

Updated Firethorn Application 21/01630/OUT Transport Assessment

Analysis by Elmsbrook Residents' Traffic & Parking Group, 22 December 2021

Executive Summary

The updated application fails to adequately demonstrate that the traffic impact of the proposed 530-home development will be anything other than "severe." In the "Response to Elmsbrook Residents' Group" section of "TN003-Velocity Consultation Responses" the arguments given do not resolve the points raised:

- The bottlenecks on Charlotte and Braeburn Avenues have not been included in the TN's additional analysis: these features render the flow one-way in turn, not two-way, as has been taken from the reference (which also says that parked cars reduce flow – e.g. by the school).
- Our contention remains: that with such issues ignored, the true RFCs will be significantly higher than predicted – i.e. not "just a little over 0.85" (for Charlotte Avenue) – but much worse.
- Arguing that an RFC of 0.87 (if it were accurate) is acceptable is not for our Group to determine: however, we would point out that at a recent meeting for a junction elsewhere in Bicester, the council used an RFC of 0.85 as a "hard limit", rather than a guideline; so if they are consistent, then the same would also be true here.
- The 2019 traffic surveys and monitoring data have not been addressed in the response, along with the highly relevant point that they show the true traffic levels to be significantly higher than the BTM predicts. There has also been a new official traffic survey in September 2021, conducted by Mode Transport – which would be the best data to extrapolate from; this is not mentioned.
- The other items – regarding model errors/omissions causing anomalous results – are acknowledged by VTP in the response, but stated to be presumed to be acceptable to OCC/CDC, because they are simply what comes out of the model. We would contend that, while one or two of the unusual results could perhaps be ignored, others indicate something seriously untrustworthy. How can we have confidence in them? – and therefore how is the assessment adequately robust?
- Also, we would note that, on 7/12/21, OCC judged the BTM no longer reliable, for an assessment of another junction elsewhere in Bicester, due to the funding removal/uncertainty over the Strategic Link Road – which is adjacent to the Elmsbrook estate, separated by one Ring Road junction only.

In Paragraph 110, the National Planning Policy Framework (NPPF) states that on assessing sites that may be allocated for development in plans, certain things should be ensured, including: "Safe and suitable access to the Site can be achieved for all users" and: "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."

We do not believe that either of the above NPPF conditions would be ensured: in fact, the opposite, based on the discrepancies between actual and simulated traffic, and further points in this document and our previous review. It would make dangerous cycling and road crossing for children travelling to attend Gagle Brook School, around 8.30am, and the queues would very likely extend throughout Elmsbrook – all the way to the B4100. Also, the congestion would cause additional air pollution, against the "eco" ethos.

Paragraph 111 of the NPPF further states: "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." We maintain that, based on all of the issues we have raised, showing errors/level underestimations in the proposal as it stands, the residual impacts would be severe. We still very much support the continuation of the proposed application; however: the predictions must use a reliable model, verified on 2019 and Sept. 2021 survey data, and the road network access solution must resolve all the issues which would cause future traffic nightmares for all present and future homes.

1. The Original Application and Elmsbrook Residents' Response

Residents objected to the initial version of this Application for a large number of reasons, of which there were several Critical Issues with respect to the Transport Assessment [3], and this review covers only those which are related to Vehicle transport. The objections raised in June 2021 [1] included 5 items:

1/ That the Critical Conclusion, of an RFC of 0.87 for the B4100/Charlotte Avenue Junction, in the "2031 Do Something case" (i.e. with junction improvements), cannot be defended, due to errors and omissions in the modelling which produces this number – and that, in any case, it is above 0.85, which has elsewhere been used recently in local planning meetings as a "hard limit", not a guideline.

2/ That the BTM (Bicester Traffic Model) used has already been shown to significantly underestimate the true traffic levels, due to certain assumptions made for the Masterplan/Exemplar Phase planning which subsequently turned out to be inaccurate (these points have been acknowledged by OCC and CDC). These include overall underestimates of 97% at peak hour, in 2019, which is now 126% as of June 2021 – i.e. the true count is 2.26 times higher than predicted. This is why the conclusions cannot be trusted.

3/ That the calculations performed in the original 21/01630/OUT Transport Assessment [3] produce some results which are completely nonsensical, providing another reason why the conclusion cannot be trusted.

4/ That the modelling demonstrated anomalous flows; another reason to not trust the conclusions.

5/ That there are "bottlenecks" enforcing one-way flow points on both Charlotte Avenue and Braeburn Avenue, which the 21/01630/OUT Transport Assessment [3] does not take into account – and without this, the true junction flow rates (measured as RFCs) will be significantly underestimated as modelled.

As well as providing all of our analysis, traffic surveys, and traffic monitoring comparison analyses [4,5,6] to both VTP (Authors of the TA) and the relevant officers at OCC and CDC, one of our team also had email and spoken/video conversations with VTP and OCC. Support for our concerns was given by OCC's Response, via email to VTP in September 2021 (see notes re VTP's response, below). We note also, however, some critical unresolved points between the TA Authors and the Council, and these are also described below.

2. Analysing the Updated version

So the important question is – in this updated Application: have the items (2-5 above) been addressed and resolved by robust evidence/analysis, such that any Critical Conclusion(s) of the TA (as in item 1 above) can now be trusted? – i.e. so we can trust that the road network supporting NW Bicester will not become farcically overwhelmed at Peak Hours? Unfortunately, the inescapable conclusion is No.

2.1 Technical Note response description

As part of the new documentation on the CDC Planning Portal, there are 3 parts of a report entitled "211123 - TN003-Velocity Consultation Responses." This states its purpose as: "1.3.1 This TN has been prepared to provide comprehensive responses to those consultees identified above and to provide further clarity and/or additional information that has been identified through the review of these consultation responses and following post-submission meetings."

This is made explicit in section 2.2, Scope, stating CDC "Comment 1" and VTP's response: "You are aware of the comments and objections from the Local Highway Authority and Highways England (now National Highways). I have also highlighted to you that a large proportion of the public comments received have raised concerns on transport grounds and that detailed comments have also been received from local groups including Bicester Bike Users Group and the local Community Management Organisation on site. It is understood that you are working on a comprehensive response to address the comments made."

"VTP RESPONSE TO CDC COMMENT 1 2.2.1 The CDC response is noted and accepted, with this TN forming the comprehensive response to the consultation comments noted above in response to the outline planning application."

Addressing of the Transport/Traffic Impact Analysis is introduced in:

"3.1.1 The formal OCC consultation response in relation to Transport matters is dated the 06th of July 2021, and a copy of this is included at ATTACHMENT 3 of this TN. Following post-submission meetings and discussions, OCC prepared further comments, which were circulated by email dated the 23rd of September 2021. A copy of these additional comments is also included at ATTACHMENT 3.

"3.1.2 It is noted from the formal consultation response dated July 2021 that OCC objected to the planning application as submitted and listed the three reasons for objection as follows:

"1. Some inaccuracies and omissions in the Transport Assessment and Environmental Statement mean that it is not possible to fully assess the impact of the development...." (etc.)

The following point states the authors believe that this TN covers all of the points needing addressing:

"3.1.6 Whilst the comprehensive formal response from OCC did provide further details on the points raised above, it is considered appropriate to address the matters identified as key points within this TN with a view to providing sufficient further evidence to satisfy OCC in order for the three highways objections to be removed."

...and the references to OCC's upholding of points re Traffic Analysis raised originally by us (i.e. items 1-5 listed above) are referred to in:

"3.1.7 The OCC email response dated the 23rd of September 2021 identified further points for consideration and for ease of reference. These are summarised out below: ..."

"Traffic Impact – potential for a sensitivity test to help overcome the objections of the resident's association."

"Response to the Elmsbrook Community Association – OCC note that a response to the Elmsbrook Community Association is to be provided."

"3.1.8 These further points of consideration are also addressed within this section of the TN."

2.2 Specific Responses to Previous Objections

This response is given specifically in Section 6, Response to Elmsbrook Residents' Group.

Here, they address our item (1) above as follows:

"VTP RESPONSE TO ECA ITEM 1 6.2.1 The ECA comment is noted, however, the modelling undertaken in support of the application was in accordance with the methodology agreed with OCC, using traffic data from the agreed BTM Model.

"6.2.2 It was agreed with OCC prior to submission of the application that any modelling work undertaken would be required to utilise traffic flows obtained from the BTM Model. The approach undertaken is therefore in accordance with what was agreed with OCC, who have confirmed that the outputs of the BTM Model are 'fit for purpose'."

It was VTP who told one of our group that the BTM Model was not the latest version, and anomalies they had found meant they believed it is not fit for purpose! The above uses OCC's initial disagreement

with this to counter it. This was raised specifically with OCC – because it needs to be resolved. Either the model is up to date, or it isn't. (See also the final point raised in section 2.4 of this document, referencing OCC stating the model needs review.) However, for the moment, it is irrelevant – as other calculation factors are more significant re items 1-5 above, such that the conclusions are not changed.

“6.2.4 With respect to the Ratio of Flow to Capacity (RFC) results referred to within the ECA response, it is acknowledged that in the AM peak hour, the junction is anticipated to operate with an RFC of 0.87 on the TECHNICAL NOTE: CONSULTATION RESPONSES 28 Velocity Transport Planning Limited CONSULTATION RESPONSES Project No 4600 / 1100 Doc No TN003 v1.0 LAND AT NORTH WEST BICESTER Page 28 of 31 November 2021 Charlotte Avenue approach, which is in excess of the typically recommended capacity threshold of 0.85. However, in interpreting the results of this modelling, reference is made to the Transport Research Lab ('TRL') Junctions Software developer guidance who acknowledge that RFC is not the most practical way to measure junction operation...”

However: in a recent Local Planning meeting for a junction in SE Bicester, an RFC of 0.85 was used as a “hard limit” – so as it is logical to assume consistency here, this application will face the same criterion. Irrespective to this, our contention is that, with all the omissions/errors, the true RFC will be very much higher, and thus untenable. Without accurate simulation, it is not shown that adding signals would be enough to mitigate – likely not. This point is therefore not resolved, as the response contends (6.2.8).

In 6.1.1 – which should be 6.3.1 – it is stated regarding items 2-5: “The traffic assessment work included with the planning application was scoped with the local highway authority, OCC, and the methodologies adopted within the assessments was agreed. Any suggestions that the traffic data from the BTM is in any way distorted or flawed is not a matter for the Firethorn application to resolve.” Other points ref. items 2-4 are adjudged either not a matter for Firethorn, because it is based on the BTM which OCC has stated it accepts any outputs of, or that the point is acknowledged but a different assumption has been made. **(See the points raised in section 2.4 of this document, regarding this aspect.)**

Finally, in 6.1.9 (should be 6.3.9), it is stated, re item 5: “Notwithstanding that the road narrowings are outside of the ownership of the Applicant, the VTP Spine Road Assessment, a copy of which is included at ATTACHMENT 7 of this TN, does assess the impact of the application site on this portion of the local road network.” **(NB: where the narrowings are doesn't matter: that they impact traffic flow does.)**

The headline conclusion, first shown in Table 3-3, simply states, without going into detail: “SUITABILITY CRITERIA: Superseded DMRB TA 77/99 has been extrapolated to determine that carriageway widths of 5.5m and 4.1m can accommodate two-way hourly flows in the order of 1,091 and 804 hourly vehicles. COMPLIANCE: Yes - projected traffic flows fall below 804 two-way hourly flows in the future Base 2031 Do Something scenario.”

The document referred to is typo'd/mis-referenced throughout the TN – it should be “DMRB TA 79/99 - Traffic Capacity Of Urban Roads, Vol 5, Section 1, Part 3.” Note that the “extrapolation” was done because this reference (in Table 2 therein) does not cover carriageways with less than 6.1 m width.

The detail is given in Attachment 7, where it is seen that the new Technical Note does not recalculate anything from the original TA, and predicts 636 two-way Vehicle flow, and that this is then the limit - extrapolated by calculation to be less than 804 for a 4.1m road, from the reference cited (in Section 4.4).

Even ignoring all other causes of underestimations of the true traffic flow, this Conclusion is erroneous, and appears to invalidate the Critical Assumption all by itself. This is because it completely ignores the fact that two-way flow across this section is NOT possible – because of the 2x physical bottlenecks either side of the bridge: these are less than 4.1 m width (not marked on e.g. Figure 4-3 of Attachment 7) – and clearly designed such that only 1 way flow is ever permitted. These are simply not addressed in the TN: it

states only that the carriageway narrows to 4.1m at its narrowest point. This despite the point that the road narrowing is described in the Transport section of "NWBicesterES Addendum 22Nov21_LR.pdf":

"6.107 Internally within the site, on-carriageway cycling was deemed as being acceptable by OCC where speeds are reliably below 20mph, which is reinforced and supported by the traffic calming along the Exemplar Estate Road, which includes carriageway narrowings and raised tables."

NB: in the DMRB TA 79/99 reference, in the section from which the figures have been calculated, it also states: "3.6 On-road parking reduces the effective road width and disrupts flow..." – this paragraph makes it clear that the figures extrapolated from do not take into account restrictions to the two-way flow such as bottlenecks, and the on-road parking around the school, meaning this section becomes single-flow also, for a large part of the peak hour, when parents are dropping off pupils. (Recent discussion has highlighted that OCC's policy has been to not stipulate provision of drop-off and collect spaces for pupils' vehicle travel, because instead they assume that this is provided for in roadside parking nearby. Unfortunately, this was never relayed to A2Dominion and the original designers: (1) there is not enough nearby roadside provision for the school's maximum pupil capacity even assuming the strictest <25% car trips; (2) A2 have all the roads around under strict parking enforcement – parents park at risk every day, and they currently occupy ALL the roadsides between the Park/Bridge and the narrowing the other side of the school, as of Nov. 2021. When the E1 Bus stops opposite the school, the road is actually blocked.)

Bottlenecks will render two-way flows limits actually reduced to well below one-way flow limits – due the additional time for slowing down/stopping/giving way changeovers to take place. **So it can be deduced that the true limit would be significantly below 482 cars per hour – which is definitely well below the 636 cars per hour predicted by the original TA.** This is the impact of the bottleneck features **alone**.

However, there are other points in the TN which also suggest that this prediction of 636 cars is in fact a large underestimation, and the true value should be calculated as much higher.

Firstly, in Section 3, Methodology and Impact Assessment, of Attachment 7 Spine Road Assessment, it states: "3.1.3 Based on principles of the NW Bicester SPD, the TA assumed that 60% of the total person trips from the area would be via sustainable modes, with private car usage making up the remaining 40% of the mode share."

This is a carefully-worded statement which does not state what the referenced document actually says: the NW Bicester SPD, 2016, actually states (in 4.1.1.7) that the car usage figure is to be not more than 50% - not 40%. There is an extra clause stating that the council might want to modify the figure to 40% in future, but nowhere else in the OCC/CDC or VTP documentation is this stated; so it appears that the 50% should in fact have been used, i.e. if the model has estimated 40% trips by car, the 50% trip generation figure **would actually be 25% higher** (calculated as $50/40 \times 100 - 100$, in %).

However, while we all want to see less vehicle pollution, perhaps the case for 40% vs 50% is irrelevant, since the traffic monitoring data shows the true figure is around 90% by cars. BioRegional's "eco audit" of Elmsbrook, for the FY2018-19 [2] noted that year's figure (of 89%) would be significantly lower if electric vehicles were not counted towards this figure along with petrol and diesel powered vehicles (because Elmsbrook has a **vastly** higher percentage of eCar owners compared to the rest of Bicester and the rest of the UK – actually more than 30-fold higher by proportion, at last count!).

Which is right to use? It depends whether the eventual critical assessment is based upon simulations or reality; because, until we are all using eVTOLs – flying cars! – then the transition to electric vehicles will continue, as per UK/Europe/international targets, trends and measures. And the real traffic load will depend on this – not a model based on a set of criteria ignoring the existence eCars (except that they are promoted elsewhere in the original NW Bicester TP and TA as part of the sustainable travel solution!).

There is also a new anomaly within the results presented in the TN's Attachment 7. Here, the breakdown of results for the critical "Charlotte Avenue bridge" (where the bottlenecks are, on the way into Phase 2, near the school), gives the following results, for their 2 assessment methods:

- Firethorn's 207 proposed new homes which exit via Charlotte Avenue cause 17.6% of the trips.
- Elmsbrook, actually only Phase 2's 71 homes (plus few to the school), cause 29.5% or 45.3%.
- "Consequential flows associated with the adjacent Local Plan developments" cause 37.1% or 53.0%.

(Note that Phase 1, 3 and 4 homes don't use this section of road to exit Elmsbrook, and internal journeys here are so short they would not be by car). It's unclear which figure contains the school trips, or where the vast proportion of "adjacent developments" are coming from – the rest of NW Bicester won't be built by 2031, and the only Caversfield and wider vehicles are school parents and carers, currently. Currently the school car users totals 24, and would be around 40, in theory, at maximum, assuming the demographic change to majority Elmsbrook-resident pupils, based on the Elmsbrook and School Travel Plans).

So the total for 71 homes plus these should be a significantly smaller percentage of trips compared to 207 new homes using it – not the other way around. The result therefore appears nonsensical.

For these latter points, the question which the Council must consider is: how can such results be trusted? Surely the only accurate method to model/predict these results would be to use the significant existing traffic monitoring (and survey) data, from Mode Transport Ltd (which are collected as stipulated by the original NW Bicester Masterplan approval conditions – and the most recent extensive full day survey was undertaken by Mode in September 2021) – and extrapolate from these, and modelling reductions in traffic flow in the case that e.g. 10%, 20% etc additional residents are persuaded to use non-car transport modes, or e.g. counting electric cars as a sustainable mode – as suggested by eco consultancy firm BioRegional [2].

2.3 Points relating to other documents in the updated application

The point regarding usable traffic survey data occurs again, in "NW Bicester ES NTS Nov21_LR.pdf": the Environmental Statement, updated, which includes:

"15.7 The technical assessments identified the following significant adverse cumulative effects:

- Moderate adverse effects on driver delay on completion of the Development;
- Moderate adverse effects on local landscape character; and
- Moderate to major adverse effects on recreational users and motorists (visual receptors) within the countryside surrounding the Development."

In section 6, TRANSPORT AND ACCESS, the following is stated:

"6.3 Due to the travel restrictions that have been in place intermittently from March 2020, it was not considered appropriate to undertake traffic surveys to establish the baseline traffic flows."

However – Mode Transport undertook EXACTLY this kind of traffic survey, in September 2021 – this information should be available to the Transport Assessors. The restrictions/lower road usage since March 2020 was shown by ONS data to have entirely returned to usual by August 2021.

As previously pointed out – actual traffic levels are vastly higher than this model has predicted; it is therefore contended that the Significant Adverse Effects on Driver Delay will not be moderate – they will be Major, and the real impacts severe.

"NWBicesterES Addendum 22Nov21_LR.pdf" also contains some data to which a more recent traffic survey undertaken by a resident (in June 2021) can also add further points regarding Driver Delay Impacts:

In Chapter 6R (contents), or 6 A (in its title) – TRANSPORT AND ACCESS, Table 6.6 states Link 16 (Braeburn Avenue junction) is predicted to have 1465 vehicles in 2031, Link 17 (Charlotte Avenue) 4446 (18 hour AAWT) – for the 2031 "Do Minimum" case. Table 6.10 shows the 2031 "Do Something" case increases these to 2695 and 5184 vehicles, respectively.

Table 6.11 shows only a Moderate adverse impact on Driver Delay, for Charlotte Avenue, with delay of ~80 seconds for 2031. However, around 0820-0845 in the morning in June 2021 – the period when the queue extends along the B4100 from the Ring Road roundabout to beyond Charlotte Avenue and often beyond Aunt Ems Lane as well – driver delays in the region of 60-100 seconds were measured. This suggests that the models for 2031, with a 532% increase ("Do Minimum") / 620% increase ("Do Something") in trips which would enter/exit via this junction, cannot possibly be correct – **you cannot have 6-7 TIMES the traffic flow, and see no significant increase in Driver Delays.**

(Data for Braeburn Avenue does not exist for 2016, so isn't assessed – however, the increase from current to 2695 vehicles would be significantly greater than the 23 seconds predicted here, particularly in the case where peak hour queues extend round from beyond Aunt Ems Lane to reach Braeburn's B4100 junction.)

2.4 Additional note, following information from a recent local planning application response

Regarding another Bicester development's recent application, 21/03177/F, the OCC Response published on 7/12/21 contains the following statements in the Transport Development Control section:

"The (traffic) impact of the development has been assessed for the future year 2031, using a 2018 scenario of the Bicester Transport Model, that includes most committed development, including that at Heyford. The scenario also assumes that the Strategic Link Road (SLR) at North West Bicester (a diversion of the A4095 through the NW Bicester Masterplan area, under the now constructed railway overbridge) will be in place in 2031. However, it has recently been recommended to the Oxfordshire Growth Board that the allocated Growth Deal funding for the project should be reallocated, and with no alternative forward funding currently in place, there is no longer certainty of its delivery within that timescale. The Growth Board will consider the recommendation on 30 November. Therefore the predictions in the Transport Assessment can no longer be regarded with any degree of certainty. Without the SLR, there would be severe congestion at the junction of Howes Lane, Bucknell Road and Lords Lane."

"This hinges on assessment work carried out by others in 2015 to predict the performance of the existing Bucknell Road/ Howes Lane/ Lords Lane junction as NW Bicester develops. This is a junction that experiences severe congestion, and which will be relieved by the SLR. ... The assessment referred to above is now over six years old, and was based on a traffic model that did not include development at Heyford. **As such it is no longer considered by OCC to be a reliable method of establishing the upper limits of capacity at the critical junction, being likely to under-estimate these upper limits.**"

In which case, this raises two further points: (1) Why has 2016 been used for the Firethorn application, when this one uses 2018? But more critically, (2) **Surely, the same traffic level uncertainty would now also apply to the traffic impact assessments for the Firethorn application** – because of the proximity of the SLR – which connects to the junction adjacent to Elmsbrook, thus its impact on the B4100 traffic north of the Ring Road, and thus the junctions with Charlotte and Braeburn Avenues. Either way: if the trip generations and traffic impact calculations in the Firethorn application's Transport Assessment and Environment Statement Addendum use the same version of the BTM, including the SLR, then it appears that assessments for 2022-27 (Construction) at least, if not for 2031 analysis as well, may need to redone.

2.5 Additional Points Referring to NPPF and Council Local Policies

NPPF:

Paragraph 112 of the NPPF states that applications for development should: “be designed to enable charging of plug-in and other ultra-low emission vehicles in safe, accessible and convenient locations.” **However, we would raise the question as to whether either of Site Access A and the proposed cycle and pedestrian access onto Carraway Fields meet these criteria.**

Site Access A is a short spur on the end of Charlotte Avenue, which contains several parking spaces directly onto the road, in a row, and a charging point: if it becomes the entry section to a road serving 138 new homes, this would not appear to be a “safe” location to have so many end-on access points for slow-moving vehicles accessing spaces or the charge point.

Carraway Fields has ~18 parking spaces along it and accessed at the ends. However, by design, it does not have pavements at all, so presumably this does not constitute a “safe” access for cyclists or pedestrians – beyond the 2 homes on it, it is designed to serve parking only – it was never intended to be a cycle and/or pedestrian access point through to 138 new homes.

Oxfordshire Local Transport Plan (LTP4) - Connecting Oxfordshire:

This includes objectives and policies for improving transport in Oxfordshire to 2031. To achieve the key transport goals, 10 objectives for transport have been developed, including, for example:

- Increase journey time reliability and minimise end-to-end public transport journey times on main routes.
- Develop a high quality, innovative and resilient integrated transport system that is attractive to customers and generates inward investment.
- Influence the location and layout of development to maximise the use and value of existing and planned sustainable transport investment.

It's not clear how the proposed application acts to support any of the 10 objectives.

Connecting Oxfordshire Volume 8 Part ii outlines the key strategies for particular local areas within Oxfordshire. The Bicester Area Strategy outlines four key aims for Bicester with respect to the county. The points within these include 2 which we will comment briefly on here:

“BIC1 - Improve access and connections between key employment and residential sites and the strategic transport system by: Continuing to work with Highways England to improve connectivity to the strategic highway.” – however, the proposed application does not seek to improve access or connections to the strategic highway: it seeks to avoid adding any further connectivity, while adding many more homes and thus vehicle trips than the existing access points were ever intended to handle – and, indeed, we believe the evidence is strong enough to reveal that they would not handle anyway near this amount.

“BIC2 – We will work to reduce the proportion of journeys made by private car though implementing the Sustainable Transport Strategy by: Significantly improving public transport connectivity with key areas of economic growth within Oxfordshire; Improving Bicester's bus services along key routes and providing improved public transport infrastructure.” – however, there is no mention of any attempt to make any such improvements.

North West Bicester Supplementary Planning Document (SPD):

The key elements of this that relate to transport are set out within Development Principle 6 – Transport, Movement and Access. These include:

- “Development proposals must show an understanding of existing routes and provide a considered response that enhances existing access and connections and seeks to improve/remove barriers to movement on and off site.”

We would contend that, to “show an understanding of existing routes”, it would be necessary to take account of the latest measurements of traffic on said existing routes – yet the proposed application avoids doing so, despite (as noted earlier) much data from 2019 and a very recent (September 2021) full day survey being undertaken.

Instead, the following points (included in the original version) are still included in “NWBicesterES Addendum 22Nov21_LR.pdf”:

“6.88 All future forecasts include some degree of uncertainty. This is particularly relevant at the current time due to the pandemic, which has resulted in unprecedented disruption to how people work and travel and the extent to which people will change their behaviour, in particular when it comes to how and when they travel. There is also the extent of uptake/continuation of working from home which remains to be seen.”

“6.89 The traffic flows, which have been provided from the BTM, do not account for the current pandemic, which is therefore considered to be a limitation. However, as the level of traffic on the local highway network during this unprecedented time is expected to be significantly lower due to the pandemic, it is assumed that the traffic flows from the BTM are robust.”

However, the Office of National Statistics (ONS) reported continually on the increase of traffic levels in the spring and summer of 2021, as they returned to pre-covid vehicle flow levels: while significantly down in the winter, their data for July suggested traffic levels were within 3% of normal, and by August, they had returned to expected levels – i.e. the effects of the pandemic had been removed – possibly any reduction due to those remaining home-working had been balanced out by increases due to population, deliveries to homes, or other effects.

Finally, it is worth noting that in the Transport section of “31036 A3 HL 21 11 23 Letter CFord - FINAL DRAFT.pdf” – which is the overall Update Response letter to CDC – the following paragraph is quoted from CDC’s letter of 21 September 2021:

“CDC Comment - Should the access arrangement strategy be demonstrated to be suitable, then we will need to establish the capacity that could be accommodated from Access B to the western land to ensure that this is a clear parameter for future reserved matter submissions to be secured via planning condition.”

This is responded to by quoting the data that the 69/70 homes using Access B will generate ~37 trips (AM peak hour), and ~33 trips (PM peak hour). However, while this response answers the question asked, it is perhaps misleading, because it does not mention that the majority of the proposed homes that actually send their vehicles through Phases 1 & 2, along Charlotte Avenue passing the School come from the 138 homes using Site Access A (i.e. from the Eastern Parcel), meaning a total of 207 homes use this. Thus, the true additional amount which OCC should be assessing for the peak hours, assuming direct scaling up is correct, would be ~111 trips (AM peak hour) and ~99 trips (PM peak hour). As noted earlier, this is much greater than the 71 homes on Phase 2 plus the school would contribute: ~62 trips (AM), ~34 trips (PM).

3. Conclusions

The bottlenecks on Charlotte and Braeburn Avenues have not been included in the new Technical Note's analysis; and their absence alone – ignoring all other issues – is enough to still render the Critical Conclusions (that flow rates will be acceptable and not cause major traffic issues) non-valid. There are further issues in the analysis for this, which indicate further underestimations of the actual value which should be used for assessment – let alone the true flows based on traffic monitoring data.

The other items – regarding model errors/omissions causing anomalous results – are acknowledged by VTP in the response, but stated to be presumed to be acceptable to OCC/CDC, because they are simply what comes out of the model. We would contend that, while one or two of the unusual ones (e.g. hundreds of cars coming into and going out of a field) could perhaps be ignored, others indicate something seriously untrustworthy in the results. How can we have confidence in them?

In Summary, the updated application simply does not adequately demonstrate that the traffic impact of the development will not be severe. The factors above, the potentially significant delay/plan change for the Strategic Link Road, and extrapolation of traffic survey data would seem to be 3 key modelling steps which need to be addressed, going forward. We still very much support the continuation of the proposed application; however, it must resolve issues which would cause future traffic nightmares for the Ecotown. It would seem appropriate to ascertain that an updated simulation model, including the one-way flow bottlenecks internal to Elmsbrook, and any modifications due to the SLR plans changing (or supplying results for both with/without it), could accurately predict the real traffic data from 2019 and September 2021 studies, before progressing to using it to create predictions for 2031.

One possible solution, for the morning peak hour, would be to allow cars using site accesses A and B to go the “wrong way” through the Bus-only section, just for that time period: this would reduce the congestion build-up throughout Phases 1-2, at the cost of increasing the potential congestion in Phases 3-4 – and without an accurate simulation, including the Phase 3 bottleneck also, there is no way to know if the Braeburn Avenue – B4100 junction would be able to cope with such an increase. It is also, perhaps, potentially risky to enable cars to drive directly against the E1 Bus direction, for such a time period.

Perhaps, therefore, it would be better to re-think the strategy of utilising only the two existing strategic highway connection junctions, and sending 207 homes' traffic through all of Elmsbrook Phases 1 & 2, and 323 homes' traffic through Phases 3 & 4. This is apparently a self-constrained design solution, and it seems likely that the only viable solution would be to have an alternative. It would seem sensible to explore the options regarding the S278 agreements for the two temporary access points for the construction of the site. OCC have already confirmed that they are not against further highway connections being added – and that they cannot see why, for example, the temporary access originally proposed for the Eastern Parcel access could not be made a permanent access point.

(NB: This option is suggested in the proposed application's new Technical Note, in Attachment 7, specifically for the Eastern Parcel in the section on Spine Road suitability for Cyclists, as a Mitigation option:

“4.3.18 As an additional measure to support Option 2, the access points from the proposed Firethorn development could be restricted to no longer utilise Charlotte Avenue and instead access directly onto the B4100. In this scenario, it is noted that the Eastern Parcel will require the proposed temporary construction access arrangement to be made permanent. If this were to become a permanent means of access, it is likely that the arrangement of this junction would have to be reconsidered to provide a right turn lane from the B4100.”)

REFERENCES:

(These list relevant documents which are not part of the Updated documents listed at the end of "31036 A3 HL 21 11 23 Letter CFord - FINAL DRAFT.pdf" – the overall Update Response letter to CDC.

[1] Firethorn 21/01630/OUT Transport Assessment – Analysis, Short Version – included as Appendix 10 (in Part 3) of VTP's "211123 - TN003-Velocity Consultation Responses." – June 2021.

[2] "A2Dominion Elmsbrook monitoring 2018-19: Data on travel, waste, water and energy use on site" – BioRegional, Final Report, October 2019.

[3] Firethorn 21/01630/OUT Appendix 6.1 Transport Assessment, V0.4, April 2021.

[4] Combined Gagle Brook School Travel Surveys, July 2021 – this document brings together:

(a) November 2018 – Gagle Brook Primary School Parents Travel Plan incl. Survey and Analysis

Carried out for the "Gagle Brook Primary School - School Travel Plan":

Prepared by: Alan Derry (Principal) / Angela Smith (CDC) / Rob Fellows (Parent/Elmsbrook)

Report Version No. 1.0, Final Release Date: 22 January 2019

(b) October 2020 – Gagle Brook Primary School Parents' Travel Survey update

Carried out in October by Drew Price (Headmaster).

(c) Gagle Brook Primary School Future Traffic and Parking Modelling, Dec. 2018, updated 2020

Prepared for Gagle Brook Primary School by Elmsbrook Traffic & Parking Group.

[5] "The Future Of Parking and Traffic on Elmsbrook" PPT presentation originally given to CDC, 9/9/2020.

[6] Elmsbrook – Phases 1 & 2 Traffic Surveys Sept to Dec 2019 & June 2021 Results, Analysis and Discussion