

MEMORANDUM



From:	Chief Officer, Environment & Technical	To:	Chief Officer Economy & Planning
		FAO:	Philip Mullineux
Our Ref:	ET/DC/AO/P/2023/0497	Your Ref:	P/2023/0497
Date:	07/01/2026		

TOWN AND COUNTRY PLANNING ACT 1990

Land North of Bryn Lane, Wrexham Industrial Estate. Hybrid application seeking: Full planning permission for the erection of buildings for class. B1, B2 & B8 use and formation of vehicular access and outline planning permission for the erection of buildings for class B1, B2 and B8 use and retail, drive thru, hotel and petrol filling station classes A1, A3, C1 and sui generis and associated infrastructure (all matters reserved). Application Ref: 2023/0497

The following comments are in response to the Additional Information submitted by the applicant in November 2025.

The previous Highway Consultation Response (04/09/2025) identified a number of further pieces of information, data or revised assumptions that would be required to enable a decision to be reached. This additional information addresses some of these points, but others remain outstanding. For clarity, the LHA comments below follow the order and detail of the points raised in the previous LHA response (text from previous response is in italics for clarity).

Previous Comment: Phase 1 of the development would be accessed from the proposed new junction on Bryn Lane, with Phase 2 being developed from the amended existing roundabout. It is not clear in the application whether both site accesses form part of the detailed element of the application or just the Bryn Lane access. This should be clarified together with all/any elements of the proposals (including site layouts) that form the detailed planning application.

This latest information confirms that both access junctions are included in the detail element of the hybrid application. **This matter is now resolved.**

Previous Comment: Site Access & Junction Design

A Stage 1 Road Safety Audit (RSA) is now included in the TAA of the site access proposals. This RSA raises a number of highly significant safety concerns. However, the TAA does not include any designer's response to the RSA so it is not clear if, or where, the applicant plans to update the proposals in response to the RSA.

This latest information now includes the Designers Response to the RSA contained in Appendix TN1. The LHA has reviewed the Designers Response and comments as follows:

- Problem 2.3.1: Excessive Vehicular Encroachment into adjacent lanes and / or footways. The DR states that this problem is accepted, but then states that the design will be updated at S-278 Stage. For the avoidance of any doubt, this will not be acceptable. The encroachment shown on the designs was significant and represented an unacceptable road safety issue. This application must demonstrate that safe access is achievable - this is

fundamental to the application process. **This cannot be deferred until a later stage. A safe layout must be demonstrated before permission can be granted.**

- **Problem 2.3.2:** Width of Right turn lane may result in right turning vehicles encroaching into adjacent traffic lane: The DR states that this problem is not accepted by the designers. It is stated "this would only apply to service vehicles". If there is potential for *any* vehicle to encroach into adjacent lanes this must be addressed. The DR states this is only service vehicles, on its own that would still be unacceptable, but in practice, any vehicle arriving from the south on Bryn Lane would likely use this junction to access the site. This junction could therefore be used by any vehicle, not just service vehicles. The DR states this junction is designed to DMRB standards, but **this should be demonstrated with swept-paths for 16.5m articulated HGVs.**
- **Problem 2.4.1:** Width of Refuge Island may not be wide enough to accommodate cyclists: The DR states that this problem is not accepted by the designers. The DR states that the refuge is for pedestrians only with cyclists being on Bryn Lane. The LHA take the view that there is the possibility of cyclists using this crossing and that it would need to be designed to accommodate cyclists to ensure the wider aspirations of the applicant in terms of sustainable transport are enabled. **This refuge island should therefore be redesigned.**
- **Problem 2.4.3 and 2.4.4:** These relate to missing tactile paving detail and are both Accepted by the DR. The DR however states this will be addressed at S-278 stage. **Given the drawings on which this detail is shown will form part of the planning permission and for the avoidance of any doubt going forward, the LHA will require this detail to be correctly shown at this stage.**

This comment therefore requires further action from the applicant.

Previous Comment: *Design of Revised Industrial Estate Road / Bryn Lane / Ash Road North / Abenbury Way roundabout: A marked-up dimension drawing, as requested previously, is required to enable this and other checks to be undertaken. Swept-path drawings of all arms were previously requested, but have also not yet been provided. Confirmation of the assumed vehicle speed used in the swept-path assessment is also required. Details of the camber and cross-fall of the circulatory carriageway will also be required.*

A marked-up drawing showing some dimensions has been provided, but this does not provide the distance between entry arms. Confirmation of the assumed vehicle speed used in the swept-path assessment has also not been provided. Details of the camber and cross-fall of the circulatory carriageway also have still to be provided. **This detail should be provided by the applicant.** Until this detail is provided the suitability / acceptability of the junction proposals cannot be confirmed.

Previous Comment: *The proposed modifications appear to result in a realignment of the central reservation on the Industrial Estate Road approach, with the splitter / refuge island not shown as connected/adjoining to the concrete central reserve. This proposed drawing is required to be updated to show this missing detail. It is also requested that this or a version of this be annotated to show key dimensions as input into the Junctions10 model.*

This detail has been addressed and the information provided. No further action from the applicant in this respect is needed.

Previous Comment: *The proposed Bryn Lane access does not take account of the existing Bryn Business Centre Access, which is situated to the immediate south-west of the proposed access. The proposed access and junction marking would result in vehicles turning right into the existing Business Centre over the ghost island hatching. This is not acceptable. The new junction layout should be designed to accommodate this existing access. This must be addressed.*

This point does not appear to have been responded to. This detail is still required to be provided.

Modelling and Trip Generation

Previous Comment: *The TAA now includes B2 & B8 trip rates as previously recommended by the LHA. All other trip rates were previously agreed following the submission of the first TA. The proposed area of the site which is open to B8/Ev Charging / Lorry Park is assessed using B8. Evidence will need to be provided on why this is appropriate, given this appears to not be immediately applicable.*

This detail has been addressed and the information provided. No further action from the applicant in this respect is needed.

Previous Comment: *Trip Distribution: No information has been provided on trip distribution other than flow diagrams. The assumptions that underpin the distribution pattern used by the applicant will need to be provided and reviewed. Previous communication with the applicant suggested the use of the same distribution pattern for B2 / B8 as used in the adjacent Kingsmoor application. This will need to be confirmed and supporting information provided.*

This point does not appear to have been responded to. This detail is still required to be provided.

Previous Comment: *Committed Development: No detail of committed development is included in the TAA document, however traffic flow diagrams in the appendix of the document include committed flows. No narrative is provided in the TAA as to where these flows are taken from or how these developments have been treated.*

This detail has now been provided.

Previous Comment: *As in the original Transport Assessment, no traffic modelling is undertaken for any junctions other than the two site access junctions. The LHA have previously requested the assessment coverage be expanded to include the roundabout junctions with the A534. The LHA will require assessment of the A534 / Borrass Hall Lane / Wrexham Road roundabout and the A534 / A5156 'Golf Club' roundabout.*

Industrial Estate / Bryn Lane Junction

The assessment of the existing Bryn Lane / Industrial Estate roundabout junction is presented for the 2030 scenarios, with and without committed development.

The LHA would request confirmation on whether this model has been validated. The results shown for the 2030 base scenarios, appear not to fully reflect current (2025/26) operational conditions, particularly in the PM peak. This is a key point and has a bearing on all future modelled scenarios.

Notwithstanding the above, it is noted that in the 2037 with-development scenario, the roundabout is predicted to be significantly over-capacity, with an RFC on Ash Road of 1.06 (0.85 being the theoretical capacity threshold) and an RFC of 0.96 on the Industrial Estate Road. The operation of Ash Road is particularly problematic as this has a predicted queue of 43 vehicles, comparable to a queue length of nearly 250m. However, it is noted that these results assume all committed development traffic as well as the application generated traffic. The note acknowledges that the junction is over-capacity for 2037 and presents the results of a scenario that does not include KSS2 traffic. The note suggests that this results in the junction working within capacity. However, RFCs in excess of 0.85 are still predicted.

Therefore, to help the LHA understand what impact this application will have, separate to the committed developments, it is requested that a further scenario be assessed for this and the other two roundabouts, assuming 2030 / 2037 with application-development and background traffic growth (i.e. without committed-developments).

Notwithstanding the above request, what is clear from the results in Table 1.3 is that the introduction of Phase 2 of the development results in the operational capacity thresholds at this junction being exceeded. For instance, in the 2030 Phase 1 scenario in the PM peak, Ash Road North operates at 0.79 RFC with a queue of 4 vehicles. In 2037 with Phase 2 this approach is predicted to operate at an RFC of 1.06 with a queue of 43 vehicles. The only change in this scenario is the addition of Phase 2 development traffic. A similar pattern is shown in the AM peak for the Industrial Estate Road approach.

The applicant's note goes on to suggest in Table 1.4 that if KSS2 were not to go ahead, the junction would work within capacity. This is not correct. In the sensitivity test results, key arms are predicted to operate in excess of 0.85 RFC. But also, the results in Table 1.3 show (as noted above) that the application traffic is the cause of the operational issues in 2037, not traffic associated with KSS2.

This application will therefore be required to develop further mitigation to improve the operation of this key local junction with timing of these improvements linked to the phasing of the application scheme. This is why the LHA have requested the additional assessment scenario referenced above, to help understand the specific impact of the application traffic.

A534 / Industrial Estate Road / Sandy Lane / Borrass Hall Lane Roundabout Junction

The LHA request confirmation on whether this model has been validated. The results shown for the 2030 base scenarios, appear to not fully reflect current (2025/26) operational conditions, particularly in the PM peak. This is a key point and has a bearing on all future modelled scenarios.

For this junction, the results in Tables 1.5 and 1.6 suggest that the junction will already be over capacity before the application site traffic is added. However, as with the junction above, the application traffic from Phase 2 has a clear impact. In the AM peak Wrexham Road in 2030 with Phase 1 has a predicted queue of 9 vehicles. In 2037 with the introduction of Phase 2 the queue length increases by over five-times to 47 vehicles. The Industrial Estate arm in the PM peak increases from a queue of 79 vehicles to over 180 vehicles as a result of Phase 2 (this queue length would occupy approximately half of the link length between the two roundabouts).

The applicant's note goes on to present a mitigation option for this junction, involving the partial signalisation of the roundabout, with the A534 eastbound and Industrial Estate Road entries to be signalised. Whilst the results presented in the note appear acceptable, these do not show the operational results of the internal stoplines. A review of the model output in the provided appendices, indicates that in a number of scenarios / assessment years, the queuing on the internal arms would be significant and of sufficient length to block the upstream entries and circulatory carriageway. This is a common problem with signalised roundabouts. The model also identifies that a significant queue would build on the un-signalised circulatory. This suggests the model set-up is not accurate and should be reviewed.

As presented, the mitigation of this junction is not acceptable to the LHA. For information, should an acceptable improvement be agreed at this location, The LHA will require a formal drawing of this proposal, annotated to show lane widths and other key geometric dimensions, together with signal pole / head location and the location of the controller and a safe maintenance location. The LHA will also require swept-path assessment of this proposal and a Stage 1/2 Road Safety Audit to be undertaken.

A534 / A5156 / Stryt Holt Roundabout

The LHA request confirmation on whether this model has been validated. The results shown for the 2030 base scenarios, appear to not fully reflect current (2025/26) operational conditions, particularly in the PM peak. This is a key point and has a bearing on all future modelled scenarios.

Table 1.10 presents the results of the assessment of this junction. This shows the PM peak operation over capacity with the application traffic assumed. An RFC of 1.0 is predicted on the A534 approach in the PM peak. The note states that despite this that the junction would operate within capacity for both phases 1 and 2. The LHA would disagree with this conclusion.

Despite suggesting the junction is operating within capacity, the note identifies a mitigation scheme for this location, with this consisting of the addition of a 3rd circulatory lane. With this improvement in place, the roundabout operates just within capacity thresholds. However, from review of the model output, this improvement in the model appears to be represented by an increase on the entry width on the A534 arm of only 2.7m, which suggests that the original width per lane has been reduced to accommodate three lanes (the current two-lane entry is c.9.3m, with the proposed three-lane entry at 12m).

The LHA will therefore require a formal drawing of this proposal, annotated to show lane widths and other key geometric dimensions. The LHA will also require swept-path assessment of this proposal and a Stage 1/ 2 Road Safety Audit to be undertaken.

***Previous Comment:** Junction Model Set up – Bryn Lane / Industrial Estate Road / Site Access Roundabout: Comparing the Junctions10 output for the existing and with-scheme scenarios appears to indicate anomalies in the model set-up. Whilst significant changes are proposed to this junction and this therefore will be reflected in the geometric input data, elements of the junction and approach arms that are not changing, appear to differ between the existing and with-scheme modelled scenarios. For instance the approach road half widths on all approaches change, yet no changes are proposed to any approach arms. For the Industrial Estate Road approach in particular, it is unclear why the approach road half width is increasing given the dual carriageway width remains unchanged. It is also unclear why if given the approach width is suggested to be increased and the entry width reduced, the flare length increases.*

This point does not appear to have been responded to. This detail is still required to be provided.

***Previous Comment:** A number of Technical Notes have been submitted to present the applicant's views on contribution to the various improvements identified across the wider transport network.*

Detailed response on these notes cannot be provided until the points raised earlier in this response have been addressed, as these are likely to affect the inputs into this process. Notwithstanding this, the LHA would provide the following general comments:

- *The technical notes provided lack the necessary detail to support the process. Several assumptions are made but with no detailed evidence is provided to support the conclusions made.*
- *Cost contributions have been noted as being based on 'Professional Judgement' with no detail included to support how these costs have been arrived at.*
- *Conclusions are made in relation to no improvements being necessary for Phase 1. It is unclear how this conclusion has been reached as the TAA only presents assessments of a combined Phase 1 and 2 scenario.*

This point has not been fully responded to. Detail is still required to be provided.

Summary

The LHA has reviewed the additional information that has been provided. Whilst a number of previously raised comments have been addressed, a number of points remain outstanding and not responded to. At this time the LHA cannot support the application.

RWE Edwards

Contracts & Engineering Manager

On behalf of the Chief Officer, Environment & Technical