

Maelor Foods Ltd

**REMOVAL OF CONDITION
MAELOR FOODS, PICKHILL LANE**

Transport Report

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Primary Author	Elliot Read	Initialled:	ER
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Contributor	Elliot Read	Initialled:	ER
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Review By	Paul Whitaker	Initialled:	PW
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1 INTRODUCTION

1.1 Background

1.1.1 Vectos has been appointed by Maelor Foods Ltd to provide a Transport Report to accompany a removal of condition application relating to a planning permission granted in 2015 for a poultry processing facility on Pickhill Lane in Wrexham.

1.1.2 In March 2015, the site received planning permission (Ref: P/2014/0781) from Wrexham County Borough Council (WCBC) for the change of use from a cheese cutting and packing facility to a poultry processing facility. One of the planning conditions (No. 14 in the Decision Notice) associated with the planning permission stated that no more than 400,000 birds shall be processed each week at the site. This was deemed to be necessary to protect the amenities of the occupiers of nearby properties. This condition has also been referenced in a number of subsequent consents (Ref: P/2015/0838 and P/2017/0165).

1.2 Market Demand

1.2.1 At the time of the original planning permission, the condition relating to 400,000 birds being processed each week was in line with the predicted operation of Maelor Foods, based on the demand of 350,000 birds per week experienced at their Salisbury Poultry (a related party company) site.

1.2.2 Since the planning permission, it is understood that there has been an increase in total market demand across the UK with a general desire to provide more locally sourced, British produce rather than rely on imports. This general increase in market demand has been experienced by Salisbury Poultry meaning that the Maelor Foods site on Pickhill Lane would no longer be able to supply the required demand which has risen to 700,000 birds per week. As such, there would be shortfall as a result of the condition relating to the number of birds that can be processed each week.

1.2.3 In addition, in response to growing market demand, there is a trend whereby farms supplying sites like Maelor Foods are increasing capacity and production, including a number within 30 miles of Maelor Foods. The condition limiting the number of birds that can be processed each week means that Maelor Foods are not able to accommodate the additional birds from local farms. As such, this will result in local farms having to transport birds greater distances on the network to alternative poultry processing facilities further afield.

1.2.4 It should be noted that the Maelor Foods site has the infrastructure in place to be able to process a greater number of birds per week to meet existing demand whilst still maintaining flexibility for future growth. However, it is the existing condition that is preventing this level of operation due to the perceived impact on amenities of the occupiers of nearby properties.

1.2.5 Maelor Foods are seeking to remove the existing condition which would allow the site on Pickhill Lane to increase the number of birds being processed per week. Based on information provided by Maelor Foods, the site could practically operate with 1,000,000 birds processed each week, based on existing infrastructure and current market demand levels. Without the required level of flexibility to respond to changing market trends, it is possible that the operation of the site (in terms of viability) would need to be reviewed.

1.3 Report Structure

1.3.1 This Transport Report builds upon information previously presented as part of the original planning application and seeks to remove the existing condition to provide flexibility for future operations at the site. The report is structured with the following sections:

- Baseline Data;
- Change in Traffic Impact; and
- Conclusion.

2 BASELINE DATA

2.1 Site Location

- 2.1.1 The site is accessed from Pickhill Lane via the A525 which is a key link into Wrexham whilst also providing access to the wider network. It is characterised as a largely rural route with limited frontage activity.
- 2.1.2 The facility is an established industrial site and has previously accommodated a variety of industrial uses. The site is bound on all sides by agricultural land, with three residential dwellings opposite the site access on the western side of Pickhill Lane.
- 2.1.3 Historically, the site has accommodated a number of industrial uses, each with regular vehicular activity associated with the delivery and distribution of goods and no restriction on production. The site was originally constructed in the 1930s as a creamery and has since been used for butter, milk and cheese manufacturing (including packing), each generating a number of daily heavy goods vehicle movements understood to be higher than movements experienced on the network today.

2.2 A525 Traffic Data

- 2.2.1 Given that a number of years have passed since the previous application was permitted, a review of current traffic flows has been conducted to fully consider the potential implications associated with the removal of the condition. The background data includes information on traffic flows, vehicle speeds and accident history on the local network.

Vehicle Flows

- 2.2.2 Previously, turning count data at the A525/Pickhill Lane junction was presented in the Transport Assessment for the poultry processing facility. This highlighted that in the morning and evening peak hours, there was a low hourly flow and a tidal pattern with the majority of vehicles heading towards Wrexham in the morning peak and away from Wrexham in the evening peak.

2.2.3 Given the age of the previous data (2011), additional data collection was coordinated in September 2017 to supplement the information previously presented. An automatic traffic count (ATC) was arranged for the A525, south of the Pickhill Lane junction, to record the volume of traffic throughout the day over a seven day period. The ATC data for the A525 is presented in **Figure 2.1** and **Figure 2.2** for the weekday and weekends respectively.

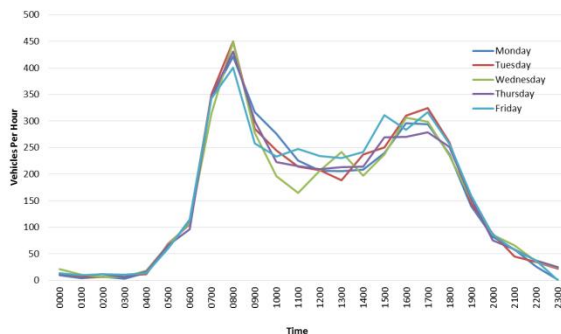


Figure 2.1: A525 Weekday Two-Way Flows

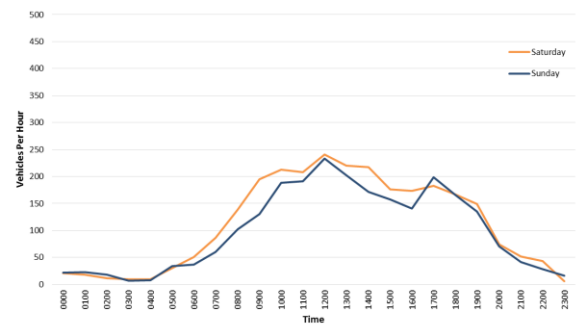


Figure 2.2: A525 Weekend Two-Way Flows

2.2.4 The peak in activity is associated with the typical morning and evening commuter periods (i.e. 0800-0900hrs and 1700-1800hrs). During the inter-peak period, two-way traffic flows reduce to approximately 200-250 vehicles per hour, equivalent to 3-4 vehicles per minute, between 0900-1500hrs.

2.2.5 At the weekend, the flows on both a Saturday and Sunday are similar with a peak around the middle of the day. It is noted that the peak flows on the A525 on a weekend are approximately 50% lower than the peak flows experienced on the A525 in the morning peak.

2.2.6 In terms of vehicle composition, the majority of traffic movements throughout the day are cars and light vehicles. Heavy goods vehicles make up approximately 6-7% of the total two-way daily flow on weekdays and 3-4% on weekends. The majority of heavy goods vehicle movements are focussed in the weekday inter-peak period with an average of 18 two-way movements per hour.

Vehicle Speeds

2.2.7 Speed data was presented in the Transport Assessment for the poultry processing facility in 2014. The data identified that 85th percentile vehicle speeds were 45mph in either direction on the A525. This was recorded at a time when the signed speed limit was 60mph but it is noted that the speed limit has since been changed to 40mph on approach to the junction.

2.2.8 To investigate vehicle speeds on the A525 following the introduction of the 40mph speed limit, a new speed survey was undertaken on Wednesday 13th September 2017. The survey was conducted with reference to the DMRB's '*Vehicle Measurement on All Purpose Roads*' (TA22/81) with data collected using a speed radar meter, capturing 200 vehicles in free flow conditions at each location. A summary is presented in **Table 2.1**.

A525 Direction	85 th Percentile (Dry Weather)	85 th Percentile (Wet Weather)	Average
Southbound	44.0mph	41.5mph	38.6mph
Northbound	43.0mph	40.5mph	37.9mph

Table 2.1: Speed Survey Results

2.2.9 The data highlights that the average speed in the vicinity of the A525/Pickhill Lane junction is less than the signed 40mph limit, with 85th percentile speeds lower than those previously recorded and presented in the Transport Assessment for the poultry processing facility. This data demonstrates that although vehicle speeds are already naturally controlled by the carriageway alignment, the introduction of a 40mph speed limit in the vicinity of the A525/Pickhill Lane junction has had a positive speed reducing effect.

Junction Operation and Visibility

2.2.10 The A525/Pickhill Lane is an existing junction that accommodates daily vehicle movements, including heavy goods vehicles. It has been observed to operate with minimal queueing and delay throughout the day, with vehicles able to identify suitable gaps in traffic to complete their manoeuvre.

2.2.11 In terms of junction capacity, a junction model was constructed for previous applications to assess the operation of the existing A525/Pickhill Lane junction. The results highlighted that, in the peak hours, the existing priority arrangement operates with spare capacity and minimal queueing which was deemed to be acceptable to WCBC Highways. The previous results demonstrate that the junction could accommodate an increase in the number of vehicular movements with the existing priority control. It should be noted that WCBC Highways previously noted that improvements would not be required at the junction as part of the cheese cutting and packing facility or the poultry processing application.

- 2.2.12 Visibility at the junction has previously been assessed with WCBC Highways noting that a splay of 2.4 metres by 150 metres is achievable. To the south, WCBC Highways have noted that a visibility splay of 2.4 metres by 95 metres is achievable measured to the nearside kerb edge. Visibility at the junction is shown in **Figure 2.3** and **Figure 2.4**.



Figure 2.3: Junction Visibility to the South



Figure 2.4: Junction Visibility to the North

- 2.2.13 It should be noted that the A525 in the vicinity of the junction with Pickhill Lane incorporates a double white centre line to restrict overtaking. In this instance, a practical visibility splay of approximately 110 metres can be achieved to oncoming vehicles when measured to the double white centre line. This is in line with the stopping sight distance requirements noted in DMRB and the recorded 85th percentile wet weather speeds for northbound vehicles which has been recorded at 41.5mph.

2.3 Pickhill Lane Traffic Data

- 2.3.1 Previously, the peak hour flows on Pickhill Lane were derived from a turning count at the A525/Pickhill Lane junction. The two-way flows on Pickhill Lane in the morning and evening peak hours were 117 and 128 vehicles per hour respectively.
- 2.3.2 Additional data has been collected to investigate the use of Pickhill Lane not only in the peak hours, but throughout the day. The ATC data for Pickhill Lane is presented in **Figure 2.5** and **Figure 2.6** for the weekday and weekends respectively.

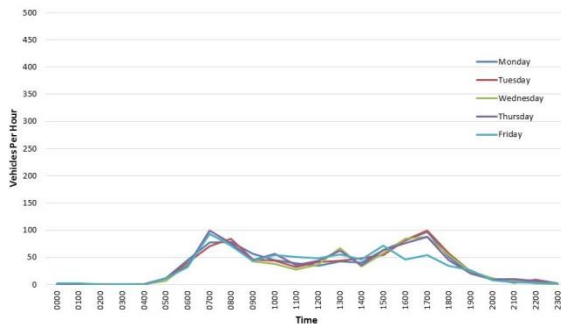


Figure 2.5: Pickhill Lane Weekday Two-Way Flows

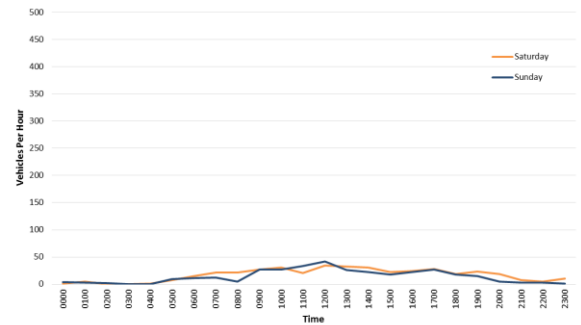


Figure 2.6: Pickhill Lane Weekend Two-Way Flows

2.3.3 Analysis of the most recent survey conducted in September 2017 shows that the average two-way flows on Pickhill Lane are 87 and 85 in the morning and evening peak hours. The flows are considered to be very low in the peak hours equivalent to 1-2 vehicles per minute. During the inter-peak, the two-way flows on Pickhill Lane decrease to an average of 47 vehicles per hour, equivalent to approximately 1 vehicle per minute.

2.3.4 In terms of vehicle composition, the majority of traffic movements throughout the day are cars and light vehicles. Heavy goods vehicles make up approximately 2-3% of the total two-way daily flow on weekdays and approximately 1% on weekends. The majority of heavy goods vehicle movements are focussed in the inter-peak period with an average of 2-3 two-way movements per hour.

2.3.5 It should be noted that although Pickhill Lane currently accommodates a low volume of heavy goods vehicles per hour based on the latest survey, it has historically accommodated a greater number of movements associated with its historic use. In addition, there is a logistics site (Fraser Lloyd Primary Logistics) adjacent to Maelor Foods which has historically generated a greater number of heavy goods vehicle movements than is currently present on the network.

2.4 Recorded Traffic Accidents

2.4.1 A review of the accident history on the local highway network has been conducted, building upon the information previously presented in the poultry processing application and cheese cutting and packing application. The historic data previously presented highlighted that the local highway network operates with few recorded accidents suggesting minimal conflict.

- 2.4.2 For completeness, a further review of online accident records has been conducted to see if there have been any recorded accidents since the previous assessment. Data for the most recent 5-year period is presented in **Figure 2.7**.



Source: Crashmap [Accessed October 2017]

Figure 2.7: Accident Summary Data

- 2.4.3 The data highlights that there have been no recorded accidents on Pickhill Lane or at the junction with the A525 in the most recent 5-year period. The conclusions in the previous assessments are still considered to be valid.

3 CHANGE IN TRAFFIC IMPACT

3.1 Increased Market Demand

3.1.1 As previously noted, since the planning permission was granted in 2015 there has been an increase in market demand for locally sourced, British produce. As a result, the planning condition which specified that no more than 400,000 birds shall be processed each week is acting as a constraint which does not allow Maelor Foods to respond to the changing market environment.

3.1.2 Since the poultry processing facility application was approved, a significant level of investment has taken place at Maelor Foods in order to provide a modern, purpose built facility capable of providing employment opportunities whilst contributing significantly to the local economy. Again, the existing condition is preventing the efficient use of infrastructure that has been invested in and may result in the operation of the site (in terms of viability) being reviewed in due course.

3.1.3 In order to provide additional flexibility to the operation of the site, Maelor Foods are seeking to remove the condition which currently limits production to 400,000 birds per week. This would allow Maelor Foods to accommodate a greater number of birds from local farms, whilst continuing to provide employment opportunities and benefits to the local economy. Based on information provided by Maelor Foods, it is understood that current demand might be in the region of 1,000,000 birds per week.

3.2 Infrastructure Requirements

3.2.1 It should be noted that there are no infrastructure amendments required at the site to accommodate an increase in production. The existing access on Pickhill Lane would continue to be utilised following its earlier improvement to visibility which has now been implemented. No accidents have been recorded at the site access in the most recent 5-year period.

3.2.2 In addition, there would be no changes to the internal site layout. Infrastructure is already provided in the form of a security gate with weighbridge and a one-way circulatory system to manage vehicle movements within the site. There is space within the site for large vehicles to enter, turn and exit in forward gear with dedicated service yard provision for vehicles to park. A delivery management plan would continue to be in operation.

- 3.2.3 It is understood that staff numbers may increase if the condition is removed but this would be in line with staff numbers previously accommodated at the site during historic use and the previously approved cheese cutting and packing use (i.e. 220-230 staff). The car park has previously accommodated this level of demand and no changes are required.

3.3 Traffic Generation

Staff

- 3.3.1 In terms of the potential future operation of the site, it is understood that although staff numbers may increase, it would be in line with numbers previously employed at the site (i.e. 220-230 staff) during operation as a creamery and cheese cutting and packing facility. As such, it is considered that the site could accommodate an increase back up to previous levels.
- 3.3.2 It should be noted that not all staff would be on site at the same time with a range of shift patterns operational in addition to typical office hours. Historically, this has not caused any problems in terms of local network operation and a return to previous staff levels is not expected to result in capacity issues due to the majority of trips occurring outside of the network peak hours.

Deliveries and Servicing

- 3.3.3 The removal of the 400,000 bird condition would result in a change in heavy goods vehicle movements to and from the site. **Table 3.1** provides a summary of the permitted and potential future heavy goods vehicle movements based on the assumption that they increase in line with the number of birds processed each week.

No. of Birds (per week)	No. of HGV Trip Movements (per hour)*		
	Arrivals	Departures	Total
Permitted Operation (400,000)	2	2	4
Potential Future Operation (1,000,000)	6	6	12

* based on 6hrs delivery window

** numbers rounded to nearest integer

Table 3.1: Permitted and Potential Future Heavy Goods Vehicle Movements

3.3.4 The uplift in processing 400,000 to 1,000,000 birds per week equates to an additional 8 heavy goods vehicle movements per hour (i.e. 4 extra arrivals and 4 extra departures) when compared with the permitted operation. This is, on average, 1 extra vehicle every 7-8 minutes over a 6-hour window in the middle of the day.

3.3.5 It should be noted that the heavy goods vehicle information presented in **Table 3.1** is based on the same methodology that was presented in the original Transport Assessment for the poultry processing facility. This sought to manage heavy goods vehicle arrivals and departures during the inter-peak period (i.e. a 6hrs window between 0900-1500hrs) when traffic flows on the local network are lower than the peak periods.

3.4 Potential Traffic Impact

3.4.1 To consider the potential traffic impact associated with the removal of the condition, a breakdown is presented in **Table 3.2**. This presents the changes in traffic flow on both the A525 and Pickhill Lane associated with the permitted 400,000 birds per week, and the potential 1,000,000 birds per week if the condition is removed.

Link	Average Two-Way Inter-Peak Traffic Flow (per hour)	Permitted Additional HGV Movements (per hour)	Total Permitted Flow	% Impact	Potential Additional Two-Way HGV Movements (per hour)	Total Potential Flow	% Impact
A525	235	4	239	2%	8	247	3%
Pickhill Lane	47	4	51	9%	8	59	16%

Table 3.2: Potential Additional Weekday Inter-Peak Traffic Impact (per hour)

3.4.2 The information in **Table 3.2** is based on the assumption that the additional 8 two-way heavy goods vehicle movements per hour would be coordinated during the inter-peak when traffic flows on the network are at their lowest. This seeks to manage potential conflict on the local network and is equivalent to 1 extra vehicle every 7-8 minutes. Based on the small increase, it is considered that there will still be times throughout each hour of the day when there are no vehicles on Pickhill Lane and as such the potential impact on occupiers of the three nearby properties would be limited.

- 3.4.3 The additional movements on the network are unlikely to result in a detrimental impact upon the operation of the local highway network during the inter-peak period, with no change anticipated to the existing peak hour operations in terms of queueing and delay. It is therefore considered that existing occupiers of nearby properties will not experience any increase in driver delay as a result of the additional heavy goods vehicle movements.
- 3.4.4 In addition, although there are no restrictions on the site in terms of operating hours, heavy goods vehicle movements will not take place over night. This seeks to further manage the potential impact on amenities of the occupiers of three nearby properties.
- 3.4.5 As previously noted, heavy goods vehicle movements will continue to be coordinated to and from the south of the site via the A525. The network in the vicinity of the site operates with spare capacity, including the A525/Pickhill Lane junction, and no recorded accidents in the most recent 5-year period. The recently introduced 40mph speed limit in the vicinity of the junction contributes to overall road safety objectives and assists with the management of vehicle movements to and from Pickhill Lane.
- 3.4.6 It should be noted that deliveries to and from the site will continue to be subject to a management system which can positively influence when vehicle movements occur to minimise the potential impact on the operation of the local highway network, but also to limit the potential impact on residential amenity. This includes a delivery booking system, coordination of deliveries outside of peak hours and a close working relationship with suppliers to improve the efficiency of movement between the site and surrounding farms.
- 3.4.7 Overall, it is considered that the small increase in the number of heavy goods vehicle movements per hour would not have a detrimental impact on the amenity of existing occupiers of the three nearby properties with measures in place to regularly monitor and mitigate potential impacts.

3.5 Wider Network Traffic Impact

- 3.5.1 As previously noted, in response to growing market demand, there are a number of farms which are looking to increase production. The Maelor Foods site, with the existing condition relating to the weekly production of birds, is currently unable to accommodate birds from local farms which are increasing capacity. As such, birds from growing local farms within 30 miles of the site are being transported greater distances on the highway network resulting in additional cost and emissions.

- 3.5.2 It is considered that the removal of condition would allow Maelor Foods to continue to support local farms and the economy, by accommodating birds from local farms and thereby reducing vehicle mileage on the network and associated transport costs. A reduction in vehicle mileage would be of benefit to local air quality by reducing emissions.

4 SUMMARY AND CONCLUSION

- 4.1.1 Vectos has been instructed by Maelor Foods to prepare a Transport Report to accompany a removal of condition application. The condition relates to the number of birds processed at the site each week which was previously considered to be acceptable based on market demand at the time.
- 4.1.2 Since the planning permission was granted in 2015, there has been an increase in market demand with a desire for more local, British produce thereby reducing the reliance on imports. The condition restricting the production of birds per week at Maelor Foods means that there is insufficient flexibility to respond to general changes in market demand and as such the operation (in terms of viability) of the site may need to be reviewed in due course.
- 4.1.3 A network review has been conducted with 2017 survey data collected for the A525 and Pickhill Lane in the vicinity of the site. This has highlighted that the network continues to operate with spare capacity and low flows throughout the day, particularly in the inter-peak period. In addition, there have been no recorded accidents on the network in the most recent 5-year period and the introduction of a 40mph speed limit on the A525 has had a positive speed reducing effect.
- 4.1.4 The potential impact associated with the removal of condition would be an increase of 8 heavy goods vehicle movements per hour when compared with the permitted operation. This equates to an average of 1 extra vehicle every 7-8 minutes which would be coordinated within the inter-peak period to maximise operational efficiency but also minimise potential conflict on the surrounding network.
- 4.1.5 The additional heavy goods vehicle movements will be subject to an existing management strategy that includes a dedicated booking system, coordination of deliveries outside of peak times, and close working with local suppliers to better plan journeys and reduce total trip distance travelled on the network.
- 4.1.6 Overall, it is considered that the Maelor Foods site could accommodate the increase in heavy goods vehicle movements associated with the removal of the planning condition. No additional infrastructure is required within the site and the additional movements can be actively managed by the site to minimise the potential impact on the surrounding highway network. As such, it is considered that the removal of condition would assist with future operation of the site to enable it to continue to contribute to the local economy.