12. Highways Raw Data

LAND OFF RAMPTON ROAD,
COTTENHAM
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Emily

Please find attached my response to your latest comments (in red below your text).

The attached zip file includes the latest improvement schemes with the minor changes suggested in the meeting last Friday. I will send Jon the CAD versions in a separate email as they are quite large files.

I have also prepared 2 No Technical File Notes dealing with the CPC trip rates and the SJ3 junction modelling.

I have attached the count and queue data. This has been provided before, but I have attached it again as requested.

The study network junction layouts are also in the attachments file. Again these were provide previously, but I have attached them to the response as requested. Please note we have revised the SJ3 plan as we now have topographical survey for this junction, which we didn’t previously.

I sent you an email earlier regarding accident data so I await your response on that.

With regard to the modelling outputs, I will send these separately as the files are too large.

If there is anything else that you require or need clarification on please do not hesitate to contact me. If it saves time, please just send me an email or pick up the phone to chat things through.

Kind regards

Ben

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transport planning  sustainable travel  travel plans
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6.0 TRANSPORT

Background

6.1 This application includes a Transport Assessment dated May 2016 and Travel Plan for the development. The remainder of this document provides a review of these documents.

Policies & Principles of Access Strategy

6.2 The policy documents reviewed are considered acceptable for the purpose of this application.

6.3 Please refer to comments provided by the Highways Development Engineer concerning the access strategy.

Highway Network

6.4 The junctions to be included as part of the assessment are considered to be acceptable to the County Council.

6.5 It should be noted that SJ11 is the responsibility of the County Council not Highways England.

6.6 The County Council requires that the peak hour analysis, the surveyed traffic flows and the queue length surveys be appended to this TA and submitted for the purposes of this application also, in accordance with our requirements for the previous application. AHA has provided this information with this response.

6.7 The County Council requires full junction modelling outputs to be appended to the TA along with the junction geometries for the purposes of this application. AHA has already provided this information, but will provide it again in separate emails due to size.

Accident History

6.8 The accident analysis is acceptable to the County Council for the purpose of this application. The applicant should contact Graham Amis, Performance and Information Manager, at the County Council to establish whether there have been any subsequent accidents within the accident analysis area since August 2015. AHA to provide update following discussions with Graham Amis.

6.9 It should be noted that this section of the report refers to speed limit change on Rampton Road West the applicant should refer to comments provided by the Highways Development Management Engineer concerning this aspect. AHA previously suggested that this is dealt with by a financial contribution to cover the cost of the TRO. AHA requests that CCC provide a figure for agreement.
Proposed Site Access Arrangements

6.10 Please refer to comments provided by the Highways Development Management Engineer.

Pedestrian and Cycle

6.11 The figures presented show pedestrian and cycle isochrones from the development which are considered to be appropriate for the purposes of this assessment.

6.12 The applicant identifies a pedestrian and cycle mitigation package, please refer to comments provided by the Highways Development Manager in response to these proposals.

6.13 The pedestrian and cycle mitigation package once agreed will need to be delivered through direct implementation prior to occupation and a commuted sum of £38,661.70 for the maintenance of the Toucan crossing will need to be secured through S106. The County Council has identified additional pedestrian and cycle improvements within Cottenham which are detailed later in this response. These measures need to be implemented by the applicant in order to mitigate the impacts of the development on the highway network. It should be noted that the applicant agreed to implement these measures as part of the previous application.

6.14 The number of cycle parking spaces to be provided in Cottenham to the east of the site should be detailed with the rationale behind this assessment provided. During the meeting with CCC on 5 August 2016, AHA suggested that a figure of 12 (Sheffield type) cycle stands would seem reasonable based on the number of cycle trips that the Site is estimated to generate. This was agreed with CCC.

Public Transport

6.15 The facilities at each of the bus stops are detailed, and the applicant has committed to providing a shelter and Real Time Passenger Information at the Lamb’s Lane bus stop, which are acceptable to the County Council. The bus shelter should be provided directly by the applicant with a commuted sum of £7,000 towards its maintenance provided to the Parish Council. The RTPI requires a contribution of £27,000 to the County Council towards the installation and maintenance of RTPI. This is agreed.

Parking

6.16 The County Council recommends that car parking provision is based on the Emerging local plan standards. However, the County Council recommends that a parking needs assessment is undertaken to investigate existing car ownership levels nearby to better establish the appropriate level. It is
important to recognise that a balance needs to be struck between parking provision potentially encouraging high levels of car ownership and use and seeking to manage the demand to travel by car. This can be done at the reserved matters stage.

**Travel Plan**

6.17 The Travel Plan will need to be secured should the local authority be minded to grant planning permission. Agreed.

6.18 Further comments on the TP are provided at the end of this review.

**Traffic Flows**

**Peak Periods**

6.19 See comments above.

**Traffic Counts**

6.20 See comments above.

**Assessment Year**

6.21 The assessment year of 2020 is considered appropriate for the purposes of this assessment provided the development is expected to be fully built out by this date.

6.22 The NTM growth factors are acceptable for the purposes of this assessment.

**Committed Development**

6.23 The application for 36 Oakington Road in Cottenham (15/1952/OL) was approved at planning committee and is therefore a committed development and should be treated as such as part of this application. The traffic generated by this development is included in the Sensitivity Test flows as at the time the TA was originally prepared this was not approved. Given that the development is relatively modest (only 50 dwellings), it is not considered necessary to include these flows in the Base as they have been included in the Sensitivity Test modelling. Notwithstanding this, CCC recommended that the modelling of SJ3 should include these flows in the Base. This has now been done (refer Technical File Note 3).

6.24 The applicant should contact South Cambridgeshire District Council as planning authority to establish whether there are any other committed developments in the area that should be taken account of since the previous application. AHA are not aware of any additional committed developments.

**Distribution**

6.25 The distribution is considered to be appropriate for the purposes of this application.
**Generated Traffic**

6.26 The assessment is based on 225 dwellings and 70 apartments with care rather than 200 dwellings and 70 apartments with care that the application allows for.

6.27 The trip rates were agreed as part of the last application assessment. However, the Parish Council undertook and submitted their own survey prior to the committee of the previous application. The County Council request that these trip rates be compared to those presented as part of this assessment and the differences in terms of trip generation explained. Refer AHA Technical File Note 2.

6.28 The AM, PM and total daily person trips rate and trips should be presented in the main body of the TA.

**Apartments with care**

6.29 The Traffic Count used as a basis for the Apartments with care should be appended to the TA.

**C2 Apartments**

6.30 The trip generation was agreed as part of the previous application. However, the raw data should be appended to the TA for the purposes of this application. AHA has already provided this information to CCC as part of the first application, but will be provided again with this response.

**Traffic Impact**

6.31 The modelling of all junctions was the request of the County Council due to the concern that even a minor percentage increase on an already congested network can have a significant impact. Therefore all of the junctions listed should be considered in full. This has been done.

**Operational Performance of Highway Network**

6.32 The full PICADY and ARCADY outputs should be appended to the TA, along with the geometric parameters entered in to the junction models. It should be noted that the junction modelling includes the 50 dwellings on Oakington Road in the sensitivity test, however this should be included in the baseline assessment as it is now committed. Refer previous comments.

6.33 The queue length surveys should be appended to the TA.

6.34 The development access junctions (SJ1)) have sufficient capacity to facilitate the development vehicular trips, subject to provision of the above information.
6.35 The Lambs Lane/Rampton Road junction (SJ2) is shown to be overcapacity during the AM peak in the base scenario, which the development contributes an addition 6 vehicles to queuing traffic exiting Lamb’s Lane. The main access to the primary school is located on Lamb’s Lane which attracts trips through this junction. It is not clear at this time whether the school will be accessed in the same way in future. However, the applicant has identified pedestrian and cycle improvements along Rampton Road on route to the school, and the introduction of a crossing point in order to facilitate and encourage residents of the Rampton Road development to undertake journeys to the school by walking and cycling and to minimise the impacts at this junction.

6.36 The Rampton Road/Oakington Road roundabout (SJ3) calibration and modelling results in Table 20 and 21 respectively, show different results to those previously presented and agreed as part of the December 2015 Transport Assessment submission for the previous application. In addition, the text in the TA refers to the previously submitted results rather than those presented in Table 21 of this report. Therefore clarification from the applicant is sought. Refer Technical File Note 3.

6.37 It should be noted that the County Council considered that as part of the previous application submission the development impacts at this junction were severe and therefore a mitigation solution was required. The applicant has not included the most recent design incorporating Road Safety Audit comments as part of the application submission or details of where this design is in the Road Safety Audit process, therefore further information is required.

6.38 The High Street (N) and High Street (SJ4) is shown to be operating over its theoretical capacity during the PM peak period during the base scenario, with a queue of 5 vehicles. The development is shown to contribute an additional 1-2 vehicles to the back of the queue. In order to mitigate this impact the developer is to provide additional pedestrian and cycle facilities along Rampton Road and provide additional cycle parking in the village centre, therefore providing facilities to encourage those that travel to the village centre or beyond to do so by foot or cycle.

6.39 B1049/High Street junction (SJ5) - is shown to be operating over its theoretical capacity during the AM peak in the baseline situation. The development contributes an additional 5 vehicles to the back of the queue. The County Council would not seek a capacity solution at this location, however require the developer to widen the footpath on the east side of the B1049 within the 30mph zone to improve facilities for pedestrians and cyclist to encourage more people to undertake trips to Histon and onward to Cambridge by cycle.

6.40 B1049/High Street junction (SJ6) – this junction is shown to operate with an RFC of 0.875 during the AM peak on the B1049 (N) and an RFC of 0.962 on the B1049 (s) arm in during the PM peak. This indicates that the junction is at capacity. The development impacts on this show a slight worsening of the RFC in both periods this result in a maximum of one additional vehicle queuing on any arm during either period.
6.41 Denmark Road/ B1049 High Street (SJ7) – is shown to be at capacity during the PM peak, however the development impacts on this junction are shown to result in a slight increase in RFC, this result in a maximum of one additional vehicle queuing on any arm during this period.

6.42 The Lambs Lane/ B1046 High Street junction (SJ8) is shown to remain within capacity during the baseline and with development scenarios.

6.43 The Water Lane/ Cambridge Road junction (SJ9) in Oakington is shown to be approaching capacity during the AM peak in the Base and with development scenarios. The development will result in additional traffic travelling on Water Lane during the AM peak which will result in those waiting to turn right into Cambridge Road from Dry Drayton Road having to wait longer to do so. The County Council therefore requires the developer to provide a contribution to introduce a right turn filter to mitigate the development impacts on other movements at the junction. Agreed.

6.44 The LINSIG models for The Green/ Impington Lane junction (SJ10) and the A14 interchange (SJ11) in Histon were altered following review of the models by our signals team due to concerns they were not representative of real life conditions. The results presented in this TA match those presented in the December 2015 TA submitted prior to the adjustments being undertaken. Therefore the modelling results from the adjusted models following the revisions should be provided.

6.45 In any event The Green Histon is shown to be over capacity in both the AM and PM peaks. The proposed development is expected to exacerbate the existing situation. Therefore the County Council requires the applicant to contribute towards a County Council scheme to provide a dedicated right turn lane and widening of the carriageway on the southbound approach. The developer has agreed to provide a proportionate contribution of £9,620 towards this scheme. Agreed.

6.46 The approach to the Histon Interchange is shown to result in queuing on the southbound arm which the development is expected to contribute towards. The developer has agreed to provide a proportionate contribution of £3,521 to reallocate lanes at the Bridge Road/ Cambridge Road junction to allow for equal lane usage and increase queuing capacity. Agreed.

Travel Plan

6.47 A Travel Plan will need to be secured for all uses on site, including the residential dwellings and care home facility. Agreed.

6.48 The approach to identifying the residential travel plan target appears reasonable, however the trip rate should be separated into arrivals and departures, and should be for both peak periods not just the AM peak. However, it should be detailed as to how the care home travel plan target will be identified and monitored, even if this is a questionnaire to staff, visitors and
any residents that travel to and from the site during the day. The measures for staff, visitors and if necessary residents of the care home should be specifically detailed as part of the Travel Plan.

6.49 The Travel Plan proposes to also monitor pedestrian and cycle movements to and from the site, which is acceptable to the County Council.

6.50 The Travel Information Pack should include incentives for residents such as cycle equipment discounts with local providers and monthly taster tickets for local bus operators. See comments below.

6.51 Paragraph 9.6 refers to monitoring the AM peak hour, this should be undertaken during the PM peak also. The AM and PM peak surveys will need to be agreed with the County Council. It is important to distinguish between residential trips and care home trips as part of the monitoring. Agreed.

6.52 Is the developer able to indicate when the 80th dwelling is expected to be occupied and the purpose of undertaking the survey at this time, rather than sooner? As set out at the meeting, the 80th dwelling represents 40% of the houses. It is considered that this represents a reasonable sample size from which to survey. It is anticipated that this will probably be in the second year of the development.

6.53 The monitoring should take place at a time agreed with the County Council. It is not clear why the traffic survey and the resident surveys do not take place at the same time. Therefore further information is sought. It is also not made clear who is responsible for implementing the surveys. It is proposed to undertake an initial multimodal survey of a suitable residential Site in Cottenham (to be agreed with CCC) prior to the S278 works being carried out. This will allow Baseline multimodal trip rates to be established and the TP target will be a 10% reduction of this figure. The reason for doing the survey before the S278 works is that the improvements will hopefully result in a modal shift from the car. If the survey happens after the works have been done then the shift may already have occurred and this makes the target much more difficult to meet.

6.54 Questionnaire surveys should be undertaken annually at the same time as the traffic count surveys. Agreed.

6.55 The Travel Plan does not identify what happens in the event the Travel Plan targets are not met, what measures and action will be taken. AHA suggest that the Travel Plan Co-coordinator is given a budget of £30,000 (by the developer) to provide additional measures, if the target is not meet this money can be used to provide incentives to travel by non-car modes. Foreexample, Stagecoach offer a 4 weekly Megarider at the current price of £94. If one pass is available to every household and apartment with care the cost would be just over £25,000. Therefore, I think a £30,000 budget is reasonable.

Conclusions
6.56 The above issues need to be addressed before the County Council can comment on the Transport Assessment in full, particularly the issues raised concerning the Rampton Road/Oakington Road Junction. Accordingly the County Council submits a **holding objection**.

6.57 The County Council has requested the following mitigation package be secured in order to mitigate the impacts of the development these are as follows:

**Lambs Lane bus stop**
- Contribution of £27,000 to the County Council for the installation of RTPI at the Lambs Lane bus stop.
- S278 works by the developer to install a bus shelter at Lambs Lane stop subject to agreement with the Parish Council for the ongoing maintenance of the shelters.
- Commuted sum of £7,000 for the ongoing maintenance of the shelter to be paid to the Parish Council, subject to agreement with the Parish Council. Agreed.

**Rampton Road**
- Development to provide a crossing facility (toucan) at a location to be agreed with the County Council, a commuted sum of £38,661.70 towards the ongoing maintenance would also need to be secured. Agreed.
- Improvements to pedestrian and cycle facilities on Rampton Road between the development site and south of Oakington Road are to be agreed with the County Council and implemented by the developer. Agreed.
- Widening of the footway on east side of B1049 within 30mph zone between the junctions of B1049 with Dunstal Field and Appletree Close to enable shared use walking and cycling. This scheme is to be delivered through direct implementation by the developer through S278 agreement. The works include resurfacing and widening the path to 2.5m where possible within the existing public highway. This is a circa 800m section of road that already has advisory cycle lanes on the carriageway. It is unlikely that the development will generate large numbers pedestrian movements between the Site and Histon due to the distance being over 4km. Therefore, these works would only benefit cyclists from the development. The TA estimates that in the AM and PM peak hours the development will generate 21 and 15 two-way cycle movements respectively. It is unlikely that all of these will travel along Histon Road. NPPF makes it clear that improvements:

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"cost effectively limit the significant impacts of the development"
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Given that the number of cycle movements along Histon Road are estimated to be less than 21 and 15 in the AM and PM peak hours and that there are already advisory cycle lanes marked on the carriageway in this location, I am not convinced these works will be cost effective or justified. Therefore, I respectively ask CCC to reconsider this request.

**Cottenham Village**
Installation of cycle parking at locations to be agreed with the Parish Council and the County Council along Cottenham High Street. The developer is to provide these works through S278. The developer agrees to provide 12 sheffield cycle stands, subject to CPC/CCC making the necessary land available.

**The Green Histon**
- A contribution of £9,620 towards the County Council’s local highway improvement scheme at The Green junction in Histon. **Agreed.**

**Cambridge Road/ Bridge Road Histon**
- A contribution of £3,521 towards the County Council’s local highway improvement scheme at Cambridge Road/ Bridge Road in Histon. **Agreed.**

**Water Lane/ Oakington Road Junction**
- A contribution of £6,000 towards a local highway improvement scheme at Water Lane/ Oakington Road Junction. **Agreed.**

**Rampton Road/ Oakington Road Junction**
- Further details are required concerning this junction have been requested as part of this response. The revised scheme was discussed during the meeting and CCC appear to be satisfied with the latest proposals. CCC requested that the proposed kerbed islands are made clearer on the plan. This has now been done. A note has also been amended to make it clear that detailed plans of the works need to be submitted to CCC for agreement prior to the commencement of the S278 works. Drg Nos 1434/19/B and 1434/20/B are provided with this response. Technical File Note 3 sets out the modelling of this junction, including the revised modelling.
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