

Land to the south of Ringwood Road, Alderholt, Dorset

REBUTTAL EVIDENCE (TRANSPORT)

by Richard Fitter, IEng, FCILT, FICE, FIHE

Planning application Ref: P/OUT/2023/01166

Planning Inspectorate Ref: APP/D1265/W/23/3336518

Date: June 2024

CONTENTS

1.0 INTRODUCTION 2

2.0 MATTERS IN DISPUTE 3

1.0 INTRODUCTION

- 1.1.1 I have provided a proof of evidence in support of Reason for Refusal 2 and Reason for Refusal 7, dated May 2024.
- 1.1.2 At the case management conference on 2nd May 2024 the Inspector requested a topic paper on Highway Impact. The appellants' transport consultant (PBA) produced a draft topic paper on 3rd June 2024. The topic paper has been the subject of ongoing discussion and amendment between Entran and PBA with the most recent amended version being issued by Entran to PBA on 13th June 2024. The topic paper includes a section on Agreed Matters and a section entitled Matters in Dispute.
- 1.1.3 The purpose of this rebuttal proof of evidence is to provide my expert view on the specific matters in dispute as identified in the Topic Paper, where it is judged that to do so may be helpful in advance of the inquiry. The fact that a matter is not repeated from my original proof of evidence is not to be understood to be a concession.

2.0 MATTERS IN DISPUTE

2.1 Residual cumulative impact on the highway network

- 2.1.1 Insufficient information was provided in the Transport Assessment (TA) to establish whether the proposed development would have a severe residual effect on the highway network. The vehicle trip rates included in the TA were not agreed by Dorset Council (DC), Hampshire County Council (HCC) or National Highways (NH). In addition, neither HCC nor NH agreed with the level of trip internalisation suggested by the appellant. In terms of the subsequent junction modelling, if the input data is not agreed then the model outputs cannot be agreed.
- 2.1.2 Even based on the Appellant's vehicle trip rates, the junction modelling showed 'with development' scenarios resulting in junctions in Fordingbridge operating above operational capacity (see 2.3 below) and with additional queuing that HCC considered to be unacceptable. On the basis that the input data was not agreed, the modelling outputs were unacceptable (even with lower than acceptable trip rates), and no road safety audits (RSA) were submitted for the proposed mitigation works, it was reasonable for HCC to object to the development on the grounds of insufficient information.

2.2 Sensitivity test

- 2.2.1 National highway requested further assessment based on higher vehicle trip rates (0.5-0.65 peak hour trips per dwelling) and lower levels of internalisation (5-10%). It should be noted that these trip rates were lower than HCC had suggested as being acceptable in their consultation response but both DC and HCC confirmed to Entran that in order to seek agreement on matters, they would accept a common set of trip rates and internalisation so that all three highway authorities could work to an agreed method of assessment.
- 2.2.2 The TAA uses these parameters to assess the A31/B3081 junction and NH has agreed the methodology and outcome; however, alternative vehicle trips were then used to assess the local highway network using a different methodology for internalisation/reduction in existing trips. For this reason, neither HCC nor DC agreed the revised methodology. In the absence of agreed input data, the modelling results and proposed mitigation measures cannot be agreed.

2.3 Description of junction capacity

- 2.3.1 A matter of disagreement between Entran and PBA has been the description of junction capacity in the Highway Impact topic paper. For roundabouts and priority junctions, the capacity of each approach arm or turning movement is defined as a ratio of flow to capacity (RFC). If an approach arm has a theoretical capacity of 100 vehicles per hour and the predicted traffic is 100 vehicles per hour then the RFC would be 1.0. The *theoretical* capacity

of an approach arm is therefore defined by an RFC of 1.0; however, it is best practice to use an RFC of 0.85 as the *operational* capacity.

2.3.2 TRL report LR942 sets out that the standard error of prediction for a typical junction modelling site is approximately 15% of the entry capacity. The TRL Junctions 9 User Guide states:

“At the point where the demand is close to capacity (i.e. RFC is around 1.0), the throughput is less than both the demand and the capacity. This is due to the random nature of traffic arrivals and random queueing theory. When the RFC is close to 1.0, this randomness is most noticeable and means that vehicles may randomly bunch up and cause momentary queueing, which results in the throughput being less than the theoretically available capacity.”

2.3.3 It goes on to state that:

“The RFC provides a basis for judging the acceptability of junction designs and typically an RFC of less than 0.85 is considered to indicate satisfactory performance. This depends however on the context of the study and so the user’s own judgement is also required” and ***“At high-speed major roads, a lower RFC (e.g. 0.75) is recommended instead.”***

2.3.4 For this reason, whereas a junction approach has a theoretical ratio of flow to capacity of 1.0, a figure of 0.85 is considered best practice as a threshold to account for possible prediction error.

2.3.5 In a number of instances, the TA indicates that in the ‘with development’ scenarios, junctions would operate with an RFC greater than 0.9. In each case, these junctions were in Fordingbridge and Hampshire County Council (HCC) as local highway authority raised concerns with the results, particularly as they considered the predicted vehicle trips rates were artificially low in any case. I consider their concerns to be reasonable. For this reason, where the topic paper refers to the TA showing a junction operating ‘within capacity’ it means that the modelling showed an RFC of less than 0.85; however, where the topic paper refers to the TA showing a junction operating within ‘theoretical capacity’ it means the modelling showed an RFC of between 0.85 and 1.0. The appellant is correct to state that this is within the theoretical capacity of the junction, but it is not accepted by the local highway authority as representing reasonable operational capacity (irrespective of the further concerns relating to the low vehicle trip rates).

2.4 Highway safety

- 2.4.1 All proposed works to be carried out within the public highway are required to be subject to an independent Road Safety Audit (RSA). Stage 1 RSAs have been provided for the proposed new junctions onto Hillbury Road and Ringwood Road and mitigation measures at the A31, but the topic paper states in a number of places that additional RSAs are being undertaken. Those RSAs have not been provided to the Council and do not form part of the appellant's evidence. Any such RSA will then be subject to a Designer's Response, identifying how the issues raised in the audit have been addressed, potentially in a revised design. Each highway authority would then need to review and agree the RSA, the Designer's Response and any revised design. This applies to proposed mitigation measures in Fordingbridge and proposed pedestrian and cycle improvements in Alderholt and between Alderholt and Fordingbridge.
- 2.4.2 In the absence of those RSAs, Designer's Responses and local highway authority review and agreement, it is reasonable to conclude that insufficient information has been provided to demonstrate that the proposed development would not have an unacceptable effect on highway safety.

2.5 Deliverability of carriageway widening

- 2.5.1 The appellant has proposed highway works to widen the carriageway, south of the site on Harbridge Drove and to the east and west of Alderholt on the B3078. The TAA states that the vehicle tracking exercise demonstrated that following the proposed widening, a car could pass an HGV except in four identified locations.
- 2.5.2 The TA and TAA assess the need for the widening on the basis of the predicted vehicle movements associated with the operational stage of the proposed development. Neither the TA or TAA include an assessment of the need for carriageway widening to accommodate potential two-way movements of HGVs during the construction period. The required width for two HGVs to pass is greater than for a car to pass an HGV. The highway authorities raised concerns in this respect in relation to potential impact on vegetation, third party features, forward visibility and access visibility where widening is proposed, the suitability of the route for buses. In the absence of such an assessment, and in the absence of an RSA for such widening, it has not been demonstrated that the required carriageway widening can be delivered within the public highway in a safe and appropriate manner.

2.6 Pedestrian and cycle links between Alderholt and Fordingbridge

- 2.6.1 The topic paper refers to the developer offering a financial contribution to improve public rights of way (PROW) in Dorset and Hampshire generally and specifically PROW E34/6 between Hillbury Road and the B3078.
- 2.6.2 Dorset Council's Transport Planning Team response is included as Appendix RF-C of my evidence and demonstrates that there is insufficient width to accommodate a shared footpath/cyclepath in accordance with the requirements of LTN 1/20 and that the appellants suggested 2.0m-2.5m width shared path would not be acceptable as a shared route. No design has been submitted for this proposed improvement and the Safety Audit brief only includes a short written description of the suggested works to the PROW so it is unlikely that the Safety Auditor will be in a position to provide an informed view on the proposed works. The appellant has therefore failed to demonstrate that a safe and suitable route can be provided for pedestrians and cyclists.
- 2.6.3 The topic paper refers to the proposed provision of advisory cycle lanes on Station Road and Ringwood Road. Section 4.3 of my evidence demonstrates that such a facility is unlikely to be deliverable. The Safety Audit brief only includes a short written description of these cycle lanes so it is unlikely that the Safety Auditor will be in a position to provide an informed view on the proposed works. The appellant has therefore failed to demonstrate that a safe and suitable route can be provided for pedestrians and cyclists.
- 2.6.4 My evidence also demonstrated at Section 4.3 that it may not be possible for the appellant to deliver the important proposed footway along the eastern side of Ringwood Road.
- 2.6.5 The topic paper refers to the provision of a footway/cycleway alongside the B3078. The submitted drawing (132.0024-P02) shows a safety margin of 0.5m; for a 40mph speed limit, this safety margin width does comply with HCC's Technical Guidance TG10 (Section 5.3) for an absolute minimum width on a shared use route. However, the minimum for a soft safety margin, as proposed, is 1m (TG10, 5.3.3); this also accords with a desirable minimum for a 40mph. It should be noted that the B3078 is currently 60mph and would require a traffic regulation order (TRO) to reduce the speed limit to 40mph. That would need to be supported by DC and HCC, and the Police, and cannot be guaranteed. The absolute minimum safety margin width for a road with speed limit of 60mph is 2m. It does not appear possible to deliver the required 2m safety margin within the highway boundary or land within the applicant's control. The plans do not illustrate the minimum 1m safety margin.
- 2.6.6 Further information regarding visibility splays and vehicle swept path analyses were requested by HCC to assess whether the scheme could be accommodated within the public highway. No safety Audit has been received and so the appellant has therefore failed to demonstrate that a safe and suitable route can be provided for pedestrians and cyclists.

2.7 Mitigation measures in Fordingbridge

- 2.7.1 The topic paper refers to mitigation measures at the junction of Provost Street/Shaftebury Street/High Street in Fordingbridge. This potentially offers limited capacity improvements due to the proposed flare being blocked by right turning traffic. The junction has been modelled as 2 lanes rather than a flare. The appellant has provided an explanation for this, but HCC as local highway authority is still concerned that the modelling results are not representative. I consider their concerns are reasonable. The mitigation scheme includes the removal of a footway which HCC has not agreed to, and which has yet to be considered as part of a Road Safety Audit.
- 2.7.2 The TA shows this junction operating with an RFC of 0.93 and delay of over two minutes which is a material adverse effect. The TAA, using higher vehicle trips, uses different modelling parameters for the same junction and shows an RFC which is lower than the TA and therefore sheds further doubt on the reliability of the results.
- 2.7.3 The topic paper also refers to an alternative mitigation scheme in the form of a one-way system. This scheme is not acceptable to HCC as the land required has already been assigned to an alternative highway improvement scheme. This alternative mitigation scheme cannot therefore be delivered.

2.8 Financial contribution towards public transport

- 2.8.1 James Rand's proof of evidence states that:

"The appellant will provide financial contributions to Dorset Council to facilitate improved bus services. The proposed contribution value is based on calculations provided by an operator for a Cranborne – Alderholt – Fordingbridge – Ringwood service that is half hourly in the peak period and hourly otherwise. At Dorset Council's request (CDB.29), the contribution value is based on 7 years of support for the bus service"

- 2.8.2 However, I have stated in my evidence that:

"The TA fails to demonstrate how the predicted additional bus passengers could be accommodated on an hourly bus service;

The appellant proposes to fund a bus service for up to 7 years, but the viability and long-term future of bus service provision cannot be guaranteed. A service every 2-hours would be even less attractive and would therefore be expected to significantly reduce the predicted bus mode share;

Insufficient information has been provided to satisfy DC that the proposed S106 bus contribution would be sufficient to deliver the proposed hourly service for a period of 7 years"

- 2.8.3 The topic paper therefore states that this is a matter in dispute.

2.8.4 Dorset Council (DC) as local highway authority have reviewed several iterations of the bus service timetable and costs. Each iteration has made significant changes, but DC has remained concerned that the proposed contribution is insufficient. Adrian Glover's (Public Transport Manager in Dorset Travel) latest comments are consistent with DC's previous consultation responses and the concerns raised.

2.8.5 In Mr Glover's professional opinion, the latest proposed bus service contribution is insufficient in the current marketplace. His response highlights the following key issues:

- The inflation uplift indicated at 2% is lower than the current rate at which our contracts are increasing by. Currently this ranges between 3.9% - 4.2%.
- The operating costs appear to be understated at a figure of £720,000 for the first year. If the council were putting this out to tender at the moment, they would be expecting bids of around £1.2M for an hourly service involving 4 double deck vehicles in a difficult to operate locality, with school flow obligations.
- Four vehicles are quoted as the requirement to operate the specimen timetable. From experience, such a timetable in a rural location with multiple nearby destinations is likely to need a peak vehicle requirement (PVR) of five.
- The 'income' figures are speculative, and experience suggests that they are often difficult to achieve.

2.8.6 Additionally, DC has raised concerns in their previous responses that the figures have been provided by a single operator. Transpora no longer operate in this area and have no local base, yet no engagement with any other operators appears to have taken place. Morebus in their response to the application have cast doubt on a service in this area generating sufficient patronage to be self-sustaining.

2.9 Means of access as a reserved matter

2.9.1 Somewhat unusually, the description of development states "Outline Application with all matters reserved apart from access off Hillbury Road". Taken literally, this would suggest that means of access remains a reserved matter with the sole exception of the access off Hillbury Road. In my evidence I stated that I am working on the basis that the Inspector will expect all access from the public highway to be considered in detail as is normally the case, and it would therefore be incumbent on the appellant to demonstrate safe and suitable access to the development for all users.

2.9.2 The joint statement of common ground states:

“That consent for access from Hillbury Road is sought in full, and that consent is not sought in full for any other access point including the access into the site from Ringwood Road.”

2.9.3 I sought clarification on this point from PBA who advised by email on 11th June 2024 that

“the application description has not changed, it is still in outline with all matters reserved except access from Hillbury Road, so the SOCG wording is still correct”.

2.9.4 On this basis, the appellant is seeking outline planning permission for 1700 dwellings, a local centre and 2ha of employment use with a single point of access from Hillbury Road and only illustrative access for pedestrians, cyclists and vehicles from Ringwood Road.

2.9.5 A development of this scale will require at least two points of vehicle access and the NPPF (para 114) requires that the development proposals should ensure that safe and suitable access can be achieved for all users. In my evidence I demonstrate that it may not be possible to deliver safe and appropriate access for pedestrians and cyclists along Ringwood Road which is a critical link between the proposed local centre and the existing village.

2.10 Acceptable level of active travel and sustainable travel choices

2.10.1 The appellant has stated that the provision of employment uses on site and a local centre, would reduce the need to travel for the new and existing residents of Alderholt. This matter is not in dispute, but the degree to which that provision would reduce the need to travel is relevant and important. If the proposed development included, for example, a single commercial unit offering a service not currently available in Alderholt that would also meet the description of reducing the need for new and existing residents to travel, even though the transport effects would be negligible.

2.10.2 Similarly, the appeal proposals include proposed highway works to provide for pedestrians and cyclists and a financial contribution towards bus service provision. The ability to provide pedestrian and cycle facilities to an appropriate standard is in dispute, as is the viability of the proposed bus service, but even if that were not the case, the provision of some level of sustainable transport facilities does not automatically equate to a genuine choice of modes of transport.

2.10.3 The TAA shows that during the morning peak, 82% of external journeys generated by the proposed development would be as a car driver or passenger and that would increase to 94% in the PM peak. The TAA also assesses the highway network using higher vehicle trip rates and lower levels of internalisation; however, no revised mode-share information was included. Needless to say, if the total journeys remain the same but the vehicle trip rates increase and internalisation decreases, the number of external journeys would increase, and

the proportion of those journeys undertaken by car would also increase.

2.10.4 In my professional opinion, if the vast majority of journeys are required to be undertaken by car, as is the case here, the appellant has failed to demonstrate that the proposed development would adequately reduce the need to travel and offer a genuine choice of sustainable modes of transport.