

MEMORANDUM



From:	Chief Officer, Environment & Technical	To:	Chief Officer Planning & Regulatory
		FAO:	Matthew Phillips
Our Ref:	ET/DC/MM/P/2020/0335	Your Ref:	P/2020/0335
Date:	22 nd March 2021		

Glyndwr University, Plas Coch, Wrexham
Removal of Condition 11 (Highway Improvement) of planning permission P/2018/0671

Further to your email dated 12/2/2021 in respect of the above, I comment as follows:-

Condition 11 states that *"Prior to the first occupation of any part of the development hereby approved, carriageway alignment improvements shall be implemented at the junction of Crispin Lane and Mold Road in accordance with a scheme which has been submitted to and approved in writing by the Local Planning Authority."*

This condition arose from concerns that increased delays at the Plas Coch/University access junction would cause a redistribution of traffic, with more traffic using the Crispin Lane/Mold Road junction.

A technical note has been submitted, proposing a methodology to assess the level of development at which sufficient congestion would be created on the Plas Coch Road/University access roundabout that traffic would be displaced to use the Crispin Road/Mold Road junction. The results of such an analysis would be used to propose a level of development at which Condition 11 would become necessary and allow an amendment of the Condition so that it is triggered when that level of development is reached.

The Plas Coch Road/University access roundabout has been re modelled in Junctions 9, this time adjusted so that the observed queue lengths are represented. It is agreed that the revised junction model provides a more accurate and robust model.

The modelling shows that in 2018 all arms of the Plas Coch Road/University access roundabout were close to or over capacity in the PM peak hour, with 2 arms having an RFC above 1. In the AM peak the RFC of 0.882 on Plas Coch Road North is slightly above the level generally deemed acceptable, while the remaining arms are operating within capacity.

The proposed methodology of adding development traffic in 10% increments may have been a useful exercise had the Plas Coch Roundabout not already been over capacity in the PM peak. As the junction has already reached capacity, it is likely that problems will occur and drivers that can chose an alternative route will begin to do so. Any additional development traffic will exacerbate the issues.

Adding traffic to a Junctions 9 model that is at capacity generally causes the model to report exponentially increasing queue lengths that do not reflect reality or provide any useful information.

Conclusion

The Junctions 9 modelling of the Plas Coch/University access junction is robust and shows queue lengths that represent those observed on site.

As the modelling shows that the junction is already operating over capacity in the PM peak, I would not expect the proposed exercise of adding development incrementally to produce meaningful results.

It is likely that some rerouting of traffic is already occurring and that any additional traffic will exacerbate this. Therefore, there is unlikely to be a theoretical solution that would provide a robust assessment to determine a meaningful trigger point beyond the need to improve the junction before any beneficial occupation of the development takes place.

A handwritten signature in black ink, appearing to be 'R. K.', on a light blue background.

Chief Officer, Environment & Technical