

P e l l F r i s c h m a n n

Manchester Road, Heywood, Rochdale

Highways Proof of Evidence

May 2024

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1 Introduction

- 1.1.1 I am Matthew Addison, the author of this report. I have been instructed by Trammell Crow Company Logistics (Heywood) Limited ('the Appellant') to prepare this Highways Proof of Evidence (PoE) in relation to its appeal against the refusal by the Council of the planning application with reference 22/01410/FUL for the redevelopment of the Department of Work and Pensions (DWP) distribution centre, located to the north of Manchester Road in Heywood, OL10 2PZ ('the site').
- 1.1.2 I believe that the facts stated in this PoE are true and accurate, and are presented in a manner consistent with my professional code of practice irrespective of by whom I am instructed. I am aware that my duty is to the inquiry to provide my honest and untrammelled professional opinion and have sought steadfastly to comply with this obligation..
- 1.1.3 I hold an Honours Degree in Environment and Transport Planning from The University of Leeds and I am a Member of the Chartered Institute of Highways and Transportation (MCIHT).
- 1.1.4 I am Technical Director at Pell Frischmann, an integrated engineering and environmental consultancy that delivers multi-disciplinary engineering solutions to the property, development and construction industry. I have over 14 years' experience in the planning and design of transport infrastructure and highway schemes. At Pell Frischmann, I am responsible for providing transport planning and preliminary highway design advice to a wide range of clients and specialise in commercial and strategic land sectors. I have previously provided highways Expert Witness advice at Public Inquiry including an appeal at other relevant appeals into such projects, such as South Caldecotte, Milton Keynes (ref: APP/Y0435/W/20/20/32511), a scheme comprising 2,600,000 sq.ft of B2/B8 commercial floor space.
- 1.1.5 In my previous employment at BWB Consulting Limited, I was instructed by the Appellant to consult the statutory highway consultees including Rochdale Borough Council ('the Council') Highways, Transport for Greater Manchester (TfGM) and National Highways (NH) and produce transport reports to support the Manchester Road, Heywood planning application.
- 1.1.6 The Appellant's proposal comprised *'the demolition of all existing units and erection of new storage and distribution units (Use Class B8) with ancillary office space, vehicular, pedestrian and cycle access, external yards, parking, landscaping and associated works'*.
- 1.1.7 The planning application was recommended for approval by Council officers, but ultimately refused at planning committee. The reason for refusal is set out in the Decision Notice dated 22 December 2023 as follows:

"By virtue of its size, scale and form, the proposed development is not well designed and would represent an overdevelopment of the site which is not compatible with surrounding land uses due to the detrimental and unacceptable impacts on the noise environment and the visual amenity of surrounding residents, with particular regard to future residents adjacent to the site. Due to this overbearing and unacceptable relationship with surrounding land uses the application fails to accord with Policy DM1 of the adopted Rochdale Core Strategy and the National Planning Policy Framework".

- 1.1.8 As above, there is no highways reason for refusal.
- 1.1.9 Russell Homes (RH) is a third-party with land interests in the vicinity of the Site and raised objections during the planning process. These included highways concerns which are set out in:
- Avison Young letter dated 13th January 2023; including relevant appendix:
 - o Appendix III 'Highways Technical Note Objection and accompanying Road Safety Audit' (Focus TP, December 2022).
 - Focus Transport Planning (TP) Letter to Ryan Grant dated 22nd May 2023; including appendices
 - o J000010-HTN05 Micro Sim Traffic Data FULL REPORT (Focus TP, April 2023);
 - o J000010-HTN06 Micro Sim Traffic Inter Peak FULL REPORT (Focus TP, May 2023);
 - o MG0259 – HeywoodStores_LMVR_R-01-A (Modelling Group, 26 April 2023); and
 - o MG0259 – HeywoodStores_Modelling Impact Assessment_R_06-E (Modelling Group, 15 May 2023).
- 1.1.10 The purpose of my proof is two-fold; to demonstrate that statutory highways consultees were consulted during pre-application discussions to inform the traffic impact assessment of the scheme proposals; and to address the highways objections raised by RH and their consultants prior to the determination of the application.
- 1.1.11 In accordance with the above, my Highways PoE is structured as follows:
- Section 2 – Highways Consultation and Agreements
 - Section 3 – Review and Critique of RH Highways Objection January 2023
 - Section 4 – Review and Critique of RH 2nd Highways Objection March 2023
 - Section 5 – Review and Critique of RH VISSIM Modelling April/May 2023
 - Section 6 – Summary and Conclusion

2 Highways Consultation and Agreements

2.1 Pre-Application Consultation

- 2.1.1 Council Highways was first consulted on the proposed development at the Site in March 2022 and a pre-application (pre-app) meeting was attended with them on 25th April 2022. The purpose of this was to discuss the likely scope of the transport and highways work to support the planning application and any potential issues that would need to be addressed. At the pre-application meeting the Council noted that the Site is located adjacent to the TfGM Key Route Network and therefore TfGM 'Highways Forecasting and Analytical Services' (HFAS) and 'Urban Traffic Control' (UTC) teams would require consulting.
- 2.1.2 Subsequently, Council Highways, TfGM and National Highways (NH) were all sent a copy of the Transport Scoping Note (TSN) on 20th May 2022 setting out the proposed methodology for the Transport Assessment (TA).
- 2.1.3 On 26th May 2022, we spoke with Richard Dolphin in TfGM UTC and requested a copy of the traffic model for the (then) proposed A6045 Manchester Road / Queen Elizabeth II Way Link Road junction to enable sensitivity testing in response to the Council's initial comments as part of the pre-app. An email response was received from TfGM UTC on 30th May 2022 stating *"I'm not really sure whether modelling the junction will add a great deal of value – the flows are from the forecast modelling and the traffic signal-controlled junction's configuring hasn't been finalised yet – the intergreen timing etc. I'm not sure the modelling would have sufficient accuracy for any design considerations"*.
- 2.1.4 On 30th May 2022, Chris Woods the Highways Officer at the Council initially responded to the TSN requesting *"a deeper dive Assessment into the figures that represent what the impact might be on the new link road/A6045 junction. To do this more fully, we will need to assess the difference in actual traffic as will have been modelled for the link road project versus your new proposed trip generation"*. In the same email response, it was also requested that the *"TA would also allow a more detailed look at things like checking the visibility splay of the entrance and turning manoeuvres in and out, taking into account the proximity of the new link road junction to this site"*.
- 2.1.5 On 6th June 2022, TfGM provided a formal response to the TSN including comments on trip generation, distribution, the traffic impact assessment methodology and travel planning. All of TfGM's comments were addressed prior to determination of the planning application.
- 2.1.6 On 10th June 2022, National Highways provided a response to the TSN, which included a Review Note prepared by WSP. This included comments setting out the relevant planning policy and requests for specific information to be included in the TA, which was provided accordingly. The TRICS vehicles trip rates were reviewed by WSP and agreed. The NH comments were accounted for in the TA and Framework Travel Plan (FTP) reports submitted to support the planning application.
- 2.1.7 The Transport Assessment (P01) and Framework Travel Plan (P01) reports, both dated 21st October 2022, were submitted alongside the planning application.
- 2.1.8 The TA was supported by an independent, combined Stage 1 and 2 Road Safety Audit (RSA) of the proposed Site access arrangements, prepared by Nicholson Sloan Consultancy.

2.2 Agreements with Council Highways

- 2.2.1 Tim Wood of Council Highways responded to the case officer by email on 4th April 2022 confirming that *"the proposed junction amendments would appear to be acceptable but would require the submission of a detailed junction arrangement plan for approval"*. In the same email, he asked *"should the application be approved we would ask that the applicant submits a detailed junction arrangement plan for the site access onto Manchester Road for approval which would be the basis of the S278 Agreement. We are likely to ask for the introduction of traffic island within Manchester Road to alert road users to this intensified entrance point"*. As such, the proposed access arrangements were agreed subject to detailed design to be a matter of condition.

- 2.2.2 In the same email, Council Highways agreed that the Framework Travel Plan, Construction Management Plan and proposed parking arrangements were acceptable.

2.3 Agreements with TfGM (HFAS and UTC)

- 2.3.1 On 30th March 2023, Claire Smallman of TfGM emailed the Council Planning and Highways sharing comments from colleagues in HFAS and UTC. The email confirmed that *“TfGM HFAS original comments have been addressed and there are no further comments from their perspective.”*
- 2.3.2 On 5th April 2023, Claire Smallman of TfGM emailed the Council's Planning and Highways Officers stating, *“further to the below response from BWB Consulting, colleagues within UTC are satisfied with the modelling discussion and conclusion”*.
- 2.3.3 The above demonstrates that the methodology and outcome of the TA was agreed with TfGM prior to determination of the planning application.

2.4 Agreements with National Highways

- 2.4.1 Following submission of the BWB Transport Assessment and Framework Travel Plan reports in October 2022, NH published their formal recommendation offering 'no objection' to the planning application dated 29th November 2022.

3 Review and Critique of RH Objection January 2023

- 3.1.1 The initial RH highway objection to the proposed development was dated 13th January 2023 in the form of a letter produced by Avison Young including a Technical Note produced by Focus Transport Planning and an accompanying Road Safety Audit.

3.1 Highways Objection 1

- 3.1.1 Highways Objection 1 on page 8 of the Avison Young letter states:

“The submitted operational analysis over states the transport implications of the ‘planning fall-back’, and under-estimates potential traffic movements to / from the site, as covered above.”

- 3.1.2 The methodology of the TA was discussed and agreed with relevant Highways consultees. The trip generation for both the existing and proposed units was based on average weekday B8 trip rates from the TRICS database on the basis that the site has a certificate of lawful use for B8 Storage and Distribution (Planning Ref. 21/01298/CPE). It was not considered representative to survey the trip generation associated with the existing B8 use of the site, to form a bespoke trip rate, as it was not fully operational.

- 3.1.3 Section 5 of the BWB TA confirms the existing site comprises nine warehouse units with a total floor area of 42,304 sq.m Gross External Area (GEA). The proposed development comprises three warehouse units with a total floor area of 45,393 sq.m GEA and therefore the residual increase in B8 floor space as a result of the proposal is 3,089 sq.m GEA. Others will provide evidence on the materiality of this as a fall-back, but I have been asked to assume that the extant lawful use remains a lawful fall-back to which comparison can be drawn.

- 3.1.4 In the TRICS database, trip rates are derived on a ‘per 100sq.m’ basis for commercial land uses inclusive of mezzanine floor areas, this is documented in paragraph 7.2 of the TRICS Good Practice Guide 2021. However, in order to provide a robust assessment in the BWB TA, TRICS trip rates were only applied to the ground floor area of the existing B8 use, equating to 27,559 sq.m GEA. Had we ‘overstated’ the transport implications of the ‘planning fall-back’ as suggested in the RH objection, the TRICS trips rates would have been applied to the total existing floor space inclusive of mezzanine and the residual weekday peak hour trip generation would have been significantly more.

- 3.1.5 In light of the above, it is my opinion that the transport implications of the proposed development have been adequately assessed in the BWB TA, which does not overstate the planning fall-back in terms of estimating existing traffic movements. The methodology leading to the conclusions of the TA was agreed with TfGM HFAS and UTC.

3.2 Highways Objection 2

- 3.2.1 Highways Objection 2 on page 8 of the Avison Young letter states:

“The nature of the proposed site access arrangements is not sufficient to cater for the intensity of the proposed future development scheme. The access can be expected to result in regular future congestion, queuing and highway safety issues over immediate sections of the adopted highway network, including knock on effects at the adjacent key local traffic signal-controlled intersection of A6045 Manchester Road / South Heywood Link Road (Queen Elizabeth II Way).”

- 3.2.2 The site access modelling results presented in Table 7.11 of the BWB Transport Assessment demonstrate that it will operate with reserve capacity in both the weekday morning and evening peak hours in the future year of 2038. The assessment was based on the total proposed development traffic, with no ‘netting-off’ of existing site traffic. This iteration of the TA therefore assumes that the fall-back position will not materialise and that there is no extant use of the site – for the purposes of robustness.

- 3.2.3 The results show that in the 'worst case' 2038 evening peak hour, the site access would operate with a maximum Ratio Flow to Capacity (RFC) of 0.23 and queue of 0.3 PCUs for drivers turning 'right-out' onto Manchester Road from the access. Furthermore, the modelling results show that for drivers turning 'right-in' i.e. movements from Manchester Road into the Site access, would have a maximum RFC of 0.05 and queue of 0.1 PCU. Junctions where all arms record an RFC of below 0.85 are considered to operate within capacity, with no requirement for mitigation or other improvements. This clearly demonstrates that in the future the Site access would operate with no significant congestion or queuing issues.
- 3.2.4 The interaction between the Site access and signalised junction with Queen Elizabeth II Way was also considered in the BWB TA. Table 7.12 of the TA summarises the LinSig modelling results for this junction, proposed by Axis in their approved TA to support the wider South Heywood development. The modelling confirms that there would still be significant reserve capacity at the junction in 2038 during both weekday peak hours. In the worst-case evening peak hour in 2038, the junction is still expected to operate with 9.8% practical reserve capacity (PRC). Furthermore, and as alluded to in TfGM's consultee response, *"It should be noted that the junction of Manchester Road / QE II Way would run under MOVA control, and such the predicted results of the model are likely to be pessimistic. The junction would likely to run with lower degrees of saturation and queues than predicted."* Even with the Axis LinSig model, which was run based on fixed signal times, in the worst case 2038 morning peak hour the queue on the Manchester Road approach to the junction is 8 PCUs, which equates to 46 metres. The distance between the stop line at the signals and the site access is in excess of this and therefore the queuing interacting between the two junctions is not expected to be an issue in the future year of 2038.
- 3.2.5 In response to the objection regarding highway safety, prior to submitting the planning application, BWB instructed Nicholson Sloan Consultancy (NSC) to undertake an independent Stage 1 and 2 RSA of the proposed Site access arrangement. This identified four minor issues with the initial (pre-application) design and included recommendations. In response, BWB updated the preliminary design to address each issue and this was documented in the Designer's Response dated October 2022, and reflected in the ultimate highways arrangements proposed as part of the development, which were both submitted to the Council with the planning application. As such the access is not expected to result in future highway safety issues.

3.3 Highways Objection 3

- 3.3.1 Highways Objection 3 on page 8 of the Avison Young letter states:

"The anticipated highway safety and congestion issues at the site access junction and associated knock-on effects at A6045 / SHLR (QEII Way) would result in material detrimental highway effects on the delivery of Rochdale Borough Council's (RBC) strategic employment & residential allocations at Northern Gateway (Places for Everyone)."

- 3.3.2 At the time of assessment and prior to determination of the planning application, Places for Everyone (PfE) were proposed allocations and therefore not commitments as they did not form part of the adopted Development Plan and had not been fully examined by the Inspectors examining the plan, let alone found sound. Therefore, these were not explicitly accounted for in the BWB TA.
- 3.3.3 Paragraph 4.4 of Focus TP's 'Objection on Highways Matters', dated December 2022 and appended to the RH objection, confirmed that their *'preliminary traffic modelling work prepared in support of the PfE allocation does not identify that future over-capacity conditions are expected to occur at the A6045 / SHLR (QEII Way) traffic signal junction'*. Again, the MOVA controlled operation of the junction is likely to result in a betterment in comparison to what has been modelled.

3.4 Highways Objection 4

3.4.1 Highways Objection 4 on page 8 of the Avison Young letter states:

"A trips survey should be established based on current site operations."

3.4.2 An Automatic Traffic Count (ATC) survey was undertaken at the existing site access, however this only sought to confirm that the existing site was generating considerably fewer vehicle movements compared to its historic use, as operations on the site were winding down. The Council's planning officers and the end-user's property agent both confirmed that this was the case and TfGM agreed to the robust methodology included in the BWB TA, which is set out in my response to Highways Objection 1.

3.5 Highways Objection 5

3.5.1 Highways Objection 5 on page 8 of the Avison Young letter states:

"Given the dominant single user nature of the proposed Heywood Stores site, it would be appropriate to consider the effects the 85th percentile site operation, particularly given the close proximity of the Heywood Stores site access connection to a key local junction."

3.5.2 The proposed development comprises three speculative warehouse units with no as yet identified end occupiers. The BWB TA includes the use of average weekday vehicle trip rates, the methodology of which has been agreed with TfGM, the Council and NH. There is no guidance prescribing for the use of 85th percentile vehicle trip rates. In fact, paragraph 13.5 of the TRICS Good Practice Guide 2021 confirms *'that there are varying opinions and policies when it comes to the applicability of 15th and 85th percentile trip rates, and TRICS merely provides the facility to use this feature at the discretion of our users, applying their own professional judgement in all cases'*. In my experience, the use of 85th percentile trip rates would be onerous on an existing brownfield site such as this and should be reserved for use on greenfield sites where new major highway infrastructure is likely to be required.

3.5.3 Furthermore, paragraph 13.6 of TRICS Good Practice Guide 2021 *'recommends that users have at least 20 surveys present in a rank order list before such trip rates are quoted in report'*. Following the primary filtering stage in TRICS, there are insufficient 'warehousing-commercial' survey sites available in the database to provide a reliable sample size to enable the 85th percentile ranking. The Guidance goes as far as saying *'TRICS does not recommend that 15th and 85th percentile trip rates based on under 20 surveys are quoted, so it is the user's responsibility to provide evidence for the robustness of any figures quoted'*. Another issue with using 85th percentile trip rates is these only reflect the operation of the 85th percentile ranked site for each peak hour in relation to shift patterns and therefore is unlikely to be representative of average shift patterns across the industry.

3.6 Highways Objection 6

3.6.1 Highways Objection 6 on page 8 of the Avison Young letter states:

"Such 'sensitivity test' operating conditions would result in the redevelopment of the Heywood Stores site generating in the order of 140 two-way trip movements per hour, of which 60 – 70 could be expected to be HGV trips."

3.6.2 See response to Highways Objection 5 above. I do not agree to the need for such an onerous assessment. The methodology presented in the TA was subject to scoping and agreements with the statutory highways consultees.

3.7 Highways Objection 7

3.7.1 Highways Objection 7 on page 8 of the Avison Young letter states:

"Given the proximity of the site access junction to the A6045 / SHLR (QEII Way) junction, potential HGV trip movements and the ability for such traffic to enter / exit the site safely is considered to be of material concern and requires a greater level of assessment than that currently included within the BWB TA report."

- 3.7.2 I have partly answered this in my response to Objection 2 above, which addresses the operational capacity concerns.
- 3.7.3 The site access design was subject to HGV swept path analysis as referenced in paragraph 6.9 of the BWB TA and shown on BWB Drawing MRR-BWB-GEN-XX-DR-TR-102 P4. This clearly demonstrates that a HGV would be able to enter and exit the Site safely in forward gear.
- 3.7.4 Furthermore, the BWB TA clearly demonstrates that appropriate junction visibility splays can be achieved in both directions from the Site access as shown in BWB Drawing MRR-BWB-GEN-XX-DR-TR-101.
- 3.7.5 The proposed Site access design was subject to an independent Stage 1 and 2 RSA and the design updated accordingly.

3.8 Highways Objection 8

- 3.8.1 Highways Objection 8 on page 8 of the Avison Young letter states:

“Focus TP has highlighted tangible concerns associated with the methodology adopted by BWB.”

- 3.8.2 The methodology of the TA was scoped and agreed with NH/WSP, TfGM and the Council's highway officer.

3.9 Highways Objection 9

- 3.9.1 Highways Objection 9 on page 9 of the Avison Young letter states:

“The close proximity of the application site access junction to the adjacent A6045 / SHLR (QEII Way) traffic signal intersection, which is likely to result in, a) difficulties for HGV traffic turning right out of the site; and, b) potential for block back queuing from the traffic signals, impacting on the safe operation of the site access.”

- 3.9.2 I have addressed this in my response to Objections 2 and 7.

3.10 Highways Objection 10

- 3.10.1 Highways Objection 10 on page 9 of the Avison Young letter states:

“The simple give-way T-junction nature of the proposed access does not provide opportunities for controlled entry / exit movements to the site and no flexibility to accommodate surges in site related traffic demand, such as at key shift change periods.”

- 3.10.2 The traffic associated with shift changeover times is factored into the TRICS vehicle trip rates used. In my response to Objection 2, I demonstrate that the site access will operate with reserve capacity in the year 2038.

3.11 Highways Objection 11

- 3.11.1 Highways Objection 11 on page 9 of the Avison Young letter states:

“Focus TP has identified that the reference to a 70m separation distance in the TA is misleading when considering the interaction of vehicle queues on the A6045 Manchester Road westbound carriageway and right turn exit HGV movements from the application site. In practice, HGV's will require a significant section of the A6045 southbound carriageway to be clear of queuing vehicles in order to be able to undertake a safe exit movement from the site. To demonstrate this, Focus TP has prepared a number of tracking runs which illustrate the extent of space required to safely accommodate a large HGV right turn exit movement from the site, without any blocking of key sections of the A6045 mainline carriageway.”

- 3.11.2 The distance between the site access junction and stop line at the signals ranges from 60 to 70 metres depending on where the measurement is taken between.
- 3.11.3 It is also important to acknowledge that the position of the access is as existing in relation to the link road, with some minor widening works proposed.
- 3.11.4 Whilst the proposed development will result in an increase in HGV movements from the Site access compared to the extant use, as documented in paragraph 7.43 of the BWB TA, there is only expected to be an average residual increase of 8 HGVs making the right-out manoeuvre during the weekday morning and evening peak hours. This equates to one right-out movement every 7 minutes and 30 seconds, which is an immaterial increase, unlikely to have any implications on interactions with the signalised junction in terms of queuing as the junction operates on MOVA control, which is not reflected in the LinSig model.
- 3.11.5 HGV drivers are professional drivers and would not be expected to pull out of the Site access unless safe to do so. This is true of any priority access from a commercial premises, of which there are many across the country. This is purely down to driver ability and not the proposed design of the junction arrangements. For example, the TA demonstrates that there is adequate visibility from the Site access in both directions and therefore the design of the junction facilitates drivers exiting safely.

3.12 Highways Objection 12

- 3.12.1 Highways Objection 12 on page 9 of the Avison Young letter states:

“Focus TP’s tracking clearly identifies that safe HGV exits from the application site is reliant on queuing conditions on the adjacent A6045 approach to the A6045 / SHLR (QEII Way) traffic signals and that, in practice, it will only require relatively limited levels of queuing on this section of the A6045 to potentially generate knock-on effects on the ability for large HGV vehicles to safely exit the site. Based on the ‘give-way’ nature of the application site access arrangements, which restricts the potential for vehicles to exit the site to available ‘gaps’ in conflicting traffic streams and the need for right turn exit traffic to effectively give-way to both through traffic on the A6045, as well as right turn entry traffic to the site, it is considered that there is a danger that safe right turn exit opportunities for large HGVs will be materially limited during busy demand periods. This could encourage drivers to effectively seek to ‘push in’ to the A6045 traffic stream, by straddling the northbound approach lane, without safe exit. Any such manoeuvre would result in clear safety issues of creating an obstruction to A6045 through traffic and could also result in knock-on queuing back towards the A6045 / SHLR (QEII Way) traffic signals and additional operational congestion at this key intersection”.

- 3.12.2 I have addressed this in my response to Objection 11.

3.13 Highways Objection 13

- 3.13.1 Highways Objection 13 on page 10 of the Avison Young letter states:

“It is noted that the application scheme includes for circa 400 parking spaces across the re-developed Heywood Stores site. Based on this site-based parking supply, short term surges in trip demand associated with shift change periods, particularly end of shift events, could be expected to be substantive and could generate significant queues within the site, should exit movements be hampered by vehicle platooning or queuing associated with the adjacent A6045 / SHLR (QEII way) traffic signals. Again, any such exit congestion could encourage drivers to adopt unsafe straddling or poor gap-acceptance based manoeuvres.”

- 3.13.2 The level of car parking at the Site has been planned in accordance with the Council's maximum standards and agreed with Council highways officers. As noted in my response to Objection 10, vehicle trip generation associated with shift changeover is factored into the TRICS trip rates used and our modelling assessment of the Site access junction.

3.14 Findings of RH Road Safety Audit

- 3.14.1 I have reviewed the findings of the Stage 1 Road Safety Audit prepared by Naresh Madhavan of Highway Associates dated 5th December 2022, which was based on an audit brief prepared by Andrew Bell of Focus Transport Planning.
- 3.14.2 Section 2 of the Russell Homes commissioned RSA report states '*it is understood that no previous road safety audits have been undertaken in relation to this scheme*', however the proposed Site access layout produced by BWB had already been subject to an independent Stage 1 and 2 RSA produced by Nicholson Sloan Consultancy (NSC) and their comments addressed in a BWB Designer's Response dated 26th October 2022.
- 3.14.3 Surprisingly, the objector's Stage 1 RSA only focuses on relatively detailed factors that have been raised by Focus TP in their highway objections and has not picked up on more standard road safety issues in the original design, such as the need to provide dropped kerbs and tactile paving, or indeed any of the issues raised in the NSC RSA. Therefore, it seems that the audit was influenced as part of the audit brief for the purposes of facilitating the RH highways objection and is not truly independent, therefore it cannot be relied upon.
- 3.14.4 Notwithstanding the above, I have reviewed the three issues and recommendations raised in the Highway Associates' Stage 1 Audit as follows:

- i. *"No dedicated right turn provision has been proposed to enable southbound vehicles to turn right into the development site. Insufficient right turn provision could result in an increased potential for rear end shunts as vehicles waiting to turn right are struck by following vehicles using the offside traffic lane on the approach to the newly established traffic signals.*

Recommendation: Carry out further assessment and analysis to determine the appropriate level of right turn provision required".

- 3.14.5 Firstly, this was not an issue raised by NSC in their combined Stage 1 and 2 RSA.
- 3.14.6 In response to it, the modelling results for the proposed site access presented in Table 7.11 of the BWB Transport Assessment demonstrate that this will operate with reserve capacity in both the AM and PM peak hours in years 2020 and 2038. The right turn movement from Manchester Road (SB) into the Site access is shown to operate with limited queuing (0.1 PCU) and delay (7 seconds) in the worst case 2038 PM peak hour. As such, there is no capacity need for a right turn lane.
- 3.14.7 The BWB Transport Assessment included a review of personal injury collision (PIC) records for the highway network in the vicinity of the Site and no collisions were reported at the existing site access location over the most recent 5-year period.
- 3.14.8 Furthermore, owing to the layout of the local highway network and proximity of the strategic road network, all HGV traffic is expected to route to and from Queen Elizabeth II Way to access the M62 Junction 19 and M66 Junction 3. As such, no HGVs are expected to need to turn right into the Site from Manchester Road.
- 3.14.9 The second item raised in the Highway Associates' Stage 1 Audit is as follows:
- ii. *"Due to the close proximity of the development site junction to the newly opened South Heywood link road junction, there appears to be only around 5 PCUs stacking available on the southbound approach to the traffic signals before a large articulated HGV turning right from the development site could obstruct the northbound mainline traffic lane increasing the potential for side-on conflicts.*

Recommendation: Carry out further assessment and analysis to determine the exact nature of the problem."

3.14.10 Again, this was not an issue raised in the independent Stage 1 and 2 RSA undertaken by NSC.

3.14.11 The interaction between the proposed site access and signalised QEII Way junction is documented in the BWB Transport Assessment and has been agreed with TfGM. This is explained in my critique of Highways Objection 2 in this PoE.

3.14.12 The third item raised in the Highway Associates' Stage 1 Audit is as follows:

- iii. *"Concern is expressed that due to the relative complexity of the adjacent South Heywood relief road junction and multi-lane southbound approach to the signals and development site, that it may be difficult for drivers attempting to turn out of the development site access, particularly those of large HGVs to fully assess approaching traffic increasing the potential for injudicious manoeuvres resulting in junction conflicts.*

Recommendation: Further assessment and modelling should be undertaken to identify the exact nature of the problem. If necessary additional forms of junction control should be provided at the development site junction."

3.14.13 In response to the above, and whilst we understand the Auditor's concerns, this problem would be presented at any priority junction adjacent to two through lanes throughout the country, there is nothing at this junction which would cause it to stand out as particularly unusual – let alone hazardous. Furthermore, the BWB TA demonstrates that adequate junction visibility splays can be achieved in both directions for drivers exiting the Site access.

4 Review and Critique of RH 2nd Highways Objection March 2023

4.1.1 In a letter to the Council (ref. J000010/APB) dated 23rd March 2023, Focus Transport Planning raised additional highways objections.

4.1 Highways Objection 14

4.1.1 Highways Objection 14 is the first bulletpoint on page 2 of Focus TP's letter and states:

"The submitted BWB TA significantly over-estimates existing site traffic levels by basing the calculation of extant trip demand on traffic generation results for modern logistics sites held in the TRICs database. This over-estimate has direct implications for the net-impact / net-change assessment that underpins the remainder of the network assessment work set out within the TA report, which we consider to be flawed."

4.1.2 I have already addressed this in my response to Highways Objection 1.

4.2 Highways Objection 15

4.2.1 Highways Objection 15 is the second bulletpoint on page 2 of Focus TP's letter and states:

"The BWB TA utilises a simple pro-rata approach to calculate additional development traffic. This approach is flawed due to the clear over-estimation of extant traffic levels and should be revisited. In addition, there is a strong case for the consideration of the operational effects of more robust 85th percentile trip demand for the application proposals, given that traffic demand to the site could be expected to be predominately influenced by a single large operator. There can be no certainty that this operator would utilise the site on the basis of industry average traffic levels."

4.2.2 I have already addressed this in my responses to Highways Objections 1 and 5.

4.3 Highways Objection 16

4.3.1 Highways Objection 16 is the third bulletpoint on page 2 of Focus TP's letter and states:

"The development traffic assignment approach adopted in the BWB TA is likely to under-estimate development related traffic movements to / from the A6045 (S), including the critical right turn exit movements from the site. This should be addressed to ensure the carrying out of a robust junction operational appraisal as at present the TA analysis under-estimates right turn exit demand from the site, the critical movement from a highway safety and safety perspective at this location."

4.3.2 The methodology in the BWB Transport Assessment used to assess the operation of the local highway network was agreed with TfGM HFAS/UTC and the Council. In terms of distribution, 100% of HGV trips were assigned to and from the QEII Link Road so it is unclear what Focus TP are referred to in terms of 'under-estimating' the right turn exit demand. It would be odd to work on a basis of a turn accommodating greater than 100% of the likely trips.

4.4 Highways Objection 17

4.4.1 Highways Objection 17 is the fourth bulletpoint on page 2 of Focus TP's letter and states:

"The operational performance of the application site access will be directly linked to, and at busy times effectively dependent on, the operation of the adjacent A6045 / SHLR (QEII Way) traffic signal junction. It is therefore not considered acceptable that the only junction analysis included to support the planning application is a PICADY style capacity assessment of the application scheme T-junction layout. Such analysis is inadequate and does not provide the comprehensive review of junction performance necessary to allow any meaningful conclusions as to the ability

of the access arrangements to operate without generating potentially severe future operational capacity and safety concerns.”

- 4.4.2 As above, the methodology in the BWB Transport Assessment used to assess the operation of the local highway network was agreed with TfGM HFAS/UTC and the Council. PICADY is industry-standard modelling software used for capacity assessment of priority junction so is precisely suitable for assessing the operation of the access junction. Had there been any concern about the chosen model or its use then the local highway authority would have raised this.

4.5 Highways Objection 18

- 4.5.1 Highways Objection 18 is the fifth bulletpoint on page 2 of Focus TP’s letter and states:

“There are significant concerns regarding the ability of the proposed site access arrangements to safely and efficiently accommodate the levels of potential development traffic predicted to be generated by the proposed B8 re-development, with a particular focus on HGV access issues. This position is informed by the following key concerns:

- a) The close proximity of the application site access junction to the adjacent A6045 / SHLR (QEII Way) traffic signal intersection, which is likely to result in, a) difficulties for HGV traffic turning right out of the site; and, b) potential for block back queuing from the traffic signals, impacting on the safe operation of the site access.*
- b) The significant increase in HGV trips to / from the Heywood Stores site predicted to occur as a result of the application scheme. With all exit HGV trips impacting on the identified problem right turn exit movement.*
- c) The simple give-way T-junction nature of the proposed access does not provide opportunities for controlled entry / exit movements to the site and no flexibility to accommodate surges in site related traffic demand, such as at key shift change periods. The site proposals illustrate over 400 parking spaces across the site, therefore shift change site entry / exit demand could be expected to be significant and result in queuing and congestion issues at the site access connection.*
- d) Additional traffic demand experienced at the A6045 / SHLR (QEII Way) junction associated with the delivery of the Northern Gateway JPA1.1 & JPA1.2 strategic allocations will further increase queuing levels at the junction. Any increased queuing will give rise to increased potential for critical block-back events to take place in the vicinity of the application site connection and therefore an increase in the frequency of associated capacity and safety issues at this location.”*

- 4.5.2 I have addressed all of the above comments in my responses to RH/Focus TP Highways objections 1 to 13.

4.6 Focus TP Review of Nicholson Sloan Consultancy Stage 1-2 RSA

- 4.6.1 From Page 3 of the letter, Focus TP comments on the independent Stage 1-2 RSA carried out but NSC.

- 4.6.2 Focus TP question the wording in the introduction of the NSC RSA as follows:

“The report states that the proposed works are “associated with the replacement of the existing storage facility with new units which will provide increased capacity”. It is not clear as to whether this reference to increased capacity refers to junction operational capacity or an increase in development capacity at the site.”

- 4.6.3 It is clear that, when read in context, this is referring to capacity (i.e. floor space) of the development. It is unclear if this forms part of the RH objection, but it appears to be a superfluous comment.

- 4.6.4 Focus TP goes onto question the brief provided by BWB to the NSC Audit Team as follows:

"There is no reference as to whether the audit team were supplied with a copy of the TA report to support their appraisal, or indeed, information regarding predicted future development traffic, information on HGV demand levels or predicted future queuing performance. It is clear, however, that HGV swept path information was provided."

- 4.6.5 I can confirm that NSC was sent the brief for the RSA by BWB on 10 October 2022 by email. This included an overview of the proposed development, including details of the existing and proposed B8 floor areas, which at the time were known to be 31,900 sq.m and 45,755 sq.m respectively. Attached to the briefing email was a copy of the site access layout (BWB Drawing Ref. MRR-BWB-GEN-XX-DR-TR-101 P1) and associated swept path assessment of a 16.5m HGV (BWB Drawing Ref. MRR-BWB-GEN-XX-RP-TR-102 P1). No further information was requested by the audit team and the information provided at the time was considered adequate.
- 4.6.6 The remainder of the Focus TP objection refers to comments provided in their January 2023 objection, such as the issues raised by their appointed RSA undertaken by Highways Associates, which I have already critiqued in section 4.15 of my proof.

5 Review and Critique of RH VISSIM Modelling April/May 2023

5.1.1 Focus Transport Planning acting on behalf of Russell Homes appointed Modelling Group to produce a VISSIM microsimulation model to assess the interaction between the proposed Site access and the adjacent A6045/SHLR (QEII Way) traffic signal junction. The results and assumptions accounted for in their assessment were documented in the following reports dated April and May 2023:

- J000010-HTN05 Micro Sim Traffic Data FULL REPORT (Focus TP, April 2023);
- J000010-HTN06 Micro Sim Traffic Inter Peak FULL REPORT (Focus TP, May 2023);
- MG0259 – HeywoodStores_LMVR_R-01-A (Modelling Group, 26 April 2023); and
- MG0259 – HeywoodStores_Modelling Impact Assessment_R_06-E (Modelling Group, 15 May 2023).

5.1.2 BWB reviewed the above information and prepared a Transport Technical Note dated 14th June 2023 in response. This uncovered a series of highly questionable assumptions factored into the VISSIM modelling methodology and therefore the results of the model are considered unreliable. There is no evidence to suggest that the assumptions used in the model have been agreed with the statutory highways consultees or if the base model has been calibrated/validated and agreed with TfGM UTC officers. Based upon that – I would suggest that no weight can be afforded to its conclusions.

5.1.3 Some of the key issues raised in my review of the VISSIM modelling are summarised below:

- PCMOVA was not used in the VISSIM model and therefore the model cannot accurately replicate the benefits of MOVA control in the future year scenarios. This limitation is clearly identified in paragraphs 1.9 and 1.10 in document ref. '230522 MG0259'. Therefore, the results of the modelling cannot be relied upon.
- The weekday morning and evening peak hour assessments are based on flows provided by Focus Transport Planning, which do not reflect the parameters in the BWB Transport Assessment, which was scoped and agreed with TfGM and National Highways. For example, 85th percentile vehicle trip rates were used to derive proposed development traffic generation rather than average weekday trip rates. The distribution assumptions for development traffic from the Site access also differ from the methodology agreed as part of the BWB TA. Therefore, the VISSIM modelling presents a completely different assessment to the BWB TA and cannot be relied upon.
- The VISSIM model includes an 'inter peak' assessment, which was not requested as part of the BWB scoping with TfGM and the Council's highways officer. Assumptions have been made by Focus Transport Planning and Modelling Group for this scenario in the VISSIM model significantly overstate the impact of the development on the operation of the local highway network. The inter-peak assessment is based on an average hour for the weekday day-time period between 10:00-16:00. Focus Transport Planning has used 85th percentile trip rates to calculate the development traffic, which I have already explained is an onerous assumption and does not reflect the agreements reached with the statutory highway consultees during scoping. Moreover, they have added an additional 400 two-way vehicle movements entering and exiting the proposed development during the inter-peak period *'in order to model the potential effect of shift change over traffic'*. Traffic associated with shift changeover patterns would be factored into average TRICS trip rates and therefore the inclusion of this is clearly intended to cause congestion in the model. It appears as if this is an attempt to demonstrate that the proposed development traffic would have a material impact on the operation of the local highway network in the future year.
- In relation to the model itself, paragraph 3.18 of document ref. '230522 MG0259' confirms that the inter-peak signal timings are based on PM peak timings and there is also the major issue of the MOVA control of the signals not being accounted for, resulting in unrealistic and unreliable results.
- Excessive gap times have been used for the priority rules in the base model at the Site access, which have been altered further in the forecast modelling. No details were provided on whether these have been

replicated in the base model and re-validated. The addition of the priority rules may contribute to the additional delay detailed in the forecast modelling scenarios.

- A review of screenshots provided during the forecast morning and evening modelling periods indicates satisfactory operation of the junctions. The delay outlined in the modelling report may be the cause of priority rule parameters utilised within the model.
- Conclusions have been derived from an inter-peak model however it is noted that the inter-peak model was not validated. The base interpeak model should have been validated, without this validation the reported results are considered unreliable. Furthermore the inputs that have been used as highly questionable.

6 Summary and Conclusion

- 6.1.1 In this Proof of Evidence I have clearly demonstrated that the methodology for the Transport Assessment submitted to support he planning application was scoped and agreed with the statutory highways consultees including the Council's highways officers, TfGM UTC, TfGM HFAS and National Highways. We addressed comments from TfGM and the Council to their satisfaction and ultimately highways matters have not contributed towards the reason for refusal.
- 6.1.2 I have also reviewed and addressed the highways objections to the planning application raised by Russell Homes and Focus Transport Planning in January and March 2023.
- 6.1.3 Finally, I have reviewed the Focus Transport Planning and Modelling Group VISSIM modelling reports dated April and May 2023. I have raised a number of issues associated with both the assumptions and modelling itself, which means the outputs of the modelling are unrealistic and ultimately cannot be relied upon.
- 6.1.4 I therefore conclude that the potential highways impacts of the proposed development were satisfactorily addressed in the BWB Transport Assessment, which was based on discussions and agreements with the statutory highway consultees. This is reflected in the fact that highways was not a matter included in the reason for refusal of the planning application.

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