

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:	04/09/2025		

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 Transport Assessment Addendum (TAA) submitted in March 2024 in response to initial LHA comments and also subsequent Transport notes submitted by the applicant in March, April and October 2024.

Transport Assessment Addendum

As requested previously by the Local Highway Authority (LHA) the TAA presents a split between the B1c, B2 & B8 uses as requested. These site uses are more defined than previously presented in the original TA and are as follows:

- Phase 1 (Detailed Application) – Total 61,423 sqm of employment use (B2 24,569sqm / B8 36,854sqm);
 - 592 car parking spaces, 138 HGV trailer spaces and HGV lorry spaces.
- Phase 2 (Outline Application)- Total 45,510sqm of employment use (B2 18,204sqm / B8 27,306sqm);
 - Hotel: 100-room hotel, with a floor area of approximately 3,600 sqm GEA;
 - Drive ‘thru’: 1,106 sqm GEA A3 uses;
 - Local Centre: 2,450sqm;
 - 8,994 sqm GEA sui generis / lorry park / EV charging (worst case assumes it is B8);
 - 908 car parking spaces and up to 138 HGV trailer spaces and HGV lorry spaces

In terms of phasing, 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.**

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.

Industrial Estate Road / Bryn Lane / Ash Road North / Abenbury Way roundabout: This existing roundabout is proposed to be amended via the addition of a new fifth-arm and subsequent changes to the circulatory carriageway and wider layout. TOUCAN crossings are proposed on the site access arm and Bryn Lane Arm. However, these are some distance from the roundabout itself. It is recommended these are positioned as close to the likely desire lines as practicable.

As is immediately apparent from the swept-path drawings contained in the TAA, the RSA identifies a number of critical and unacceptable swept-path issues that would result from the changes to the roundabout layout, along with pedestrian desire line issues and tactile paving issues. These swept-path drawings demonstrate that HGVs cannot negotiate the modified roundabout safely and would result in significant safety risks, including the potential for head-on collisions. These safety issues have also been identified in the RSA, yet no designer's response has been prepared in this regard.

No dimension drawings have been provided despite being previously requested. The LHA are concerned that the introduction of the fifth-arm results in sub-standard spacing between entry arms and may result in a layout that encourages vehicle tip-over due to the tight radius involved in turning from the Industrial Estate Road into the new fifth-arm. **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.**

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. As previously requested, the applicant has submitted a drawing of the proposed amendments showing the existing arrangement overlaid with the proposed. However, the existing central reserve and existing refuge / splitter island on the Industrial Estate Road Approach are not shown on this overlay. **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.**

It appears that the roundabout scheme includes a modification to the Abenbury Way approach. It appears that land outside of the adopted highway is included to achieve this improvement. **A more detailed drawing will be required to clearly demonstrate if third-party land is required.** This proposed modification would also introduce a significant level difference on the back of footway to the adjacent third-party land. **Details will therefore be required to demonstrate how this level difference will be managed.**

Bryn Lane Site Access: The RSA flags significant tracking and pedestrian issues with the site access. Information on how this has been addressed and swept-path drawings for the tracking of HGVs into and out of the site access, including the right turn lane, should be provided.

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.**

Public Transport Access: No improvements to existing bus services or infrastructure are proposed in terms of public transport.

Active Travel Access: New signalised crossings are proposed at the roundabout site access arm and on Bryn Lane. A pedestrian island is provided across Bryn Lane at the secondary access point. A footpath is proposed along the route of the existing public right of way between Bryn Lane and Francis Lane. That these are the extent of Active Travel proposals for a development of this size

and scale is disappointing and not acceptable. The Council's Active Travel officer – Gwen Thomas has been consulted and will provide a separate response detailing requirements.

Modelling and Trip Generation

Trip Generation: 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.

For the Local Centre, Drive Thru and PFS uses the applicant assumes that 10% of trips will be passby and 90% diverted. This is accepted on the basis of the floor areas included in the assessment at present (6,100m² of flexible floorspace comprising A1, A3, C1 use). However, the assessment at present does not take account of the full 16,100m² of flexible space being built out. An assessment of this was previously requested. With the increase in retail space that this could generate it is highly likely that a significant proportion of new trips would be generated. **The applicant should review the proportion of new, passby and diverted trips when this assessment is undertaken.**

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.**

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.

Traffic Impact Assessment

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. The specific committed developments identified in these are as listed below.

- Pacific Road
- Ash Road
- KSS2
- Kingsmoor

No narrative is provided in the TAA as to where these flows are taken from or how these developments have been treated. **This detail must be provided.**

It is also noted that the TAA does not include specific Committed Developments requested by included by the LHA in their initial response. Namely:

- Application P/2023/0230 on Bryn Lane
- The Net World Sports development on Bryn lane - this would not have been running at capacity at time of surveys for this development
- The received application for increase at New World Sports.

Model Scope: 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. Given the concerns raised on accuracy of the junction modelling in later sections of this response, **the LHA will require assessment of the A534 / Borrass Hall Lane / Wrexham Road roundabout and the A534 / A5156 'Golf Club' roundabout.**

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. **To help reconcile these issues, a drawing annotated to show the geometric inputs for both the existing and proposed roundabouts, must be provided.**

Modelling Scenarios & Conclusions: The following scenarios are modelled.

- 2023 Base
- 2030 Base
- 2030 Base + Committed Development
- 2030 Base + Committed Development + Phase 1 Development
- 2030 Base + Committed Development + Phase 1 & 2 Development
- As above for year 2037

For the Industrial Estate Road / Bryn Lane / Ash Road North / Abenbury Way roundabout, the TAA concludes that the roundabout would “*operate well within capacity*”. This statement does not correlate with the results presented in Table 5.17 which show RFC (Ratio of Flow to Capacity) values in excess of 0.85, which is taken as the capacity threshold. In both 2030 and 2037 the Industrial Estate Road arm is shown with RFCs of up to 0.94, this over-capacity operation appears to be a direct result of the development’s introduction. The points raised above relating to model geometric coding may change these results, but it is noted that at this level of operation further mitigation would be required.

Off-site Mitigation

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.

Summary

The LHA has reviewed the Transport Assessment Addendum and associated information and has identified a number of points that will require clarification, explanation or further information to be provided. These are summarised as follows:

- 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 identified.

- As is immediately apparent from the swept-path drawings contained in the TAA, a number of critical and unacceptable safety issues are shown in the swept-path drawings. These safety issues have also been identified in the applicant's RSA.
- 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.
- A marked-up dimension drawing, as requested previously, of the amended roundabout junction (Industrial Estate Road / Bryn Lane) is required.
- Swept-path drawings of all arms of the roundabout junction of Industrial Estate Road / Bryn Lane were previously requested, but have not yet been provided and must be.
- Confirmation of the assumed vehicle speed used in the swept-path assessment provided is also required.
- Details of the camber and cross-fall of the circulatory carriageway will also be required for the roundabout junction of Industrial Estate Road / Bryn Lane.
- As previously requested, the applicant has submitted a drawing of the proposed amendments at the roundabout junction of Industrial Estate Road / Bryn Lane, showing the existing arrangement overlaid with the proposed. However, the existing central reserve and existing refuge / splitter island on the Industrial Estate Road Approach are not shown on this overlay. 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.
- It appears that land outside of the adopted highway is included to achieve the proposed improvement to the roundabout junction of Industrial Estate Road / Bryn Lane. A more detailed drawing will be required to clearly demonstrate if third-party land is required. This proposed modification would introduce a significant level difference on the back of footway. Details will be required to demonstrate how this level difference will be managed.
- The proposed access and junction marking on Bryn Lane 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.
- The assessment at present does not take account of the full 16,100m² of flexible space being built out. An assessment of this was previously requested. With the increase in retail space that this could generate it is highly likely that a significant proportion of new trips would be generated. The applicant should review the proportion of new, passby and diverted trips when this assessment is undertaken.
- 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.
- Details of how the committed development flows have been derived and how applied.
- The LHA will require assessment of the A534 / Borrass Hall Lane / Wrexham Road roundabout and the A534 / A5156 'Golf Club' roundabout.
- Assessment of Phase 1 will be required to identify if improvements / mitigation is required in this initial phase.

RWEdwards

Contracts & Engineering Manager

On behalf of the Chief Officer, Environment & Technical