



## Developments Affecting Trunk Roads and Special Roads

### Highways England Planning Response (HEPR 16-01)

### Formal Recommendation to an Application for Planning Permission

From: Alan Shepherd  
Divisional Director  
Network Delivery and Development  
Highways England.  
North West Region

To: Warrington Borough Council – Alison Gough

CC: [transportplanning@dft.gsi.gov.uk](mailto:transportplanning@dft.gsi.gov.uk)  
[growthandplanning@highwaysengland.co.uk](mailto:growthandplanning@highwaysengland.co.uk)

Council's Reference: 2019/34799

Referring to the planning application referenced above, dated 21<sup>st</sup> May 2019, for an outline application (all matters reserved except for access) comprising the construction of up to 287,909m<sup>2</sup> (gross internal) of employment floorspace (Use Class B8 and B1(a) offices) including change of use of Bradley Hall Farmhouse to B1 (a) office use (335m<sup>2</sup>) and associated servicing and infrastructure including car parking and vehicle and pedestrian circulation, alteration of existing access road into site including works to the M6 J20 dumbbell roundabouts and realignment of the existing A50 junction, noise mitigation, earthworks to create development platforms and bunds, landscaping including buffers, creation of drainage features, electrical substation, pumping station, and ecological works, accompanied by an Environmental Statement on land to the West of Junction 20 of the M6 Motorway, and Junction 9 of the M56 Motorway and to the south of, Grappenhall Lane/Cliff Lane (known as Six:56 Warrington) Grappenhall, Warrington, notice is hereby given that Highways England's formal recommendation is that we:

- a) ~~offer no objection;~~
- b) ~~recommend that conditions should be attached to any planning permission that may be granted (see Annex A – Highways England recommended Planning Conditions);~~

- c) recommend that planning permission not be granted for a specified period (see Annex A – further assessment required);
- d) recommend that the application be refused (see Annex A – Reasons for recommending Refusal).

Highways Act Section 175B is / is not relevant to this application.<sup>1</sup>

This represents Highways England formal recommendation and is copied to the Department for Transport as per the terms of our Licence.

Should you disagree with this recommendation you should consult the Secretary of State for Transport, as per the Town and Country Planning (Development Affecting Trunk Roads) Direction 2018, via [transportplanning@dft.gsi.gov.uk](mailto:transportplanning@dft.gsi.gov.uk).

<b>Signature:</b> 	<b>Date:</b> 16 <sup>th</sup> October 2019
<b>Name:</b> Benjamin Laverick	<b>Position:</b> Assistant Asset Manager
<b>Highways England:</b> 8th Floor, Piccadilly Gate, Store Street, Manchester, M1 2WD	

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<sup>1</sup> Where relevant, further information will be provided within Annex A.

**Annex A**    ~~Highways England recommended Planning Conditions /~~  
~~Highways England recommended further assessment required /~~  
~~Highways England recommended Refusal.~~

HIGHWAYS ENGLAND (“we”) has been appointed by the Secretary of State for Transport as strategic highway company under the provisions of the Infrastructure Act 2015 and is the highway authority, traffic authority and street authority for the Strategic Road Network (SRN). The SRN is a critical national asset and as such we work to ensure that it operates and is managed in the public interest, both in respect of current activities and needs as well as in providing effective stewardship of its long-term operation and integrity.

Further to previous correspondence in connection with the above site I write to provide our comments on the recently submitted document entitled “*P/2019/34799 - Highways England Post Submission Note 1*” which provides details of additional modelling of M6 J20 in LinSig as well as supporting commentary with regards to the inputs to the model and modelled years.

On 10th June 2019 we wrote to you with our review of Part 2 of the Environmental Statement – Traffic and Transport which includes appendices which incorporate both a Transport Assessment and Travel Plan. Whilst the reports were generally robust, key issues with regards to the work and the conclusions drawn from it were highlighted. As a summary, the key issues highlighted included:

- Concern over the lack of assessment of the cumulative impact of the Warrington Local Plan developments
- Issues with regards to the design of the proposed mitigation
- Issues with regards to the assessments based on the apparently flawed WMMTM strategic traffic model
- A failure to use the appropriate design year of 2031 within the traffic modelling of interest to Highways England
- Issues with regards to the base and proposed modelling for M6 J20
- A failure to adequately identify and propose mitigation for the impact of the development on the merges and diverges at M6 J20

Following the above review, discussions took place between Highways England and the developer where the issues raised in the review were discussed. During these discussions it was agreed that the design year should be 2029 which is 10 years after application, an approach consistent with that taken for the nearby Stobart application. The use of the Warrington Multi Modal Traffic Model (WMMTM) was also discussed in the context of the assessment of M6 J20 and it was noted given the manual assignment of development traffic and the use of a junction count to create the base

model that re-running the WMMTM would likely lead to little in the way of a material change to the assessment of this location in opening year.

### **This Review**

This review is focused on the letter and supporting LinSig models supplied Highways England on 12<sup>th</sup> September as “P/2019/34799 - Highways England Post Submission Note 1”. This document focuses on reporting upon a revised LinSig model and revised Mitigation Drawing with both amendments looking to address Highways England’s comments under previous review. It also includes a brief discussion on Merge/Diverge assessments.

### **Base LinSig Modelling**

It was noted in our last review that the M6 J20 has been modelled in LinSig along with the adjacent junctions. Despite the limitations in the use of LinSig for a network primarily under priority control, it is felt that the submitted base model could be made to be sufficiently robust that it could be used to draw broad conclusions as to the appropriateness of the proposed mitigation.

From a review of the supplied Morning and Evening Peak models, it can be seen that the comments with regards to the coding of the model have generally been addressed. In addition, there is an overall improvement in the models reported queues matching the observed. Whilst there are still some outlier values, the fact that LinSig is not necessarily suited to modelling priority junctions means that the model can be regarded as robust at a broad level noting previous reservations with regards to the use of this software.

### **Proposed Mitigation LinSig Modelling**

A large number of comments were made on the proposed mitigation modelling in the last review. Whilst the developer has stated that either the design or model has been updated to account for these comments, this process has introduced a number of new issues which require addressing. These are set out below:

- Arm J1:1 is modelled with both the nearside and offside lanes accommodating the movement to the downstream middle of three lanes. The drawing shows only the offside feeding the downstream middle lane.
- Arm J1:3 there appear to be significant differences in the maximum flow whilst giving-way values used between the base and proposed models without obvious justification.

- Arm J1:4 has a weave from the offside lane to the downstream middle and nearside lanes. This reflects the base but is not needed to accommodate the movement from M6-M6 due to the provision of a connector from the middle to downstream middle and nearside lanes and should be removed. The lane markings on this part of the network should also be reviewed.
- Arm J1:9 is modelled with both the nearside and middle lanes feeding the nearside immediately downstream and the offside lane feeding the middle and offside downstream lanes. The drawing shows a continuation of all three lanes
- Arm J1:10 the model shows the middle lane feeding the nearside and middle lanes of the downstream circulatory whereas the drawing shows this lane feeding the offside exit lane and nearside downstream circulatory lane
- Arm J2:1 is not marked to allow the movement from offside to both downstream lanes on the circulatory although the model allows this.
- Arm J2:2 is modelled and drawn with the offside lane being right only but the design allows for it to also be left.
- Arm J2:3 is drawn with a left only and right only but the nearside is actually left and right.

In addition, Given the nature of traffic flows on a roundabout, all lanes should be coded as being 'nearside' unless there is strong justification not to do so. Corrections should be made where this is not the case in the model. Highways England would welcome the supply of geometric take-offs in order to accurately check the coding of the saturation flows in the revised model.

Whilst deficiencies have been identified with regards to the base and proposed modelling, the following comments are made with regards to the operational assessment on a without prejudice basis:

- The model cannot accurately reflect the impact of the merges between the two junctions and we are concerned that blocking back from these merges will occur with knock-on consequences for the operation of M6 J20, including the northbound off-slip in particular; and
- There are a number of locations where queuing on the circulatory carriageway is more than can be accommodated without blocking of the upstream exit. This could lead to an overestimation of the capacity of the network. For example, this occurs on J1:5-2, J1:7-2 and J2:8-1

We therefore have some serious reservations about the modelling and the conclusions drawn from it.

### **Merge/Diverge Assessment**

As noted in our previous review, merge and diverge analysis has been provided at 2022 and 2032. It was clear from our review as set out in our previous correspondence that the development increases the required standard of arrangement for the northbound on-slip. Whilst Curtins contest this in their latest note, no supporting analysis is provided for review. We would welcome the opportunity to review the analysis again in the context of Curtins comments should they provide the analysis.

### **Summary & Recommendations**

This review has looked at the Curtins letter entitled “*P/2019/34799 - Highways England Post Submission Note 1*” and the supporting modelling work in LinSig. As has been set out, the quality of the base modelling of M6 J20 has improved significantly and it can now be taken that this base model provides an adequate platform for the assessment of the proposed scheme noting previous reservations about the choice of software.

However, there are still a number of issues with the modelling of the proposed mitigation and as we have some serious reservations, we also have concerns with regards to the conclusions drawn from modelling. We therefore request that the model is updated in line with comments.

As a summary, the key issues highlighted previously and within this review include:

- Concern over the lack of assessment of the cumulative impact of the Warrington Local Plan developments;
- Issues with regards to the design and modelling of the proposed mitigation; and
- A failure to adequately identify and propose mitigation for the impact of the development on the merges and diverges at M6 J20.

**Consequently, to allow the applicant to address the issues identified, provide the required information and for Highways England to review the information, Highways England formally recommends that this application not be determined before 14<sup>th</sup> February 2020.**

This response represents our formal recommendation with regard to planning application 2019/34799 and has been prepared by Benjamin Laverick, the Assistant Asset Manager for Cheshire and Warrington within Highways England.