay (sec)
Golborne Rd/ Myddleton La	112%	83	433	115%	103	536
Myddleton La/ Delph La	148%	103	1120	187%	164	2012
Hilden Road/ A50 R/A	100%	23	76	110%	64	180
Hilden Road/ A50 R/A linked with Poplars Ave.	-	53	158	-	94	293
Hallfields Rd/ A50	85%	19	21	97%	24	34
Blackbrook Ave./ Enfield PR/ Ballater	38%	1	4	62%	2	6
Blackbrook Ave./ Enfield Park Road/ Capesthorne Rd	42%	1	6	82%	5	16
Poplars Ave./ Capesthorne Rd	51%	1	9	79%	4	22

5.7 From **Table 5.2**, generally the junctions will work within capacity. Those showing results of over 85% RFC are detailed below and mitigation plans are referred to in **Section 9.0**:

i. Golborne Road/Myddleton Lane - It can be seen that the differences between the Do Minimum and Do Something are minor. In 2022, 105 development trips go through this junction in the AM peak hour (less than two per minute) and 68 in the PM peak hour (around one per minute). This reduces in 2032 to around 79 and 63 development trips respectively. It is proposed to provide Keep Clear markings to assist with the operation of the junction to clear right-turning traffic from Golborne Road northbound.

ii. Myddleton Lane/Delph Lane

From a review of the development trips (Appendix 13 of the Transport Assessment Addendum), WMMTM16 assigns around 122 development trips in the AM peak hour and 86 development trips in the PM peak hour through this junction. This is up to around two development trips every minute in the AM peak hour.

It can be noted that when a junction becomes over capacity in a stand-alone model such as PICADY, e.g. the operation of the model in the AM peak hour, it cannot adequately forecast queueing and delay and as such the results should be treated with caution.

The provision of traffic signals was identified for this junction and the level of contribution towards this is subject to discussion with the Council.

The Council raised concern about the increase in traffic using Delph Lane and are in the process of developing a traffic calming scheme and as a result a developer contribution of £35,000 has been proposed by the Council and agreed by the appellant.

iii. Hilden Road/A50 – It can be seen that the development traffic may increase the largest queues by up to around 40 vehicles (Orford Road arm), with some delays increased by up to around two minutes. The development impact on this junction has been discussed with the Council and it is agreed that a scheme of mitigation/contribution will be provided by the appellant. This is considered in more detail in **Section 7.0**.

iv. A50/Hallfields Road - It can be seen that the results indicate the proposed development will have a moderate impact on the operation of the A50/Hallfields Road signal junction. However, when considering that an all red phase will not be called every cycle (as modelled) then it is expected that the junction will operate satisfactorily in all future design years. It is however proposed to provide a contribution to upgrade the MOVA to modern specifications and refresh the road markings at this junction.

VISSIM Assessment

5.8 Further to submission of the Transport Assessment Addendum, a meeting was held with Highways England, their highway consultants and the Council/Council's highway consultants, and Modelling Group (the appellant's VISSIM modelling consultants) to discuss the VISSIM base model. As such the VISSIM modelling has been updated and the information on this is provided at **Section 7.0**.

Summary on Link Capacity within Area to South

5.9 TN/09/A helps to quantify and explain the implications of increased traffic flows on the residential area to the immediate south of the Peel Hall development in terms of impact on link capacity. In particular, whether or not the development traffic results in a harmful change to where any given road sits within the local road hierarchy, further to the Inspector's comments {IR13.45-13.54} regarding possible impact on the character of the local area. The updated Technical Note is provided in **Appendix DT/19**.

5.10 The report is structured to show a comparison with the 2022 Do Minimum (no Peel Hall development) traffic flows and the forecast 2032 Do Minimum and 2032 Do Something (full Peel Hall development) traffic flows at different locations on the area to the south, as identified by the Inspector {IR13.49}. These links are Poplars Avenue, Capesthorne Road, Cleveland Road, Cotswold Road, Howson Road and Sandy Lane. We have also identified Statham Avenue, Greenwood Crescent and Sandy Lane West.

5.11 It is demonstrated that the forecast traffic flow figures should be considered acceptable and that the impact of the increase in traffic flows through this area over time could be offset through a range of mitigation measures.

5.12 Because the overall network in northern Warrington can be congested at peak times, this area to the south of the appeal site will over time continue to attract rat running traffic from elsewhere until it reaches capacity. In reality what will happen in future years is that instead of rat running traffic there will be development traffic and that some of the rat running traffic will be displaced over the wider network. Therefore, mitigation in this area to the south is considered desirable rather than essential.

The Proposed Mitigation Package within the Transport Assessment Addendum

5.13 The proposed mitigation package is set out in Section 11.0 of the Transport Assessment Addendum and changes to this is further discussed in **Section 9.0**.

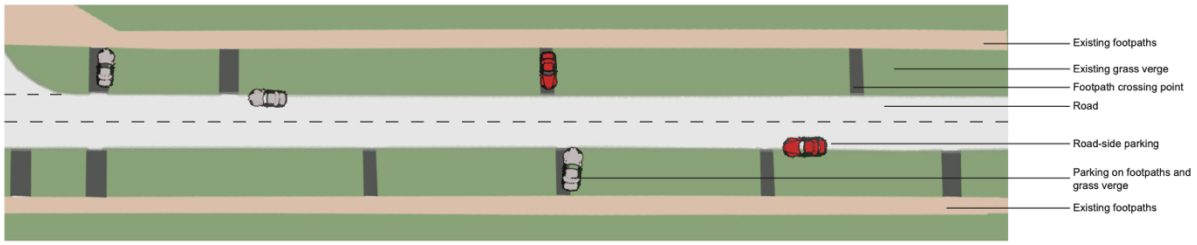
5.14 A series of mitigation measures for the residential area to south are set out in the Transport Assessment Addendum on the basis that they would only be provided if they were considered necessary to make the appeal proposals acceptable in planning terms. This is consistent with the evidence I gave at the 2018 inquiry which confirmed that mitigation in this area to the south, including extending the 20mph speed limit and verge parking, is considered desirable rather than essential. The measures considered within the Transport Assessment Addendum comprise:

i. Provide a scheme for traffic calming measures in the area to the immediate south of the Peel Hall development such as Poplars Avenue, Cleveland Road, Statham Avenue, Howson Road and Capesthorne Road. This is likely to involve, for example, replacement of measures along Capesthorne Road with more appropriate traffic calming and additional traffic calming and traffic management measures in the wider area such as surface treatments at junctions, removal of white lining, priority working and pinch-points.

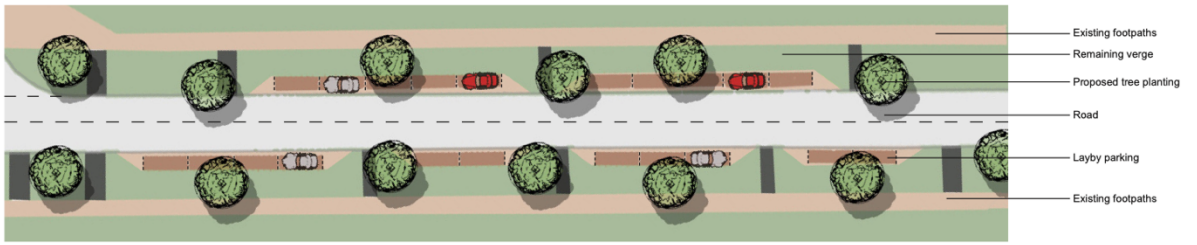
ii. Provide a scheme for an extended 20mph speed limit through Poplars Avenue and Capesthorne Road.

iii. Provide a scheme for parking spaces to be created within the highway verges at locations along Poplars Avenue and Capesthorne Road. This is illustrated in **Figure 5.1** below (see also TN/10/A contained in **Appendix DT/20**).

Figure 5.1 – Illustrative verge parking



Existing Parking- Plan View:



Illustrative Layby Parking Treatment- Plan View:

iv. Provide a scheme for uncontrolled dropped kerb pedestrian crossing points with tactile paving across arms of all roads intersecting with Poplars Avenue and upgrade existing locations for pedestrians to cross Poplars Avenue to promote attractive pedestrian routes, enhance highway safety and assist pedestrians with crossing movements.

v. Provide a scheme for the provision of cycle-friendly measures on Poplars Avenue such as painting cycle markings on carriageway near junctions to warn motorists of cycles. Also, the provision of cycle warning signing where suitable poles for doing so at key areas such as the approaches to the Poplars Avenue/Capesthorne Road roundabout.

5.15 In addition to the mitigation package, the appeal proposals include the six site access junctions associated with Access Strategy Option A. These are shown on the plans provided in **Appendix DT/2**.

6.0 Summary of the response from highway officers to the Transport Assessment Addendum

6.1 The Council's highway officer provided their consultation response to our Transport Assessment Addendum on 17th June 2020 (see **Appendix DT/15**). The Council's committee report of 1st July 2020 also sets out the Council's position on highway matters at this Inquiry (see **Appendix DT/16**).

6.2 The officer's position is summarised below and my response is *underlined and in italics* where appropriate.

6.3 The general points can be summarised as:

i. WMMTM16 modelling agreed and suitable for further detailed modelling to assess specific junction operation and impact; junctions identified for further detailed modelling are appropriate.

ii. The use of VISSIM is appropriate for assessing the impact of the development along the A49 Winwick Road corridor including M62 J9, A49/A574/Sandy Lane West and the A49/A50 junctions. Issues remain with the VISSIM base model, which were under review at the time the consultation response was provided. *This is considered in **paragraphs 7.3** to **7.6** in **Section 7.0***.

iii. The individual junction capacity models within the Transport Assessment Addendum are considered satisfactory (capacity issues arising are dealt with in **paragraph 6.4** below).

iv. Whilst there is no expectation that a development should mitigate existing issues it is reasonable and expected that any proposal should not exacerbate an existing issue and that where capacity issues are already experienced the development should mitigate its own impact. A pragmatic approach is taken where small over capacity increases to one arm are outweighed by larger decreases to other congested arms or where there is no readily acceptable solution. *This approach is welcomed*.

v. A Travel Plan and bus mitigation strategy are appropriate and can be secured via condition and Section 106 Agreement respectively.

vi. The proposed mitigation measures at A50 Orford Green/Hallfields Road, A49 Newton Road/Golborne Road and Myddleton Lane/Delph Lane are considered appropriate and can be secured by condition.

vii. In terms of phasing and triggers for mitigation, it was considered that the 600th dwelling trigger proposed for some of the mitigation works is not reflective of actual impact and requires further discussion. *Triggers are considered further in **paragraphs 9.2** and **9.3** in **Section 9.0**.*

6.4 The comments regarding specific locations are summarised below:

i. Myddleton Lane/Delph Lane – The TAA correctly identifies an impact at this junction and suggests the implementation of traffic signals as a necessary mitigation measure. This route is currently well-utilised and concerns are regularly raised in respect of traffic volume, speeds and damage-only accidents due to the nature of the route, its limited width and the presence of sharp bends. A traffic management scheme to address these concerns along Delph Lane is under consideration by the Council and given the additional traffic that will be using the route as a direct result of the development it is considered appropriate to seek a contribution towards this scheme also. *A contribution toward the traffic signal junction is to be agreed and a contribution of £35,000 towards the Council's traffic management scheme has been agreed.*

ii. A50/Hilden Road Roundabout – The TAA identifies an impact at this location as a result of the development but references discussions in January 2020 in relation to concern of potential changes to the existing layout (which incorporate safety and accessibility improvements) that may be detrimental to vulnerable road users. It is considered that mitigation measures are required. *A scheme of mitigation is considered in **paragraphs 7.7** to **7.16** in **Section 7.0**.*

iii. A50/Hallfields Road – The TAA identifies an impact at this location and suggests the implementation of MOVA and to refresh road markings. It is considered that the introduction of MOVA to improve the efficiency of the traffic signal operation at the junction will have a positive effect; the refreshing of road markings will highlight appropriate road space for all road users travelling through the junction and the mitigation measures are considered appropriate.

iv. At paragraph 9.21 the committee report refers to the rerunning of the Peel Hall cordoned WMMTM16 to consider the effects of installing traffic signals at the Delph Lane/Myddleton Lane junction. *This exercise was carried out at the request of Highways England's transport consultants Atkins to ensure that there would be no adverse impact on Junction 9 of the M62 as a result of the signals. The resultant Technical Note TN/20 summarising this sensitivity test is provided in* ***Appendix DT/21*** *and confirms that there is no adverse impact.*

v. In the committee report it is set out that the Council consider the proposed development impact on the area to the south cannot be adequately mitigated. The officer report states that the development will have significant impact on the residential roads to the south and whilst mitigation proposals for the residential roads south of the development are not considered appropriate to mitigate the overall impacts of the development, they will be required should planning consent be granted. The main points raised are:

- Area suffers from heavy on-street parking which effects capacity.
- Disagree with the methodology used to assess impact and consider that the area is already at capacity.
- Micro-simulation modelling is required to accurately reflect link capacity.
- Appellant's suggested mitigation – reject 20mph extension, concerns over verge parking masking pedestrian movements and loss of on-street parking increasing vehicle speeds.
- Increase in development traffic will change the nature and function of the routes and therefore character of the area to the south and are concerned by impacts on public safety, residential amenity and movement of vulnerable road users.
- Concern raised regarding the proportion of accidents involving vulnerable road users in the area to the south.

This is considered in ***paragraphs 11.33*** *to* ***11.35*** *in* ***Section 11.0***.

vi. Consideration of alternative access strategies is raised, as set out below:

- Access Strategy Option B (forming a new all-movements junction at A49 Winwick Road/Poplars Avenue) formed part of the appellant's original appeal submission.

- It is clear that the latest modelling highlights particular issues with a through-route access strategy and new junction directly onto the A49, as was always suggested by the Council, but no further work has been undertaken to assess whether alternative junction designs or development access strategies (e.g. allowing only part of the development to be accessed here) suggest that a solution is feasible.
- It is considered that the impact on the residential roads south of the development is such that alternative access strategies must be explored.

*This is considered in **paragraphs 11.39** to **11.60, Section 11.0**.*

6.5 In summary, the Council maintains an objection to the proposal in respect of the impact of the development on the highway network with the following key issues to be fully examined:

1. Impact on Sandy Lane West arm of A49 Winwick Road/A574 Cromwell Avenue signal junction, particularly queuing.
2. Impact on A50 Orford Green/Hilden Road roundabout.
3. Impact on Poplars Avenue and Capesthorne Road (and surrounding residential roads by association) due to increased level of traffic.
4. Impact on Delph Lane due to level of traffic.

6.6 The Council's position is that a new access strategy and significant mitigation is needed to overcome the key issues identified with the appeal proposal. Point 3 (see **paragraph 6.5** above) is contended to be the most serious impact and the key reason they consider a new access strategy is required. This is considered in **Section 11.0**.

6.7 The Council further consider that points 1, 2 and 4 may potentially be addressed by appropriate mitigation secured by condition/S106 and that a Highways Statement of Common Ground should be progressed, particularly having regard to mitigation and conditions relevant to points 1, 2 and 4. This is considered in **paragraphs 7.7** to **7.16** in **Section 7.0**.

6.8 Subject to further discussion regarding points 1, 2 and 4, the Council's main case will relate to point 3 and unacceptable impact on Poplars Avenue and Capesthorne Road (and surrounding residential roads by association) due to the increased level of traffic contrary to Local plan policies CS1; QE6; QE7; MP1; MP3; MP4; MP7 and MP10.

6.9 Furthermore, that the Council's highway objection remains since the appellant has not demonstrated that:

i. Acceptable mitigation to deal with the highways/transportation impact of the appeal proposals. It is considered that an alternative access strategy is required for the proposed development to be successfully delivered.

ii. The impacts from the development on the highway network would not be significantly adverse having regard to local plan policies and guidance contained within the NPPF.

6.10 This is considered in **Section 11.0**.

7.0 Response to highway officer comments

7.1 This part of my evidence considers two of the four key issues identified by the highway officer (**paragraph 6.5**). The issue of impact and mitigation to the area to the south and alternative access strategies (point 3) is considered in detail in **Section 11.0**. Therefore, this section of my evidence deals specifically with matters arising from the A49 corridor VISSIM (point 1) and the A50/Hilden Road junction (point 2).

7.2 It is considered that the fourth point raised by the highway officer regarding Delph Lane impact has been satisfactorily resolved.

VISSIM

7.3 At the time of writing this evidence, the revised VISSIM package has been submitted to the Council and Highways England further to considerable dialogue by all parties. The updated modelling reports are provided in **Appendix DT/22** and relevant correspondence is provided in **Appendix DT/23.**

7.4 From the modelling it can be seen that the combination of committed and proposed mitigation measures creates a network able to absorb the projected Peel Hall development traffic whilst maintaining a relative network wide performance in both tested peaks in 2022 and 2032. There are some relatively minor, steady increases to journey times and delay as a result of the growth in both background traffic and specific development related traffic. However, there are two noticeable areas where higher levels of delay are apparent; at the A49/Cromwell Avenue/Sandy Lane West and A49/A50 Long Lane/Hawleys Lane junctions.

7.5 The results show that improvements to the signal control are possible with a better junction control i.e. MOVA updates at the A49/A50 Long Lane/Hawleys Lane junction. It is quite apparent in the modelling that with the addition of the committed and proposed mitigation measures, the impact on the network is considerable in terms of unlocking capacity. However, the advantages of increased capacity at those locations with mitigation result in a subsequent impact on the A49/Cromwell Avenue/Sandy Lane West junction, which acts as a bottleneck for the corridor even at present. It is no surprise therefore that this junction will benefit from mitigation.

7.6 From studying the updated VISSIM it would appear that increasing the left turn filter lane from the A49 northbound arm to Cromwell Avenue from one to two lanes, and extending the length of these filter lanes, would ensure that a reduction in green time could be given to this arm to free up green time for the other movements, such as the right-turn from A49 southbound and movements from Sandy Lane West, thereby balancing the junction more effectively. It is also apparent that the length of the bus lane on the A49 southbound reduces the queue stacking capacity at this junction. A preliminary drawing of this mitigation for discussion with the Council is provided in **Appendix DT/24**.

A50/Hilden Road

7.7 At present this roundabout junction incorporates shared surface pedestrian and cycle routes around the perimeter of the junction with a single circulatory lane. An indicative plan of the existing layout is provided at **Appendix DT/25**. Historically (until circa 2010) there were two circulatory lanes and no off-carriageway cycle routes.

7.8 At the 2018 inquiry the mitigation proposed at this junction increased capacity by reintroducing the two circulatory lanes and localised widening to provide two-lane entries on each of the three main arms.

7.9 The Council's position to this proposed mitigation scheme is set out in paragraph 6.2.14 of Mike Taylor's proof of evidence to the 2018 inquiry and paragraphs 2.29 to 2.38 of his second supplemental proof of evidence, is that the scheme removed the build-out and circulatory hatching and as such would increase vehicle speeds and impact on the safety of local road users. The relevant extracts are contained in **Appendix DT/5**.

7.10 However, it is appropriate to note in paragraph 2.38 that Mike Taylor stated, "*Whilst it is considered that a mitigation solution would be possible within the extent of adopted highway, this is likely to require a re-design of the junction to meet the requirements (of) all road users*."

7.11 Accident records are set out in Section 10.0 of the Transport Assessment Addendum show that there have been seven 'slight' Personal Injury Accidents and one 'serious' at this roundabout in the last five years, five of which involved cyclists and one a pedestrian. It would appear that all the accidents involving cyclists were associated with cyclists choosing to remain on carriageway around the junction. Given this, a scheme involving the introduction of lane discipline markings is considered appropriate and this is set out in more detail below in **paragraph 7.14**.

7.12 At the scoping meeting in January 2020 this junction was discussed on the basis that the impact may be limited so that mitigation could be directed at the area to the south of the appeal site rather than physical works at this junction. Also, the highway officer confirmed that a traffic signal scheme was under consideration, although we were later advised that a cost-effective solution involving signals did not appear viable. See correspondence contained in **Appendix DT/18**.

7.13 In the run up to this inquiry, we also considered the introduction of traffic signal controlled junction incorporating the Poplars Avenue junction as well as all four arms of the A50/Hilden Road roundabout. However, as with the Council's assessment, the introduction of traffic signal control would increase capacity by an insufficient amount in the AM peak hour, albeit an improvement on the forecast modelling for the existing roundabout (see **paragraph 5.6 Table 5.2**).

7.14 Given the above, the mitigation now proposed for the A50/Hilden Road roundabout and Poplars Avenue is to provide a modified junction arrangement that retains the safety benefits of the existing layout in terms of vulnerable road users but improves the situation for traffic capacity by introducing 'turbo' markings to ensure lane discipline around the junction. The existing uncontrolled crossing on the Orford Road arm is also proposed to be provided as a zebra crossing. See proposed layout contained at **Appendix DT/25**.

7.15 The modelling results are summarised in **Table 7.1** and also contained in **Appendix DT/26** for reference.

Table 7.1 – A50/Hilden Road mitigation modelling results

Junction	AM Peak Hour			PM Peak Hour		
	Max RFC	Queue Length (Veh)	Delay (sec.)	Max RFC	Queue Length (Veh)	Delay (sec.)
2022						
Do Minimum	55%	2	8	57%	2	8
Do Something (part)	57%	2	9	59%	2	9
DS (part) – DM	*2%*	*0*	*1*	*2%*	*0*	*1*
Do Something (full)	69%	3	12	62%	2	9
DS (full)– DM	*14%*	*1*	*4*	*2%*	*0*	*1*
2027						
Do Minimum	58%	2	9	59%	2	8
Do Something	66%	2	11	64%	2	9
DS - DM	*8%*	*0*	*2*	*5%*	*0*	*1*
2032						
Do Minimum	62%	2	10	62%	2	9
Do Something	72%	3	12	68%	3	10
DS - DM	*10%*	*1*	*2*	*6%*	*1*	*1*

7.16 Therefore, it can be seen that the mitigation offsets the impact of the development traffic and improves the operation of the junction to below 2022 Do Minimum levels. It is considered that the additional measures for vulnerable road users will also address the Council's previous concerns.

8.0 Response to Rule 6 and third party highway related comments

8.1 Whilst the Rule 6 and third parties object to many aspects of the appeal proposals in addition to those raised by the Council and Highways England, including Option B, they have raised specific concerns regarding the width of Birch Avenue, the proposed Mill Lane extension and additional traffic through Winwick.

Birch Avenue

8.2 Birch Avenue has a junction with the A49 just to the south of Junction 9 of the M62. It is a residential access road and, combined with Elm Road, serves around 50 dwellings and a NHS unit for children and adolescents. These roads essentially form a cul-de-sac from Winwick Road.

8.3 The plan showing the proposed accesses from Birch Avenue forms part of **Appendix DT/2**. These accesses comprise a simple priority junction with 4.8 metre wide carriageway and footways to both sides to the west of the Health Centre, and a continuation of the 4.8 metre carriageway along Birch Road to the immediate south of the Health Centre which will expand to a 5.5 metre wide shared surface. Both accesses are expected to serve up to a combined total of 20 dwellings.

8.4 The applicant (as land owner) previously permitted parking on their land adjacent to Birch Avenue. Under the current access proposals this parking provision will be reinstated for 10 cars off the access road. Additional parking bays will be provided at the access to accommodate five vehicles in the verge area to the immediate east. These 15 off-street parking spaces are to be provided for the benefit of the existing dwellings in Birch Avenue i.e. parking provided for local residents so that they do not have to park on street.

8.5 The additional development traffic using Birch Avenue is forecast to be 5 arrivals and 11 departures in the AM peak hour and 10 arrivals and 6 departures in the PM peak hour for the 20 dwellings proposed. This is in the context of an existing traffic flow of around 13 arrivals (eastbound) and 23 departures (westbound) in the AM peak hour and 22 arrivals and 18 departures in the PM peak hour.

8.6 In the context of the operation of Birch Avenue the additional flows do not represent a severe impact in terms of capacity or safety.

8.7 It should be noted that at the January 2020 progress meeting (**Appendix DT/14**) that the highway officer asked the appellant team to consider accessing the proposed 20 dwellings from Birch Avenue through the former employment area onto Poplars Avenue, to address the 2018 Inspectors concerns. However, after discussion it was agreed that the situation described by the Inspector was more onerous than the reality and putting additional traffic onto Poplars Avenue could be considered a disbenefit.

Mill Lane Extension

8.8 In 2012 a planning application was submitted for the development of up to 150 residential dwellings on the north eastern part of the Peel Hall site that is accessed from Mill Lane and Radley Lane. Local residents were concerned by:

i. The effect existing on-street parking might have on the free flow of traffic and safety once development traffic using Mill Lane was accounted for.
ii. The loss of amenity for those who currently use the open (western) section of Radley Lane for recreational walks.

8.9 The planning application was refused and subject to a public inquiry in 2013 (see Inspector's report contained at Appendix DT/B of the March 2018 proof of evidence Core Document APP 23).

8.10 Although the appeal was dismissed on the grounds of lack of housing need and sustainable development, the inspector concluded in paragraph 63 of her decision that the road and footway access would be adequate and that the development of 150 dwellings off Mill Lane would not be harmful to road safety.

8.11 The 2018 Inspector in considering the Mill Lane extension for 150 dwellings noted in IR13.26. that the concerns of local residents raised at the 2018 inquiry, "*were addressed by another Inspector, who felt that Mill Lane was adequate for the scheme then proposed.*"

8.12 In IR13.27 the Inspector confirmed that, "*there is no requirement upon me to accept without question the conclusion of my colleague. That said, I did not see or hear any evidence during the Inquiry that would lead me to a different conclusion. Although there was some limited on street parking on Mill Lane, and a narrowing of the footway in places, overall the road does appear to be adequate, rather than perfect, as an access route for vehicles and pedestrians, including those with disabilities.*"

8.13 It should be noted that the site access proposed for this part of the appeal site is the same as for the 2018 inquiry and therefore we agree with the Inspector's conclusions at IR13.27.

9.0 Mitigation package now proposed, S106 obligations and transport related planning conditions

9.1 The mitigation package now proposed, with associated triggers is set out below.

9.2 The following are expected to be secured by a S106 obligation:

i. Bus mitigation – contributions and triggers as set out in the S106 Agreement.

ii. Contribution towards the Council's Delph Lane traffic management scheme - £35,000 triggered prior to occupation.

iii. Contribution towards a signalised junction scheme at the Delph Lane/Myddleton Lane junction – figure to be agreed, trigger of prior to occupation to be agreed. See plan contained in **Appendix DT/ADD/27**.

iv. Contribution to the A50/Hallfields Road signal junction MOVA works (to cover controller, additional loops and testing) – figure to be agreed, triggered prior to occupation of the 300th dwelling.

v. Contribution to the A49/A50/Hawleys Lane signal junction MOVA works (to cover controller, additional loops and testing) - figure to be agreed, trigger of prior to occupation to be agreed.

9.3 The following are expected to be secured by a suitably worded planning condition:

i. A mitigation scheme at the Hilden Road/A50 junction – trigger of prior to occupation to be agreed. See plan contained in **Appendix DT/ADD/25**.

ii. A scheme of mitigation measures in the area to the south if required – trigger to be agreed. The scheme could include the following:

- A scheme for traffic calming measures in the area to the immediate south - as per **paragraph 5.14(i)**.
- A scheme for an extended 20mph speed limit through Poplars Avenue and Capesthorne Road (see plan contained at **Appendix DT/ADD/28**).
- Provision of pedestrian improvement works to the area of Poplars Avenue immediately south of the site – as per **paragraph 5.14(iv)**.
- Provision of cycle-friendly measures on Poplars Avenue – as per **paragraph 5.14(v)**.
- A scheme for verge parking – as per **paragraph 5.14(iii)**.

iii. Works for the widening and provision of a ghost right turn lane at the A49/Golborne Road junction, if not provided by other committed developments – trigger prior to occupation of the 300th dwelling. See plan contained at **Appendix DT/ADD/29**.

iv. The provision of Keep Clear markings at the Golborne Road/Myddleton Lane junction – triggered prior to occupation. See plan contained at **Appendix DT/ADD/30**.

v. The provision of Keep Clear markings at the Birch Avenue junction with the southbound A49 – triggered prior to occupation of dwellings accessed from Birch Avenue. See plan contained at **Appendix DT/ADD/31**.

vi. The site access junctions – triggered prior to occupation of the first dwelling (or local centre) served off each respective access road. See plans contained at **Appendix DT/2**.

vii. Travel Plan – triggered prior to occupation (Framework Travel Plan dated January 2018 Core Document APN 102).

10.0 Compliance with transport related planning policies

10.1 The following should be considered when examining the development related transport policy aspects of the appeal scheme:

i. National Planning Policy Framework (February 2019).

ii. Local Plan Core Strategy for Warrington (Adopted July 2014) – Policies CS1 (seventh and eleventh bullets); QE6 (fifth, sixth and tenth bullet); QE7 (third bullet); MP1 (All bullets); MP3; MP4; MP7 (both bullets); and MP10 (first, second and third bullets).

iii. Warrington's Draft Local Plan 2017-2037 (March 2019).

iv. Warrington Fourth Local Transport Plan -LTP4 (December 2019).

v. Manual for Streets (2007) and Manual for Streets 2 (2010).

10.2 Mr Griffiths in his evidence considers planning policy in detail and explains how the NPPF is aimed at boosting housing supply. I will not attempt to duplicate what is in the evidence prepared by Mr Griffiths but will concentrate on where the above documents and policies have affected how the transport aspects of the appeal scheme have been considered. In this respect, I will consider the highway and transport related issues arising from these documents.

National Policy

10.3 The National Planning Policy Framework (NPPF) introduced March 2012 and most recently updated in February 2019 sets out the Government's guidance on planning policy. The primary aim of the NPPF is to promote sustainable development and sets out that local authorities should presume in favour of sustainable development.

10.4 Paragraph 108 sets out that:

"*In assessing sites that may be allocated for development in plans, or specific applications for development, it should be ensured that:*

a) appropriate opportunities to promote sustainable transport modes can be – or have been – taken up, given the type of development and its location;

b) safe and suitable access to the site can be achieved for all users; and

c) any significant impacts from the development on the transport network (in terms of capacity and congestion), or on highway safety, can be cost effectively mitigated to an acceptable degree."

10.5 In terms of paragraph 108:

i. Promoting sustainable transport modes – as set out in **Section 9.0**, the appeal proposals include bus mitigation and the key principle in the evolution of the masterplan has been to make sure that the development is sustainable with high quality walking, cycling and public transport access to services and facilities required on a daily basis which will encourage sustainable travel at the expense of car trips whenever possible and minimise the need to travel.

ii. Safe and suitable access to the site – all the site accesses have been designed to ensure that they are suitable for all road users and have passed an independent Road Safety Audit.

iii. Mitigating significant impacts in terms of capacity and safety – the appeal proposal does not have an unacceptable impact that cannot be mitigated against.

10.6 Paragraph 109 sets out that:

"*Development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe*".

10.7 In terms of paragraph 109:

i. Unacceptable impact on safety – as set out elsewhere in this evidence, the appeal proposal does not have an unacceptable impact on safety that cannot be mitigated against.

ii. Residual cumulative impacts on the road network would be severe – the Transport Assessment Addendum and ES Chapter 9.0 concludes that the appeal proposal does not result in severe residual cumulative impacts on the road network.

10.8 Paragraph 110 sets out that applications for development should:

a) "give priority first for pedestrian and cycle movements, both within the scheme and with neighbouring areas; and second – so far as possible – to facilitating access to high quality public transport, with layouts that maximise the catchment area for bus or other public transport services, and appropriate facilities that encourage public transport use;

b) address the needs of people with disabilities and reduced mobility in relation to all modes of transport;

c) create places that are safe, secure and attractive – which minimise the scope for conflicts between pedestrians, cyclists and vehicles, avoid unnecessary street clutter, and respond to local character and design standards;

d) allow for the efficient delivery of goods, and access by service and emergency vehicles; and

e) be designed to enable charging of plug-in and other ultra-low emission vehicles in safe, accessible and convenient locations."

10.9 The masterplan is illustrative, but the issues raised in NPPF paragraph 110 will be addressed at the reserved matters stage.

Local Plan Core Strategy for Warrington (2014)

10.10 Reason for refusal 1 of the 2017 decision notice refers to Policies CS1 (seventh and eleventh bullets); QE6 (fifth, sixth and tenth bullets); QE7 (third bullet); MP1 (All bullets); MP3; MP4; MP7 (both bullets); and MP10 (first, second and third bullets). In addition, Policy CS4 specifically refers to transport. In transport terms the thrust of these policies is set out below. The Local Plan Core Strategy is included as Core Document LP 1.

10.11 Policy CS1 (seventh and eleventh bullets) – This relates to the Council working proactively with applicants in order to deliver sustainable development and in this case specifically in relation to making the best use of existing transport infrastructure and safeguarding safety. The appellants team has repeatedly engaged extensively on highway issues with the Council over the lifetime of this planning application and it is regrettable that, for instance, highway officers have been unable to provide details of measures to be considered for inclusion in a scheme of mitigation for the area to the south of the appeal site.

10.12 From the 2017 Committee report it is clear it is agreed in principle that the appeal proposals represent a sustainable urban extension. Furthermore, the proposals add to the existing transport infrastructure and the access arrangements have been the subject of independent Road Safety Audits.

10.13 Policy QE6 (fifth, sixth and tenth bullet) – This relates to the need to submit detailed assessments on environmental and amenity protection and in this case specifically in relation to air quality, noise and vibration and the effects and timing of traffic movement and car parking including on highway safety.

10.14 As set out in the ES, the appeal proposals do not have an unacceptable adverse environmental impact on the amenity of neighbouring properties or residents, or the surrounding area.

10.15 Policy QE7 (third bullet) – This is a policy relating to the design of the development, to ensure a high quality place by creating sustainable, accessible and safe environment. The illustrative parameters plan shows that the development and site accesses will function well and it is considered that requirements of this policy are expected to be secured through reserved matters applications.

10.16 Policy MP1 – This relates to general transport principles such as reducing private car use; prioritising facilities for public transport, pedestrians and cyclists; the provision of cycle and car parking; and providing mitigation or improvements to the transport network as a result of development.

10.17 As set out earlier in my evidence, the development of this site places sustainable travel modes at the central core of the scheme.

10.18 Policy MP3 – This relates to the needs and safety of pedestrians and cyclists within a new development and which should contribute to enhancing and developing integrated networks of continuous, attractive and safe routes for walking and cycling including improvements to roads, Rights of Way and the Greenway Network.

10.19 Again, as set out earlier in my evidence, the masterplan has been prepared with these objectives at the core of its design and this will provide a real benefit for existing and future residents and support and encourage sustainable modes of travel as well as promote healthier living by providing improved leisure routes that link to the wider network.

10.20 Policy MP4 – This relates to improvements to the public transport network and where development is located. Most of the appeal site is already close enough to be very well served by existing bus services and the bus mitigation measures proposed will result in the development having excellent public transport links.

10.21 Policy MP7 – This relates to the need for Transport Assessments and Travel Plans to support development with the aim of showing that development will not significantly harm safety and can be accommodated by the transport network. In this case it specifically relates to identifying where significant effects will occur and the measures needed to mitigate the impact.

10.22 As well as a Framework Travel Plan (Core Document APN 102) the appeal proposals are supported by a comprehensive Transport Assessment and Addendum that identify where significant effects will occur and the measures needed to mitigate the impact. It concludes that the Peel Hall development will not significantly harm safety and with the mitigation measures in place the development can be accommodated within the transport network.

10.23 Policy MP10 (first, second and third bullets) – This relates to securing the infrastructure improvements arising from development. The infrastructure obligations and mitigation measures proposed will be secured through Section 106 obligations, Section 278 Agreements or planning conditions.

10.24 The appeal proposals are supported by a comprehensive package of proposed planning conditions and obligations, as set out in **Section 9.0**.

Warrington Draft Local Plan

10.25 The Local Plan is provided to set out the framework for the delivery of 18,900 new homes and support the ongoing economic growth of Warrington through the provision of employment land.

10.26 Whilst this plan is at an early stage it is noted at Policy MD4 that it allocates the Peel Hall site as developable for a scheme similar to this appeal proposal and that the Local Plan modelling tested for 1,200 houses on the development site in the WMMTM16 using Access Strategy Option A for loading of development trips.

10.27 Paragraph 7.1.2 of the draft Local Plan (Core Document LP 26) sets out that due to the proposed level of housing and employment growth, "*there is a critical need to address this dependency on the private car and increase the use of public transport, cycling and walking*".

Warrington Local Transport Plan 4

10.28 The objectives of the Local Transport Plan 4 (Core Document LP 41) are to transform travel around Warrington to cultivate a less car-dependent culture, leading to a town centre that is less car-dominated and local neighbourhoods that are more attractive places to live (section 5.3), with, "*improved air quality, less traffic and improved access to the town centre*".

Manual for Streets (2007) and Manual for Streets 2 (2010)

10.29 Manual for Streets and Manual for Streets 2 provides the recommended approach to highway design and planning. These documents are included as Core Documents NP 6 and NP 7 respectively.

10.30 Applying this technical guidance on the design of residential streets to the masterplan results in a layout that promotes inclusive environments and sustainable modes of transport, whilst striking a balance between the needs of different users.

10.31 This guidance encourages designers to take a flexible approach and not rely on historic design parameters.

Policy Compliance

10.32 Given the above I consider that the appeal scheme does not conflict with the above policies and documents including those listed in reason for refusal number 1.

11.0 Key issues arising

11.1 From the highway officer's consultation response and the committee report of 1st July 2020 the key issues arising are:

i. What is the increase in traffic through the residential area to the south of the appeal site? Does change necessarily mean harm and is mitigation in this area essential?

ii. Whether the appeal should be dismissed on the ground that there are one or more feasible alternative access strategies?

What is the increase in traffic through the residential area to the south of the appeal site? Does change necessarily mean harm and is mitigation in this area essential?

Background Traffic Flows 2022 and 2032

11.2 There are two elements to the increase in traffic through the residential area to the south of the appeal site, the growth in background traffic (rat-running traffic through the area as the main road network becomes increasing congested at peak times) and the addition of development traffic. As set out in **paragraph 5.12**, in reality what will happen in future years, is that instead of rat running traffic there will be development traffic on these links in the area to the south and that some of the rat running traffic will be displaced over the wider network.

11.3 Traffic flows for the area to the south of the appeal site are set out in TN/09/A (**Appendix 19**), which provides a comparison between the link flows in the 2022 Do Minimum scenario (no development) in the area to the south with 2032 Do Minimum and Do Something scenarios. For ease of reference the relevant tables are shown below.

Table 11.1 - 2022 link flows within the study area (Do Minimum)

Link Name	AM Peak Hour	PM Peak Hour	AADT_24
	2022 DM	2022 DM	2022 DM
Capesthorne Road (Greenwood Crescent to Blackbrook Avenue)	848	782	7309
Capesthorne Road (Poplars Ave - parallel to Humber Road)	496	617	4991
Cleveland Road	316	375	3801
Cotswold Road	40	36	418
Howson Road	43	39	451
Greenwood Crescent (Darley Ave to Grasmere Ave)	297	9	1683
Greenwood Crescent (Grasmere Ave to Meteor Cres)	482	84	3114
Poplars Avenue - East of (Central) Site entrance	383	440	4528
Poplars Avenue (Greenwood Cres - Capesthorne Road)	758	1042	9902
Poplars Avenue (south of Capesthorne Road)	740	685	7839
Sandy Lane West	578	774	7438
Sandy Lane	330	493	4528
Statham Avenue	353	431	4313

Table 11.2 – Links flows within the study area (2032 Do Minimum)

Link Name	AM Peak Hour			PM Peak Hour			AADT_24
	2032 DM (Flow 1)	2032 DM (Flow 2)	2032 DM (Two-Way)	2032 DM (Flow 1)	2032 DM (Flow 2)	2032 DM (Two-Way)	2032 DM
Capesthorne Road (Greenwood Crescent to Blackbrook Avenue)	580	443	1023	577	407	984	9004
Capesthorne Road (Poplars Ave - parallel to Humber Road)	443	261	704	484	322	806	6771
Cleveland Road	244	286	530	190	366	556	5988
Cotswold Road	13	30	43	22	11	33	419
Howson Road	26	22	48	17	23	40	485
Greenwood Crescent (Darley Ave to Grasmere Ave)	129	181	310	5	3	8	1753
Greenwood Crescent (Grasmere Ave to Meteor Cres)	242	269	511	44	49	93	3325
Poplars Avenue - East of (Central) Site entrance	398	208	606	374	256	630	6809
Poplars Avenue (Greenwood Cres - Capesthorne Road)	575	489	1064	505	786	1291	12984
Poplars Avenue (south of Capesthorne Road)	454	416	870	320	417	737	8871
Sandy Lane West	418	510	928	552	513	1065	10988
Sandy Lane	274	201	475	186	419	605	5955
Statham Avenue	299	118	417	362	95	457	4819

Table 11.3 – Comparison between 2022 and 2032 Do Minimum link flows

Link Name	AM Peak Hour	PM Peak Hour	AADT_24
	2032 DM - 2022 DM (Two-Way)	2032 DM - 2022 DM (Two-Way)	2032 DM - 2022 DM
Capesthorne Road (Greenwood Crescent to Blackbrook Avenue)	175	202	1695
Capesthorne Road (Poplars Ave - parallel to Humber Road)	208	189	1780
Cleveland Road	214	181	2186
Cotswold Road	3	-3	1
Howson Road	5	1	34
Greenwood Crescent (Darley Ave to Grasmere Ave)	13	-1	70
Greenwood Crescent (Grasmere Ave to Meteor Cres)	29	9	211
Poplars Avenue - East of (Central) Site entrance	223	190	2282
Poplars Avenue (Greenwood Cres - Capesthorne Road)	306	249	3082
Poplars Avenue (south of Capesthorne Road)	130	52	1032
Sandy Lane West	350	291	3551
Sandy Lane	145	112	1427
Statham Avenue	64	26	506

Table 11.4 – Links flows within the study area (2032 Do Something)

Link Name	AM Peak Hour			PM Peak Hour			AADT_24
	2032 DS (full) (Flow 1)	2032 DS (full) (Flow 2)	2032 DS (full) Two-Way	2032 DS (full) (Flow 1)	2032 DS (full) (Flow 2)	2032 DS (full) Two-Way	2032 DS (full)
Capesthorne Road (Greenwood Crescent to Blackbrook Avenue)	800	686	1486	812	570	1382	12860
Capesthorne Road (Poplars Ave - parallel to Humber Road)	648	399	1047	711	477	1188	10022
Cleveland Road	299	341	640	241	431	672	7234
Cotswold Road	46	40	86	45	37	82	921
Howson Road	44	23	67	32	41	73	783
Greenwood Crescent (Darley Ave to Grasmere Ave)	135	264	399	8	6	14	2277
Greenwood Crescent (Grasmere Ave to Meteor Cres)	212	350	562	44	49	93	3611
Poplars Avenue - East of (Central) Site entrance	564	300	864	495	432	927	9875
Poplars Avenue (Greenwood Cres - Capesthorne Road)	680	628	1308	1014	616	1630	16204
Poplars Avenue (south of Capesthorne Road)	508	556	1064	339	476	815	10365
Sandy Lane West	503	562	1065	638	595	1233	12670
Sandy Lane	276	213	489	189	443	632	6186
Statham Avenue	401	108	509	434	102	536	5756

Table 11.5 – Comparison between 2032 Do Minimum and 2032 Do Something link flows

Link Name	AM Peak Hour	PM Peak Hour	AADT_24
	2032 DS (full) - 2032 DM Two-Way	2032 DS (full) - 2032 DM Two-Way	2032 DS (Full) - 2032 DM
Capesthorne Road (Greenwood Crescent to Blackbrook Avenue)	463	398	3856
Capesthorne Road (Poplars Ave - parallel to Humber Road)	343	382	3251
Cleveland Road	110	116	1246
Cotswold Road	43	49	502
Howson Road	19	33	298
Greenwood Crescent (Darley Ave to Grasmere Ave)	89	6	524
Greenwood Crescent (Grasmere Ave to Meteor Cres)	51	0	287
Poplars Avenue - East of (Central) Site entrance	258	297	3066
Poplars Avenue (Greenwood Cres - Capesthorne Road)	244	339	3220
Poplars Avenue (south of Capesthorne Road)	194	78	1494
Sandy Lane West	137	168	1682
Sandy Lane	14	27	232
Statham Avenue	92	79	937

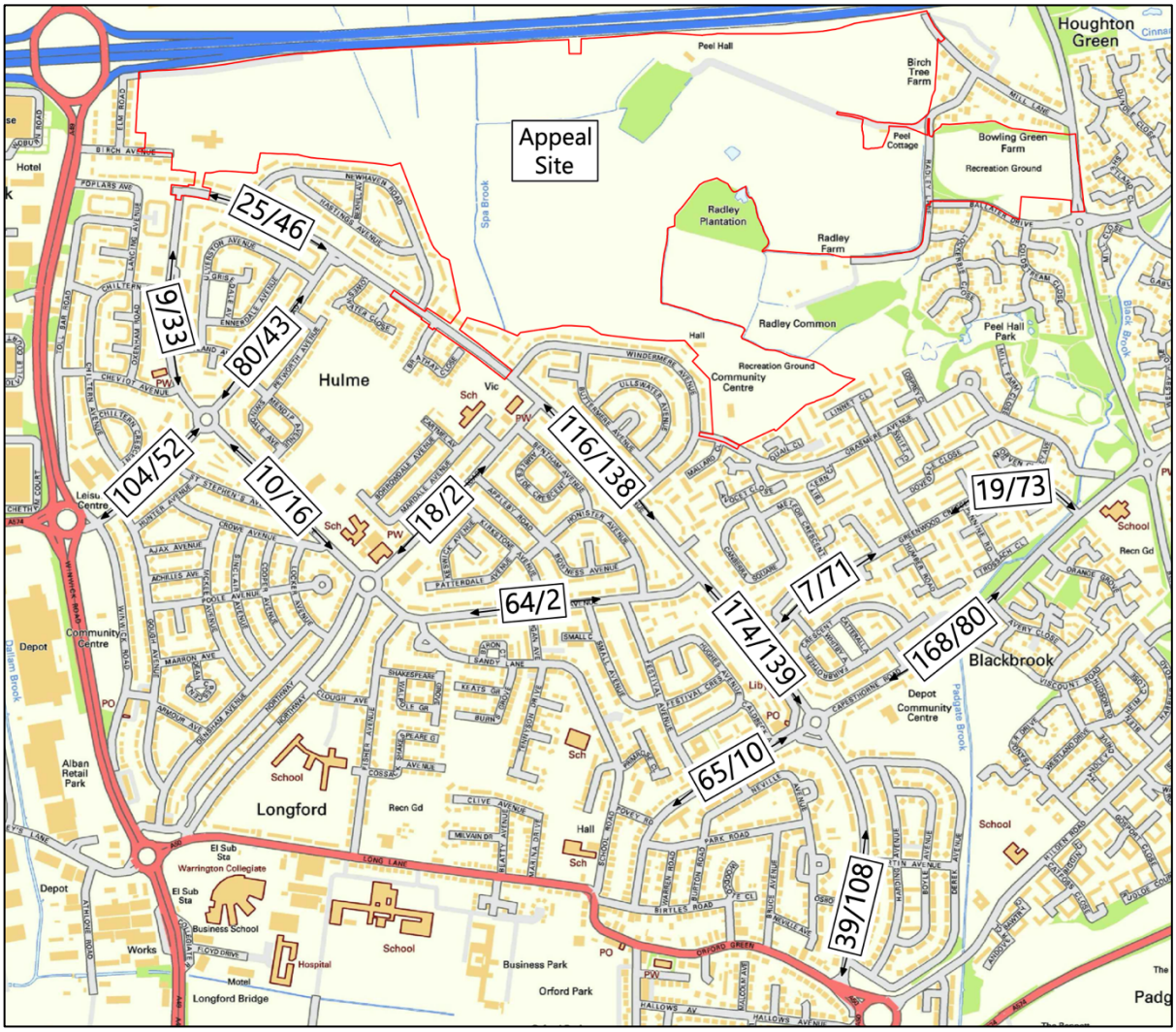
11.4 From this it can be seen that the busier links account for use by through-traffic. A comparison between the 2022 and 2032 Do Minimum SATURN results demonstrate that the flows through the area are expected to substantially increase over time on the majority of links even without the Peel Hall development traffic i.e. up to around 200vph or around 2,000-3,000vpd.

11.5 It can also be seen when reviewing **Table 11.5** that the increase in traffic as a result of the full Peel Hall development varies across the links of between an additional 6 to 463vph (i.e. an additional 232 to 3,856vpd AADT). Development trips are set out below.

Peel Hall Development Traffic

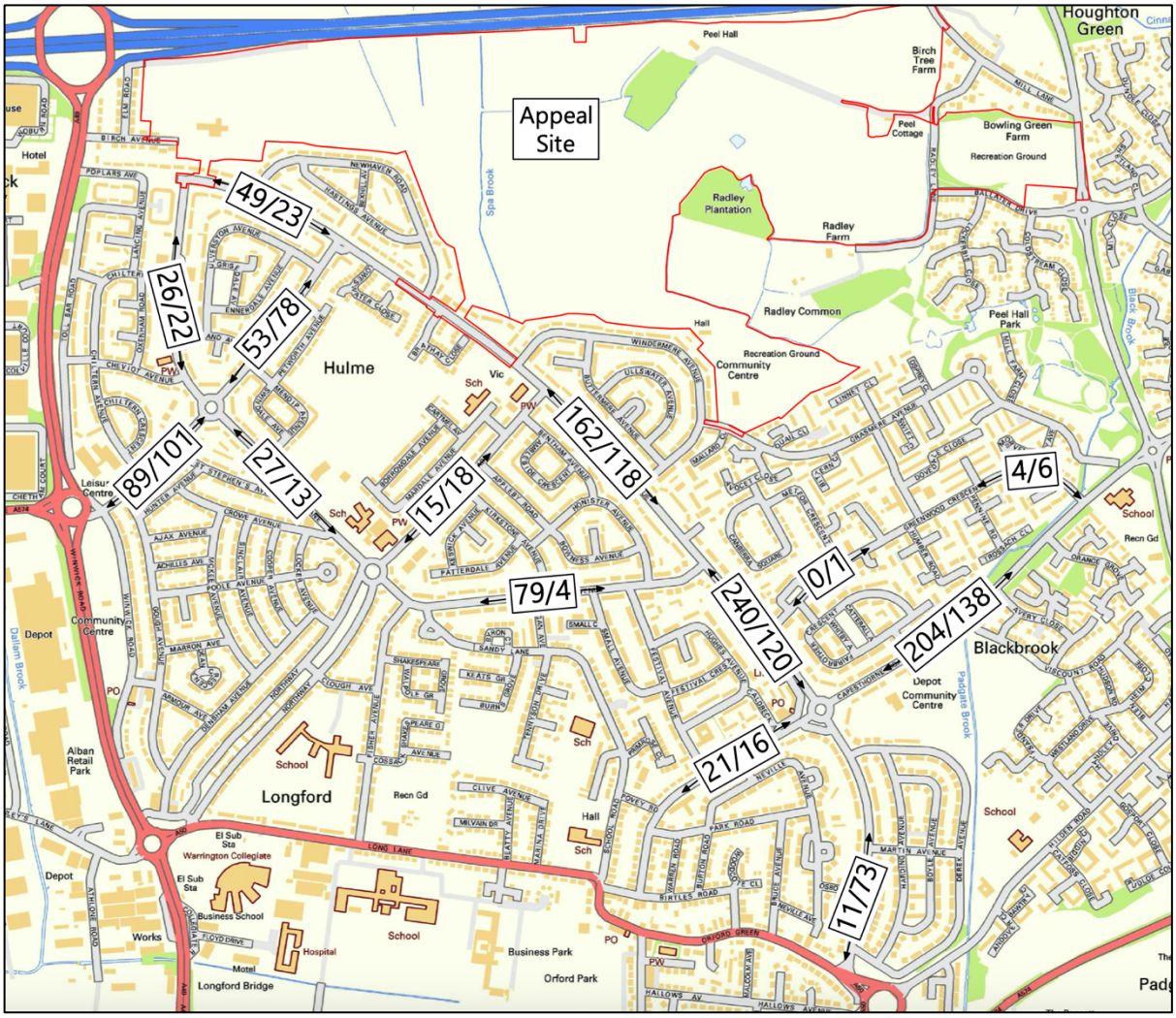
11.6 The following **Figures 11.1** and **11.2** show development traffic for AM and PM peak hours respectively (see development traffic flow diagrams in Appendix 13 of the Transport Assessment Addendum - Core Document APN 120). These Figures are provided to show directional movement across this area.

Figure 11.1 – Development Traffic AM Peak Hour



*** Direction of flow indicated by small directional arrow associated with each figure**

Figure 11.2 – Development Traffic PM Peak Hour



*** Direction of flow indicated by small directional arrow associated with each figure**

11.7 **Figures 11.1** and **11.2** show development traffic impact to be very low on Sandy Lane and Howson Road (one vehicle every two to four minutes), with low increases of around 40 to 80vph on Cotswold Road, Greenwood Crescent and Statham Avenue i.e. around one vehicle per minute. Larger impacts are forecast on Cleveland Road and Sandy Lane West of around 110 to 170vph (two to three vehicles per minute) increasing to between 250 to 450vph Capesthorne Road and Poplars Avenue i.e. four to seven vehicles per minute. Impact is discussed in more detail below.

Impact Due to Development Traffic

11.8 It is appropriate to note the 2018 Inspector's comments regarding the area to the south at IR13.48 where he noted that at present, "*most vehicles do not appear to travel at speed, streets are straightforward to cross, and it is a pleasant area through which to walk (although this situation changes on some streets during the peak hours)*."

11.9 At IR13.49, the Inspector acknowledged when discussing the impact of development traffic in light of the growth of background traffic that, "*the appeal proposal would be unlikely to have any impact on the majority of residential streets in the area … having regard to the 'without development' scenarios, peak hour flows along those streets that serve as routes into and out of the residential area, chiefly Poplars Avenue, Capesthorne Road, Cleveland Road, Cotswold Road, Howson Road and Sandy Lane would increase significantly. Sandy Lane West, Poplars Avenue and Capesthorne Road would see Annual Average Daily Traffic (AADT) levels reach over 10,000 by 2030*."

11.10 However, in IR13.50 he comments that the, "*There was a debate at the inquiry as to whether the technical function of these roads would change with such flows upon them. This is, I suggest, moot. Even if their function was to remain the same, the level of increase in flow of traffic along them (roads in the area to the south of the development), whether technically appropriate or not, would, inevitably, make them less pleasant routes along which to walk (or cycle) and, indeed to drive. They would be busier, noisier and potentially, more difficult to cross for certain residents"*.

11.11 He concluded this section of his report in {IR13.53}, which states, "*All of this may be considered as an inevitable consequence of any new development. In addition, change does not necessarily equate to harm. Thus, the weight to be attributed to this issue may not be considered very significant. Even so, in this instance, I conclude that the appeal proposal would have an adverse impact upon the character of the area, which would gradually, as the appeal site was built out, change to become a busier and, for pedestrians at least, noisier area through which to travel*'.

11.12 It is reasonable to assume that the Inspector was referring to the streets he listed in IR13.49 i.e. Poplars Avenue, Capesthorne Road, Cleveland Road, Cotswold Road, Howson Road and Sandy Lane West and each of these are now considered in turn in terms of the NPPF paragraphs 108 and 109 i.e.

108c) *"any significant impacts from the development on the transport network (in terms of capacity and congestion), or on highway safety, can be cost effectively mitigated to an acceptable degree.*" and

109 "Development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe".

Poplars Avenue

11.13 From **Figures 11.1** and **11.2** it can be seen that the busiest peak hour is in the PM, with around 280 vehicles (two-way) near the central access location. This is around two vehicles per minute in each direction.

11.14 In terms of the most recent five year accident records, there were 10 reported PIA on Poplars Avenue; two of these involved a pedestrian and were classified as 'slight'; three of these involved a cycle (one classified as 'serious' and two 'slight'). None of the reported PIA involved a motorcyclist.

Capesthorne Road

11.15 From **Figures 11.1** and **11.2** it can be seen that the busiest peak hour is in the PM, with around 342 vehicles (two-way). This is around three vehicles per minute in each direction.

11.16 In terms of the most recent five year accident records, there were two reported PIA on Capesthorne Road and two PIA at the Capesthorne Road arm of the roundabout with Poplars Avenue.

11.17 The two PIA on Capesthorne Road each involved a pedal cycle (both classified as 'slight'), one of which involved a reversing vehicle and the other involved a child pedal cycle and a stopping vehicle.

11.18 Of the two PIA that occurred on the Capesthorne Road entry to the roundabout, one was classified as 'slight' and the other was classified as 'serious' and involved a pedestrian and a light goods vehicle.

Cleveland Road

11.19 From **Figures 11.1** and **11.2** it can be seen that the busiest peak hour is in the PM, with around 131 vehicles (two-way). This is around one vehicle per minute in each direction.

11.20 In terms of the most recent five year accident records, there were two 'slight' PIA on Cleveland Road; one involved a motorcycle and one a cycle.

Cotswold Road

11.21 From **Figures 11.1** and **11.2** it can be seen that the busiest peak hour is in the PM, with around 48 vehicles (two-way). This is around one vehicle every three minutes in each direction.

11.22 In terms of the most recent five year accident records, there was one 'slight' PIA on Cotswold Road, which involved a pedestrian.

Howson Road

11.23 From **Figures 11.1** and **11.2** it can be seen that the busiest peak hour is in the PM, with around 33 vehicles (two-way). This is around one vehicle every four minutes in each direction.

11.24 In terms of the most recent five year accident records, there were two reported PIA on Howson Road, both were classified as 'slight'; one of which involved a cycle.

Sandy Lane West

11.25 From **Figures 11.1** and **11.2** it can be seen that the busiest peak hour is in the PM, with around 190 vehicles (two-way). This is around three vehicles every two minutes in each direction.

11.26 In terms of the most recent five year accident records, there were 11 reported PIA on Sandy Lane and Sandy Lane West; one of these involved a pedestrian (classified as 'slight'), which occurred at the Sandy Lane/Howson Road/Northway roundabout; four PIA involved a cycle (one classified as 'serious' and three as 'slight'); two PIA involved a motorcycle (both classified as 'slight').

Summary

11.27 From the above **paragraphs 11.13** to **11.26** it is concluded that development traffic flows are too low to have any significant impact on capacity, congestion or highway safety and if it is considered essential then the impact can be cost-effectively mitigated to an acceptable degree.

11.28 Furthermore, it can be seen that there is no pattern in accidents to suggest a road safety history that will be exacerbated by the appeal scheme, and that the number and type of accidents reported are not a-typical of locations such as this i.e. an average of around 2 per year on Poplars Avenue and also Sandy Lane and Sandy Lane West, with much less elsewhere. In terms of vulnerable road uses, the data sets out that there were between one PIA per year, to one every five years on the various links. As such, it is considered that no significant harm to ease of movement in the area for pedestrians will arise as a result of the appeal scheme.

11.29 It can also be concluded that these roads would not be noticeably busier and as such there would not be an unacceptable impact on highway safety. Similarly, it is concluded that the residual cumulative impacts on the local highway network would not be severe.

Council's Position

11.30 The Council's position is that the increase in development traffic through the roads in the area to the south will change their nature and function so that the primary purpose is movement and that this will subsequently alter the character of the area with potential impacts on public safety, residential amenity, and the movement of vulnerable road users.

11.31 As set out in paragraph 6.3(v), the Council's consultation response on the Transport Assessment Addendum stated that, *"Whilst mitigation proposals to the residential roads south of the development are not considered appropriate to mitigate the overall impacts of the development, they will be required should planning consent be granted."* As such, should the Inspector consider that these measures are necessary then they can be secured by an appropriately worded planning condition.

11.32 The Council's position regarding the proposed verge parking, which they agree will free up road space and improve traffic movement, is to raise a concern that verge parking may mask pedestrian movement. It can however be noted that a vehicle parked on the verge is less likely to mask a pedestrian waiting to cross the carriageway than a vehicle parked on the carriageway.

11.33 The officer's consultation response of June 2020 **Appendix DT/15** also set out that, "*The most appropriate means to accurately reflect link capacity and movement throughout this area* (to the south) *would be via a micro-simulation model.*"

11.34 We have never been able to agree the means of assessing the capacity of the network in this area. However, the forecast traffic flows for the area to the south are derived from WMMTM16 and the cordon model for Peel Hall was updated to include key roads, in agreement with the Council.

11.35 Developing a micro-simulation model in this area was considered but it was concluded that this would not be a worthwhile exercise given that it would not tell us anything we do not already know, such as:

i. Given the congested network of north Warrington as the level of background traffic increases throughout the north Warrington area, through-traffic will seek to find whatever routes are available until capacity is reached.

ii. On street parking reduces capacity and as such the introduction of verge parking could help increase the free flow of traffic.

Conclusion

11.36 Whilst any development on this site is bound to have an impact on the area to the south in terms of capacity and safety, given the above, it can be concluded that it does not necessarily mean harm.

11.37 It is considered that no significant harm to ease of movement in the area for pedestrians will arise as a result of the appeal scheme. However, the pedestrian and cycle improvements set out as potential mitigation in **Section 9.0** could benefit existing and future residents in improving connectivity and the safety and attractiveness of non-car modes, and also boost health and well-being.

11.38 My evidence remains, as with the 2018 inquiry, that a package of measures in the area to the south is desirable, but should the Inspector consider it essential, then this obligation could be secured by a suitably worded planning condition.

Whether the appeal should be dismissed on the ground that there are one or more feasible alternative access strategies?

11.39 As set out in **paragraphs 2.29** to **2.32**, the Council is now apparently seeking to rely on one or more feasible access strategies as an alternative to Option A (as set out in the highway officer's email of 1st July 2020, **Appendix DT/18**). These are:

Option B (also referred to as Option B1) – a through route linking the A49 in the west to Mill Lane in the east. The Option B accesses onto Poplars Avenue (central), Birch Avenue and the Mill Lane extension would remain.

Option B2 – based on Option B, but without the through route. The appeal site would be split with the two main Option B access points (i.e. one on the A49 to the west via Poplars Avenue and the other on Mill Lane to the east) each serving a proportion of the site. The Option B accesses onto Poplars Avenue (central), Birch Avenue and the Mill Lane extension would remain under Option B2.

Option C – single vehicular access at Mill Lane with an internal loop road serving all 1,200 dwellings, local centre, primary school and care home with no vehicular access on to Poplars Avenue except for emergency and bus use.

Option B

11.40 In the run up to the 2018 inquiry, despite requesting through-route Access Strategy Option B to be included, the Council were very negative of Option B particularly regarding:

i. The works proposed to enlarge and signalise the junction of the A49 with Poplars Avenue (suggesting the Poplars Avenue arm needed to be wider to increase capacity and pedestrian safety, which in turn would require Council land that was not public highway).
ii. The close proximity of M62 Junction 9 less than 150 metres to the north and resultant implications for queuing.
iii. The need to reroute local bus services numbers 20 and 21.
iv. TPO – in order to make it more difficult for Option B to progress a TPO was placed on the Poplars Avenue highway trees that would have been affected by the highway works.

11.41 In respect of the area to the south, when compared with Option A, there will be no net improvement with Option B.

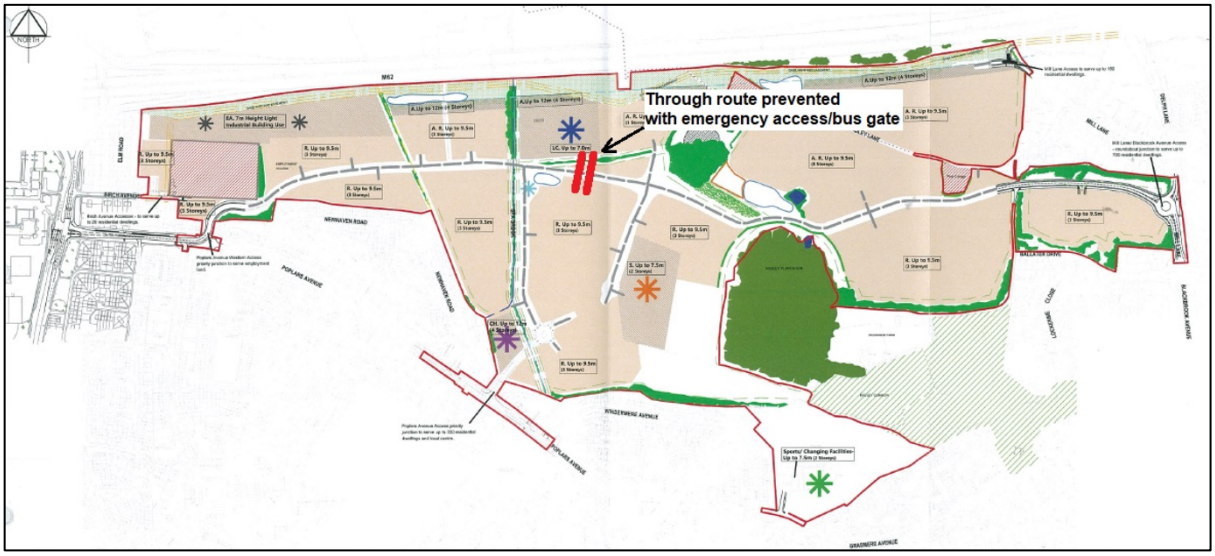
Option B2

11.42 As set out at **paragraph 2.21**, Option B2 can be described as:

i. Option B with a central bus gate to prevent a through-route between the A49 in the west and Mill Lane in the east.
ii. Around 180 dwellings and care home accessed via Poplars Avenue.
iii. Around 240 dwellings accessed via the A49.
iv. Around 610 dwellings, the primary school and the local centre accessed from Mill Lane.
v. 150 dwellings still accessed from the Mill Lane extension.
vi. 20 dwellings still accessed from Birch Avenue.

11.43 The preliminary illustrative concept plan showing Option B2 forms part of **Appendix DT/9** (**Figure 2.2** replicated here for ease of reference).

Figure 2.2 – Option B2 - Preliminary illustrative concept plan



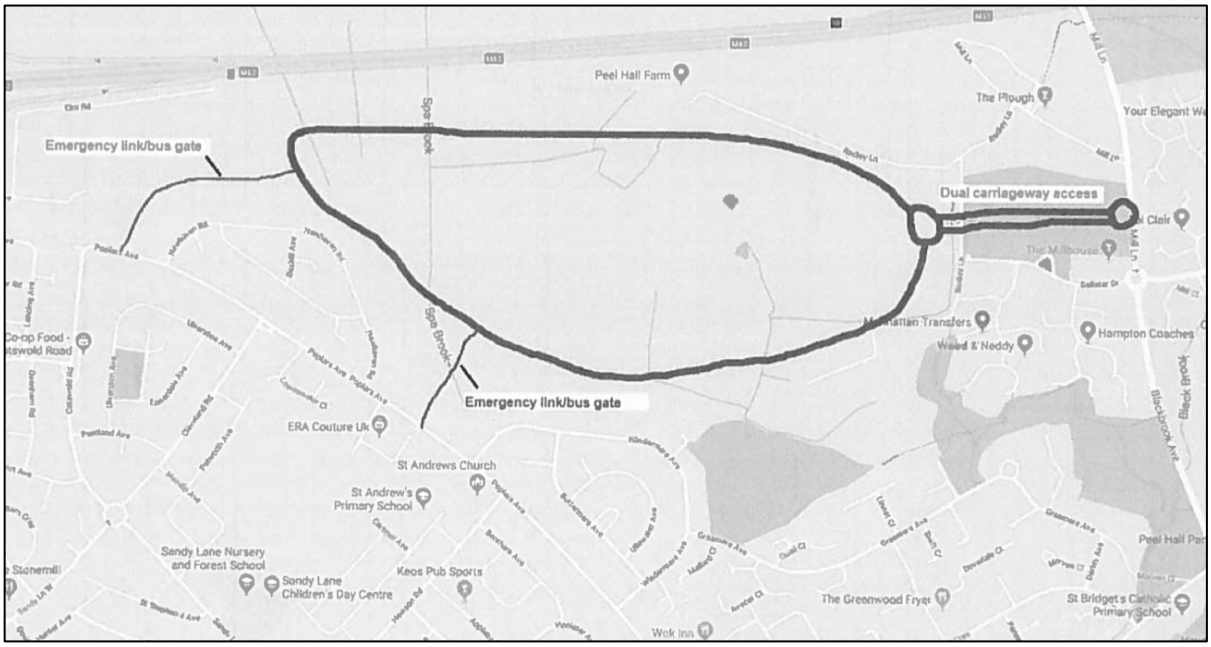
11.44 In respect of Option B2 I would expect that all the Council's objections regarding Option B would remain i.e. the close proximity of M62 Junction 9 with the resultant new signalled junction on the A49 at Poplars Avenue; the size of this new junction and the need for land outside the public highway; the impact the new signal junction would have on the M62; the need to reroute existing bus services; and the Council would also have to agree to remove the Tree Preservation Order on the cul-de-sac section of Poplars Avenue, an action that would no doubt be strongly resisted by local residents.

11.45 In respect of the area to the south, when compared with Option A, there will be no net improvement with Option B2.

Option C

11.46 A preliminary illustrative plan showing the concept of Option C was provided in the WSP Scoping Note and this plan forms **Appendix DT/9** (**Figure 2.1** replicated here for ease of reference).

Figure 2.1 – Option C - Preliminary illustrative concept plan



11.47 In respect of Option C it is clear that there would be significant additional impact when compared with Option A at the existing roundabout junctions of Mill Lane, Enfield Park Road, Blackbrook Avenue, Ballater Drive and Blackbrook Avenue, Enfield Park Road and Capesthorne Road given that all development traffic would be distributed to/from a new junction onto Mill Lane. This will lead to an increase in delay when entering or leaving the Cinnamon Brow area at peak times.

11.48 In respect of the wider impact, and compared with Option A, there would be additional traffic using the Delph Lane, Myddleton Lane, Winwick route to access the A49 and M62 Junction 9 as a result of Option C.

11.49 In terms of the Option C internal road layout, it should also be noted that in paragraph 4.8 of the Warrington Design Guide (now withdrawn - although officers continue to refer to this document) it states:

"*Access roads form the major part of residential road networks and provide direct access to individual dwellings and parking spaces (for properties with direct frontage access in sensitive locations, on site turning areas may be requested) and often links several residential areas to a local distributor road. They may serve between 50 and 300 dwellings (or equivalent mixed uses) including those located on other access roads feeding onto it. It should preferably have two points of access or take the form of a loop road with a short connection to a single point of access and a secondary emergency access link. Any through route must be designed so as it discourages non-essential through traffic. Cul-de-sac may be permitted on sites, which are too small to accommodate a loop road, or on sites where existing allocated or consented land is involved. Any such roads should however serve no more than 150 dwellings. The design speed for this access road is 20mph.*"

11.50 Therefore, a development in the form of a loop road with a short connection to single point of access such as Option C, would be expected to serve only up to 300 dwellings and not the 1,200 dwellings plus local centre, primary school and care home that form the appeal proposals.

11.51 Also, the access strategy of Option C results in a stand-alone site and would limit the development becoming an extension of, and less integrated and connected to, the Poplars Avenue area.

11.52 Furthermore, because access strategy A has several points of access this helps to distribute development traffic over a wider area, rather than concentrating it to a single point on the highway network, as with Option C.

11.53 In respect of the area to the south, when compared with Option A, there will be no net improvement with Option C.

Conclusion

11.54 It is my evidence that Option B, and its variation B2, are not feasible options because of the previous objections raised by local residents, Cheshire Police, Highways England as well as the Council's highway officers that led to the withdrawal of Option B at the 2018 inquiry.

11.55 Furthermore, there will be no net benefit with Option B and B2 on the area to the south when compared with Option A.

11.56 It is also my evidence that Option C is not feasible because it is based on a cul-de-sac design serving 1,200 dwellings plus a local centre, care home and primary school, and the increase in delay leading to and from the Cinnamon Brow area.

11.57 Furthermore, there will be no net benefit with Option C on the area to the south when compared with Option A.

11.58 Option A is the only access strategy in front of this appeal and based on the evidence this represents a strategy that results in an acceptable impact in the area to the south of the appeal site.

11.59 The Council have not, to my knowledge, explored alternative access strategies to provide evidence that others are feasible or appropriate and it should also be recalled that for their Local Plan assessment the Council only modelled Access Strategy Option A when considering the Peel Hall site and not any of their suggested alternative strategies, and conclude that the site is developable.

11.60 Therefore, it would be unreasonable that this appeal should be dismissed on the ground that there are one or more feasible alternative access strategies.

12.0 Remaining areas of agreement and disagreement

12.1 At the time of writing this evidence not all matters relating to what is agreed or yet to be agreed have been settled, but at this moment in time, the areas of agreement can be summarised as:

i. The use of WMMTM16 as the most appropriate tool to extract data for detailed modelling of individual junctions, and to forecast growth for the approved VISSIM model.
ii. The description of the local transport network.
iii. The traffic flow figures that have been used in the Transport Assessment.
iv. Development trip rates.
v. Trip rates for committed development.
vi. That the layout of the internal access roads will be determined as part of Reserved Matters.
vii. An emergency access plan will be determined as part of Reserved Matters.
viii. A plan defining the Greenway Network will be produced as part of Reserved Matters.
ix. The level of car parking for the appeal scheme will be controlled through condition.
x. The provision of the Travel Plan will be controlled through condition.
xi. Existing local bus services and routes.
xii. The principle of the bus gate to prevent a through route to general traffic.
xiii. Residents located off the Poplars Avenue accesses in the early phases of development will be able to use the existing bus stops at Poplars Avenue as they will be within 400 metres walking distance.
xiv. Proximity of existing local services and amenities.
xv. The provision of a Construction Management Plan will be controlled through condition.
xvi. Assessment periods.
xvii. The individual junction capacity models.

xviii. The use of VISSIM for a corridor study of the A49 and to assess impact of the development on that corridor including the A49/Golborne Road; A49/Winick Link Road; A49/Delph Lane; M62 Junction 9; A49/Cromwell Avenue/Sandy Lane West; A49/Junction NINE Retail Park; and A49/A50 Long Lane and Hawleys Lane.

xix. When highway engineering works measures have been agreed, off-site junction obligations will be secured under a Grampian condition and procured via a Section 278 Agreement.

xx. A Section 38 Agreement would be entered into between the developer and the Council for the construction and delivery of the internal road network.

xxi. Proposed bus mitigation strategy, which will be secured through a S106 Agreement with the Council.

xxii. A contribution of £35,000 to be provided by the applicant towards traffic management measures at Delph Lane.

xxiii. A contribution to be provided by the applicant towards junction improvement works (signal junction) of Delph Lane and Myddleton Lane.

xxiv. A scheme of mitigation to be provided at the A50/Hilden Road roundabout.

xxv. A contribution to be secured for works to the A50/Hallfields Road signal junction MOVA upgrade (including lining and loops).

xxvi. A contribution to be secured for works to the A49/A50/Hawleys Lane signal junction MOVA upgrade (including lining and loops).

xxvii. Widening and ghost right turn lane at the A49/Golborne Road junction.

xxviii. Keep Clear markings at the junction of A49/Birch Avenue and also the Golborne Road/Myddleton Lane junction.

xxix. Cycle and pedestrian improvement works in the area to the south if required.

xxx. Transport policies NPPF paragraphs 108 and 109 are agreed to be relevant.

xxxi. Some triggers for mitigation.

12.2 Areas still to be agreed can be summarised as:

i. Whether the appeal should be dismissed on the ground that there are one or more feasible alternative access strategies.

ii. Means of assessing link capacity in the area to the south.

iii. Proposals to extend the 20mph speed restrictions in the area to the south.

iv. Proposals for verge parking in the area to the south.

v. Need for mitigation on the Sandy Lane West arm of the A49/Cromwell Avenue junction.

vi. Form of mitigation at the A50/Hilden Road.

vii. VISSIM base model and future year assessments.

viii. Some triggers for mitigation.

12.3 It is expected that prior to the start of the inquiry the Statement on Common Ground on Highway Matters will have been concluded and circulated to the relevant parties.

13.0 Summary and conclusions

13.1 This appeal arises from the refusal of the outline planning application for a new residential neighbourhood on land adjacent to Peel Hall in Warrington, with all matters reserved except for access.

13.2 This appeal is supported by a comprehensive Transport Assessment Addendum and a Statement of Common Ground on Highway and Transport matters has been prepared which confirms the current areas of agreement and disagreement.

13.3 The principles in the evolution of this masterplan were to make sure that the development is sustainable, with high quality walking, cycling and public transport access provided to services and facilities required on a daily basis.

13.4 My proof of evidence has covered the following:

i. What the evidence was based on at the 2018 inquiry including the reasons why alternative Access Strategy Option B was withdrawn and the background to the 2020 inquiry.
ii. Matters arising from the Inspector's report.
iii. Further transport analysis since the 2018 appeal decision.
iv. Summary of the Transport Assessment Addendum (HTp/1901/TA/Addendum/01 - Core Document APN 120) issued in March 2020 including amended mitigation package.
v. Summary of the response from highway officers to the Transport Assessment Addendum.
vi. Response to highway officer comments.
vii. Response to Rule 6 and third party highway related comments.
viii. Mitigation package now proposed and S106 obligations/transport related planning conditions.
ix. Compliance with transport related planning policies.
x. Identified the key issues arising including:
    - What is the increase in traffic through the residential area to the south of the appeal site? Does change necessarily mean harm and is mitigation in this area essential?

- Whether the appeal should be dismissed on the ground that there are one or more feasible alternative access strategies?

xi. Areas of agreement and remaining areas of disagreement.

Conclusions

13.5 I conclude that:

i. Whilst any development on this site is bound to have an impact on the area to the south in terms of capacity and safety, given the above, it can be concluded that it does not necessarily mean harm.

ii. No significant harm to ease of movement in the area for pedestrians will arise as a result of the appeal scheme.

iii. A package of measures in the area to the south is desirable, but should the Inspector consider it essential, then this obligation could be secured by a suitably worded planning condition.

iv. Option B, and its variation B2, are not feasible options because of the previous objections raised by local residents, Cheshire Police, Highways England as well as the Council's highway officers that led to the withdrawal of Option B at the 2018 inquiry.

v. Option C is not feasible because it is based on a cul-de-sac design serving 1,200 dwellings plus a local centre, care home and primary school, and the increase in delay leading to and from the Cinnamon Brow area.

vi. Option A is the only access strategy in front of this appeal and based on the evidence this represents a strategy that results in an acceptable impact in the area to the south of the appeal site.

vii. The Council have not, to my knowledge, explored alternative access strategies to provide evidence that others are feasible or appropriate and it should also be recalled that for their Local Plan assessment the Council only modelled Access Strategy Option A when considering the Peel Hall site and not any of their suggested alternative strategies, and conclude that the site is developable.

viii. It would be unreasonable that this appeal should be dismissed on the ground that there are one or more feasible alternative access strategies.

13.6 I finally conclude that there are no highways or transport related reasons to withhold the granting of planning permission for the appeal scheme.