

Hughes, Martha

From: Taylor, Mike
Sent: 06 October 2020 10:23
To: fiona.bennett@highgatetransportation.co.uk; 'Heywood, Robert'
Cc: 'Colin Griffiths'; dave.tighe@highgatetransportation.co.uk; 'Wright, Colin'; Hughes, Martha
Subject: RE: Peel Hall VISSIM Meeting Notes (24th September 2020)

Fiona,

Whilst I don't agree with some of the points made in your post-meeting notes I have no further comments at this stage. More pressing is understanding your position in respect of my suggestion that immediate work on the base model would be more productive. Can you confirm your intentions?

Regards

Mike

Mike Taylor

Transport Development Control Team Leader

CURRENTLY WORKING FROM HOME

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From: Taylor, Mike
Sent: 01 October 2020 17:09
To: fiona.bennett@highgatetransportation.co.uk; 'Heywood, Robert' <Robert.Heywood@highwaysengland.co.uk>
Cc: 'Colin Griffiths' <colin@satnam.co.uk>; dave.tighe@highgatetransportation.co.uk; 'Wright, Colin' <Colin.Wright@wsp.com>; Hughes, Martha <Martha.Hughes@warrington.gov.uk>
Subject: RE: Peel Hall VISSIM Meeting Notes (24th September 2020)

Fiona,

Thank you for your email. I am currently on leave and will review the amendments on my return on Monday.

However I would make one key point, given that WBC won't be in a position to agree any forecasting until the base model is agreed, can I suggest that rather than submit the full modelling package by 30th October as highlighted in point ix, you endeavour to provide an updated base model for us to review and/or responses to our concerns on the base model at the earliest opportunity.

This would seem an efficient use of the time involved and may prevent any abortive work.

Regards.

Mike

Sent from my Samsung Galaxy smartphone.

----- Original message -----

From: fiona.bennett@highgatetransportation.co.uk

Date: 01/10/2020 11:47 (GMT+00:00)

To: "Taylor, Mike" <mike.taylor@warrington.gov.uk>, "Heywood, Robert" <Robert.Heywood@highwaysengland.co.uk>

Cc: 'Colin Griffiths' <colin@satnam.co.uk>, dave.tighe@highgatetransportation.co.uk, "Wright, Colin" <Colin.Wright@wsp.com>, "Hughes, Martha" <Martha.Hughes@warrington.gov.uk>

Subject: RE: Peel Hall VISSIM Meeting Notes (24th September 2020)

Good morning Mike,

Thank you for your email and notes. Please see updated meeting note below:

- i. It was noted that DM was not present and we delayed the start of the meeting in case he was able to join.
- ii. RH opened the meeting and handed over to DT.
- iii. DT thanked both parties for providing their audits at close of play yesterday. DT confirmed that we will review in detail but have carried out a very quick high level review and make the following points:
 - a. HTP set out that VISSIM is validated against journey times and turning counts, not queues. This was set out in the agreed VISSIM scoping note.
WBC stated following the meeting that the scoping note states in 4.3 "Checks of flows and turning counts will be carried out using the GEH statistic and WebTAG flow criteria. Journey time data will be assessed using WebTAG guidance, as a minimum. Queues will be assessed visually."
Post meeting note HTP – The queues are shown along the length of the SLW link. The link was artificially extended in VISSIM to load latent demand.
We are reviewing the base model queue lengths (see point (v) below).
 - b. HTP stated that this VISSIM is a corridor model for the A49 and for testing the effect of the development on journey times and flows along this corridor.
WBC commented after the meeting that the VISSIM model is not solely being developed as a corridor model. The VISSIM model is to be used to assess the impact of the development on the following junctions: M62 J9; A49/A50/Hawleys Lane; A49/Junction 9 Retail Park; A49/A574/Sandy Lane West. This was agreed on 14/01/2020, as documented in 1.26-1.29 of the TAA and referenced in the Highways Statement of Common Ground. It therefore imperative that all approach arms of these junctions reflect base year conditions before forecasting and development impact assessment is carried out.
HTP post meeting note – The VISSIM has been provided at the request of the Council (and HE) to test development impact. This was known when the modelling scope was provided. There is nothing in the minutes of 14/01/20 or immediately following when agreeing the meeting note, that the VISSIM methodology (as set out in the scoping note) was to be updated/alterd from that provided in November 2019. The argument at the 2018 Inquiry was that stand-alone models were not sufficient to test development impact on the A49 corridor and therefore a VISSIM should have been provided. We have provided a VISSIM that is validated to journey times and turning counts; as all are aware there is no UK specification for validating to queue data (see point (v) below).
 - c. This model has been designed to provide a comparison that shows what the impact of the Peel Hall development traffic is and to assess if the Peel Hall mitigation proposed is sufficient.
- iv. FB explained that following HTP/MG's high level review of the two audit submissions, the following points are made:

- a. The only comments regarding the base VISSIM now are around the requirement from both parties for an updated LMVR to accompany the base model and that WSP comment on Sandy Lane West queue lengths:
- FB stated that we would provide an updated LMVR
 - FB set out that there is no UK standard for validation of queue lengths
 - LB added that anecdotal evidence should not be used to calibrate or validate a model
 - CW said that WBC were not requesting that the model be validated against queue lengths. CW stated that due to the relatively short journey time validation section on Sandy Lane West [*HTp note – this is because the Sandy Lane West link is relatively short*], it was important to examine the queueing as journey time validation could be achieved with a varying range of queue lengths. WBC/WSP have previously raised the issue that the journey time validation section is too short.
HTp post meeting note – we have previously responded to this. Journey time link is the same as the actual link length - circa 300m.
 - CW stated that the current base model predicts a queue of 700m in the AM peak between 0900-0915 and that this doesn't represent average AM peak conditions.
 - CW queried why the queueing profile on Sandy Lane West had changed in the last two releases of the base model.
 - HTp stated that the queue profile should be examined, not just the 15 minute sections, to understand the overall picture of the changes to the queue profile i.e. changes to the peak times throughout the hour. The vehicle flow and signal timings did not change in the base model.
 - LB stated that there wasn't a queue of 700m on Sandy Lane West, as Sandy Lane West is only 300m long so the remaining queue of 400m would actually be split onto the three roads that feed into Sandy Lane West which are not in the VISSIM model.
 - TL said that Sandy Lane West was a key link for WBC to assess the impact of the development. Queue lengths are a key comparator to assess the impact and as such it is important that the base model is realistic.
HTp post meeting note – In terms of Sandy Lane West there is no empirical data to confirm the queue lengths beyond the 300m link to the Sandy Lane/Cleveland Road/Cotswold Road roundabout.
 - HTp stated that this has always been a comparative exercise, to compare the reference case against the respective Peel Hall traffic scenario. This remains the case.
- b. There are no further issues raised with spreadsheet data input/output for the model. However a number of different points are noted with regard to flows, percentage increases and growth. All these are taken from the agreed Council WMMTM16 data, as per the methodology agreed.
Post meeting note from WBC - The forecasting spreadsheet was not issued with the latest VISSIM package, so no comment can be made on whether any issues still exists. The forecast outputs still seem different to what we would expect based on the WMMTM16 outputs.
Post meeting note from HTp – the forecasting spreadsheet was issued on 8th September. It should be noted that all were emailed to confirm this and that there had been no change to the forecasting spreadsheet from the previous package everyone had. It is not clear from the statement 'we would expect' what the empirical basis is.
- c. In terms of signal optimisation, it is agreed that the principle of signal optimisation is sound. Signal optimisation arises as a result of flow changes throughout the corridor in future years leading to signal timings being adapted. The optimisation provided is to give an indication of the level of network performance; not to be prescriptive to signal engineers in the future. FB further noted that the approach has been to optimise the reference case (i.e. no development traffic) before adding the Peel Hall flows as per the agreed methodology, so as to provide a direct comparison. MG have not optimised for Peel Hall traffic.
- d. FB confirmed it is expected that a response can be provided for all points raised in the audits, and that many are straight forward, for example Atkins' Table 2 and the flow data values of zero, as follows:

- The link coded as 'A49 SB to Winwick Link Rd' is provided as part of the committed mitigation and therefore would be expected to have values of zero in the 'background + committed traffic/ background + committed + Peel Hall traffic' columns
 - It should be noted that the columns referred to that have been taken from the model are not the reference case (background + committed traffic/ background + committed + Peel Hall traffic) for the comparisons, which is instead (background + committed traffic + committed mitigation/ background + committed + Peel Hall traffic + committed mitigation); and as such are not used for comparisons in any event
- v. MT commented that the review was very technical and the issue of queues was one for discussion between modellers. The Council consider that queue lengths are an important measure of assessing impact. DT stressed that the VISSIM is validated to journey times and that is what the comparison exercise should be to test the impact of Peel Hall traffic; this is as per the agreed modelling scoping report. After the meeting WBC commented that the comparison exercise presented in TAA Chapter 9 relies solely on queue data from the VISSIM model to address the impact of the development on Sandy Lane West. Queue data will be used to assess the impact of the development (as is also highlighted in the Highways Statement of Common Ground) and attention needs to be paid to it in the base model development as it will affect the forecast queues both DM and DS. Post meeting note from HTP - Chapter 9 of the TAA relied on the VISSIM report that provided journey time information as well as queue lengths at key junctions. The queue data is used as a comparison between the reference case and the respective Peel Hall traffic scenario. WSP confirmed only in late August that the July base model was acceptable, and by that time a change had already been made to the base model and work on the 8th September submission was being finalised. On this basis MG are using the time provided by the Inspector to further investigate the queue lengths on Sandy Lane West in the base model to accommodate WSP's latest audit comments from 8th September submission; it is noted that if the queues are reduced in the base model this will have the knock on effect of reducing queue lengths on the respective links in the future years. This does not detract from the principle of the comparison exercise between the reference case and the respective Peel Hall traffic scenario.
- vi. LW reiterated that Atkins require an updated LMVR to accompany the base model and that evidence needs to be provided in the forthcoming response to clarify the points raised regarding flows in their audit so that they can agree the future year traffic flow inputs. The next iteration of modelling should address mitigation requirements at the M62 Junction 9.
- vii. CW reiterated that they are interested in the level of demand for Sandy Lane West to enable development impact to be considered. CW stated that in line with the SATURN outputs presented in TN09, WBC will expect similar levels of growth between DM and DS demand on Sandy Lane West. CW said the issue of illogical forecast demand had been raised several times previously without response. HTP post meeting note – this is the same comment as (iv)(b) above. We have responded before that this aligns with WMMTM16 DM and DS scenarios. CW asked DT/FB if they were prepared to make any changes to the base model given the earlier discussion around validating to journey times. DT/FB said they would consider whether further changes to the base model should be made.
- viii. RH and MT agreed that they can provide their responses to further VISSIM submissions within the 3 week timetable.
- ix. RH asked if HTP would respond to the audits of yesterday afternoon within two weeks. FB replied that until a proper review of the audit reports that we had just received had been carried out over the next few days, it would not be possible to provide a response on a likely date for our responses to the audits. HTP post meeting note – We will submit a complete modelling package including audit responses by 30th October.
- x. GC asked for the various modelling runs presented to be condensed to provide a more concise package for audit. FB agreed that the package would be streamlined to the relevant comparison models required.

- xi. CW asked that the proposed mitigation at the A49/Cromwell Avenue arm be investigated in terms of lane designations within the model. FB agreed that this would be reviewed and a response provided.
- xii. Meeting closed.

Post meeting note by WBC - Finally notwithstanding the comment made by DT about the need for evidence to be prepared on the VISSIM model I hope that this will not be necessary and that agreed base and forecasting models can be provided in advance of the Inquiry deadlines.

HTp post meeting note - This is welcomed. DT did comment at the end of the meeting that he hoped that the need for witnesses to provide proofs of evidence on this would not be required.

Happy to discuss.

Kind regards,
Fiona

Fiona Bennett

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From: Taylor, Mike <mike.taylor@warrington.gov.uk>

Sent: 28 September 2020 11:26

To: Fiona Bennett <fiona.bennett@highgatetransportation.co.uk>; Heywood, Robert <Robert.Heywood@highwaysengland.co.uk>

Cc: Colin Griffiths <colin@satnam.co.uk>; dave.tighe@highgatetransportation.co.uk; Wright, Colin <Colin.Wright@wsp.com>; Hughes, Martha <Martha.Hughes@warrington.gov.uk>

Subject: RE: Peel Hall VISSIM Meeting Notes (24th September 2020)

Fiona,

Thank you for your email.

I would make the following points referenced against your bullet numbers:

iii. *DT thanked both parties for providing their audits at close of play yesterday as we were concerned that we would not receive them until next week.*

I am unsure as to why you thought there would be any delay in receiving a response in respect of the VISSIM modelling; as you know WBC/WSP have provided feedback and comments on all of the previous VISSIM packages promptly and in short time. Indeed the main bullet issues were provided to you on 14th September.

- a. *VISSIM is validated against journey times and turning counts, not queues. This was set out in the agreed scoping note.*

The scoping note states in 4.3 “Checks of flows and turning counts will be carried out using the GEH statistic and WebTAG flow criteria. Journey time data will be assessed using WebTAG guidance, as a minimum. Queues will be assessed visually.” The requirement to examine queues is clearly stated.

- b. *This VISSIM is a corridor model for the A49 and for testing the effect of the development on journey times and flows along this corridor.*

The VISSIM model is not solely being developed as a corridor model. The VISSIM model is to be used to assess the impact of the development on the following junctions:

M62 J9

A49/A50/Hawleys Lane

A49/Junction 9 Retail Park

A49/A574/Sandy Lane West

This was agreed on 14/01/2020, as documented in 1.26-1.29 of the TAA and referenced in the Highways Statement of Common Ground. It therefore imperative that all approach arms of these junctions reflect base year conditions before forecasting and development impact assessment is carried out.

- iv. *DT also stressed that if the ‘urgent’ meeting requested by MT on Day 1 of the Inquiry had taken place on Inquiry Day 2 as originally scheduled, many of the points raised in the audits would have been thrashed out.*

I disagree that many of the points would have been thrashed out. This is borne out by your point x where you cannot provide a response on a likely date for response to the audits.

- v. I would request that the following be added to point a. iii. after *LB added that anecdotal evidence should not be used to calibrate or validate a model:*

CW said that WBC were not requesting that the model be validated against queue lengths.

CW stated that due to the relatively short journey time validation section on Sandy Lane West, it was important to examine the queueing as journey time validation could be achieved with a varying range of queue lengths. WBC/WSP have previously raised the issue that the journey time validation section is too short.

CW stated that the current base model predicts a queue of 700m in the AM peak between 0900-0915 and that this doesn't represent average AM peak conditions.

CW queried why the queueing profile on Sandy Lane West had changed in the last two releases of the base model.

LB stated that there wasn't a queue of 700m on Sandy Lane West, as Sandy Lane West is only 300m long so the remaining queue of 400m would actually be split onto the three roads that feed into Sandy Lane West which are not in the VISSIM model.

TL said that Sandy Lane West was a key link for WBC to assess the impact of the development. Queue lengths are a key comparator to assess the impact and as such it is important that the base model is realistic.

- v. b. *There are no further issues raised with spreadsheet data input/output for the model. However a number of different points are noted with regard to flows, percentage increases and growth. All these are taken from the agreed Council WMMTM16 data, as per the methodology agreed.*

The forecasting spreadsheet was not issued with the latest VISSIM package, so no comment can be made on whether any issues still exists. The forecast outputs still seem different to what we would expect based on the WMMTM16 outputs.

- vi. *MT commented that the review was very technical and the issue of queues was one for discussion between modellers. The Council consider that queue lengths are an important measure of assessing impact. DT stressed that the VISSIM is validated to journey times and that is what the comparison exercise should be to test the impact of Peel Hall traffic; this is as per the agreed modelling scoping report.*

The comparison exercise presented in TAA Chapter 9 relies solely on queue data from the VISSIM model to address the impact of the development on Sandy Lane West. Queue data will be used to assess the impact of the development (as is also highlighted in the Highways Statement of Common Ground) and attention needs to be paid to it in the base model development as it will affect the forecast queues both DM and DS.

viii. I would request that the following be added after **CW reiterated that they are interested in the level of demand for Sandy Lane West to enable development impact to be considered.**

CW stated that in line with the SATURN outputs presented in TN09, WBC will expect similar levels of growth between DM and DS demand on Sandy Lane West. CW said the issue of illogical forecast demand had been raised several times previously without response.

CW asked DT/FB if they were prepared to make any changes to the base model given the earlier discussion around validating to journey times and how queue lengths were not to be considered in base model development. DT/FB said they would consider this and provide a response.

Finally notwithstanding the comment made by DT about the need for evidence to be prepared on the VISSIM model I hope that this will not be necessary and that agreed base and forecasting models can be provided in advance of the Inquiry deadlines.

Regards

Mike

Mike Taylor

Transport Development Control Team Leader

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From: Fiona Bennett [<mailto:fiona.bennett@highgatetransportation.co.uk>]

Sent: 24 September 2020 14:20

To: Heywood, Robert <Robert.Heywood@highwaysengland.co.uk>; Taylor, Mike <mike.taylor@warrington.gov.uk>

Cc: Colin Griffiths <colin@satnam.co.uk>; dave.tighe@highgatetransportation.co.uk

Subject: Peel Hall VISSIM Meeting Notes (24th September 2020)

Dear Rob and Mike,

Please find below our meeting note from the call earlier today.

- i. It was noted that DM was not present and we delayed the start of the meeting in case he was able to join.
- ii. RH opened the meeting and handed over to DT.
- iii. DT thanked both parties for providing their audits at close of play yesterday as we were concerned that we would not receive them until next week. DT confirmed that we will review in detail but have carried out a very quick high level review and make the following points:
 - a. VISSIM is validated against journey times and turning counts, not queues. This was set out in the agreed scoping note.
 - b. This VISSIM is a corridor model for the A49 and for testing the effect of the development on journey times and flows along this corridor.
 - c. This model has been designed to provide a comparison that shows what the impact of the Peel Hall development traffic is and to assess if the Peel Hall mitigation proposed is sufficient.
- iv. DT also stressed that if the 'urgent' meeting requested by MT on Day 1 of the Inquiry had taken place on Inquiry Day 2 as originally scheduled, many of the points raised in the audits would have been thrashed out.

- v. FB explained that following HTp/MG's high level review of the two audit submissions, the following points are made:
- a. The only comments regarding the base VISSIM now are around the requirement from both parties for an updated LMVR to accompany the base model and that WSP comment on Sandy Lane West queue lengths:
 - i. FB stated that we would provide an updated LMVR
 - ii. FB set out that there is no UK standard for validation of queue lengths and that this did not form part of the agreed modelling scope
 - iii. LB added that anecdotal evidence should not be used to calibrate or validate a model
 - b. There are no further issues raised with spreadsheet data input/output for the model. However a number of different points are noted with regard to flows, percentage increases and growth. All these are taken from the agreed Council WMMTM16 data, as per the methodology agreed.
 - c. In terms of signal optimisation, it is agreed that the principle of signal optimisation is sound. Signal optimisation arises as a result of flow changes throughout the corridor in future years leading to signal timings being adapted. The optimisation provided is to give an indication of the level of network performance; not to be prescriptive to signal engineers in the future. FB further noted that the approach has been to optimise the reference case (i.e. no development traffic) before adding the Peel Hall flows as per the agreed methodology, so as to provide a direct comparison. We have not optimised for Peel Hall traffic.
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 - The link coded as 'A49 SB to Winwick Link Rd' is provided as part of the committed mitigation and therefore would be expected to have values of zero in the 'background + committed traffic/ background + committed + Peel Hall traffic' columns
 - It should be noted that the columns referred to that have been taken from the model are not the reference case (background + committed traffic/ background + committed + Peel Hall traffic) for the comparisons, which is instead (background + committed traffic + committed mitigation/ background + committed + Peel Hall traffic + committed mitigation); and as such are not used for comparisons in any event
- vi. MT commented that the review was very technical and the issue of queues was one for discussion between modellers. The Council consider that queue lengths are an important measure of assessing impact. DT stressed that the VISSIM is validated to journey times and that is what the comparison exercise should be to test the impact of Peel Hall traffic; this is as per the agreed modelling scoping report.
- vii. LW reiterated that Atkins require an updated LMVR to accompany the base model and that evidence needs to be provided in the forthcoming response to clarify the points raised regarding flows in their audit so that they can agree the future year traffic flow inputs. The next iteration of modelling should address mitigation requirements at the M62 Junction 9.
- viii. CW reiterated that they are interested in the level of demand for Sandy Lane West to enable development impact to be considered.
- ix. RH and MT agreed that they can provide their responses within the 3 week timetable
- x. RH asked if HTp would respond to the audits of yesterday afternoon within two weeks. FB replied that until a proper review of the audit reports that we had just received had been carried out over the next few days, it would not be possible to provide a response on a likely date for our responses to the audits.
- xi. GC asked for the various modelling runs presented to be condensed to provide a more concise package for audit. FB agreed that the package would be streamlined to the relevant comparison models required.
- xii. CW asked that the proposed mitigation at the A49/Cromwell Avenue arm be investigated in terms of lane designations within the model. FB agreed that this would be reviewed and a response provided.
- xiii. Meeting closed.

Happy to discuss.

Kind regards,
Fiona

Fiona Bennett

Highgate *Transportation*

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Mob: 07595 892 217

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