1.0 Introduction

ASD Engineering has been instructed to undertake a review of the likely transport impacts associated with a proposed change of use in respect of an area of land to the west of Claypit Road in Foulsham, Norfolk. The location of the site is indicatively highlighted on Figure 1 below.

Figure 1 – Indicative Site Location

The site is currently composed of open land operating motor maintenance and engineering garage and a builders yard fronting Claypit Road representing B2/B8 use. There is a proposal to change the use of the site from the engineering garage and builders yard to develop the site to accommodate up to 11 residential dwellings, as identified in Figure 2 below.
The existing site access will be utilised and upgraded to provide a Type 6 access road into the proposed development, enabling access to all 11 dwellings. Claypit Road is a rural access road; it has a straight alignment in this area with limited roadside vegetation; therefore the necessary visibility is available in both directions from the proposed site access.

It is understood that there are proposals for a footway improvement scheme to be implemented in early 2017 by Norfolk County Council, with work understood to commence very shortly. A scheme drawing of this proposal is provided in Appendix A. The footway improvement scheme will involve provision of a 1.2m wide footway along the eastern side of Claypit Road, connecting into the existing pedestrian footway on the eastern side of High Street in Foulsham. This will also include a proposed build out at the junction of High Street and Claypit Road to provide improved separation between vehicles and pedestrians at this location.

2.0 Traffic Generation

Information provided to ASD Engineering has highlighted a number of operations that have been operating on site within its B2 use. This includes:

- A builders’ yard (including visiting foremen) Heavy Goods Vehicle deliveries;
- Supporting office accommodation for the builders’ yard (accommodating 5 staff);
- Joinery shop (1 staff);
- Motor engineers (2 staff plus vehicle deliveries); and
- Open storage areas.

The site has been very active within its designated use, as has been identified by the mix of activity and associated vehicular traffic generation and the level of on-site vehicular parking within the yard area. This can be highlighted by Figure 3 below, which highlights the level of vehicular parking activity on site that has recently been evidenced.

**Figure 3 – Evidence of Use**

In order to highlight the transport impacts associated with the proposed change of use, ASD Engineering has consulted the national TRICs database to derive appropriate trip rates for the existing and proposed uses. TRICs represents a regularly updated database of sites representing a variety of land uses, for which traffic counts are undertaken to enable trip rates to be derived.

ASD Engineering has consulted the TRICs database for both B2 and residential land uses. These searches have been undertaken to best reflect the site location in Foulsham and dissimilar geographical areas have been removed, only neutral weekdays have been included and those located in ‘Edge of Town’ or ‘Neighbourhood Centre’ locations.

It should be noted however, that due to the bespoke mix of uses; it is difficult to accurately establish the trip generation associated with these uses using typical land use classifications within TRICs. Therefore, although the designated B2 general industrial use has been used for the comparator purposes below; it should be noted that the baseline trip generation established is likely to be a significant underestimate compared to the actual trip generation associated with the recent uses/activity on site.

ASD Engineering has calculated that the usable buildings and yard area associated with the existing use represents a site area of some 2,170sqm.
The trip rates derived for B2 use have been used to establish the associated trip generation, associated with a site of the site area identified. This information is summarised in Table 1 below. The supporting TRICs data is provided in Appendix B.

<table>
<thead>
<tr>
<th>Time Period</th>
<th>Arrival</th>
<th>Departure</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>AM Peak Trip Rate (per 100sqm)</td>
<td>0.270</td>
<td>0.092</td>
<td>0.362</td>
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<tr>
<td>AM Peak Trip Generation (2,170sqm site)</td>
<td>6</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>PM Peak Trip Rate (per 100sqm)</td>
<td>0.040</td>
<td>0.224</td>
<td>0.264</td>
</tr>
<tr>
<td>PM Peak Trip Generation (2,170sqm site)</td>
<td>1</td>
<td>5</td>
<td>6</td>
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</tbody>
</table>

*TABLE 1: B2 Trip Rates and Trip Generation*

The data highlights for the standard network peak periods for 0800-0900 in the AM and 1700-1800 in the PM, the existing B2 use for the site is likely to generate a total of 8 two-way vehicular trips in the AM peak and 6 two-way vehicular trips in the PM peak.

It should be noted however, that the figures above do not explicitly include the Heavy Goods Vehicle trips associated with the specific site in Foulsham; therefore, the actual trip generation associated with the site will be higher than that identified above. The figures on which the existing trip generation of the site have been calculated can be considered as a particularly conservative estimate.

In order to compare the impact of the proposed residential development, the data summarised in Table 1 has been assessed against a similar TRICs search undertaken for residential uses, privately owned houses. Again, a prescriptive search has been undertaken, to remove dissimilar geographical locations, use neutral weekday surveys only and include ‘Edge of Town’ and ‘Neighbourhood Centre’ locations only. The trip rates, and associated trip generation for up to 11 residential dwellings, is summarised in Table 2 below.

<table>
<thead>
<tr>
<th>Time Period</th>
<th>Arrival</th>
<th>Departure</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>AM Peak Trip Rate (per dwelling)</td>
<td>0.124</td>
<td>0.378</td>
<td>0.502</td>
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<tr>
<td>AM Peak Trip Generation (11 dwellings)</td>
<td>1</td>
<td>4</td>
<td>6</td>
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<tr>
<td>PM Peak Trip Rate (per dwelling)</td>
<td>0.393</td>
<td>0.169</td>
<td>0.562</td>
</tr>
<tr>
<td>PM Peak Trip Generation (11 dwellings)</td>
<td>4</td>
<td>2</td>
<td>6</td>
</tr>
</tbody>
</table>

*TABLE 2: Proposed Residential Trip Rates and Trip Generation*
The data highlights for the standard network peak periods for 0800-0900 in the AM and 1700-1800 in the PM, the proposed residential use for the site is likely to generate a total of 6 two-way vehicular trips in both peak periods.

This highlights that the proposed residential use will in fact generate a lower volume of vehicular trips compared to the existing extant B2 permission of the site, with the same level of trip generation expected during the PM peak.

It should be noted however, that this comparison is based on a standard B2 land use within TRICs representing general industrial units rather than the more trip intensive motor services and mix of engineering, office and joinery services that have been accommodated on the site.

**Summary**

The site access arrangement that will be provided as part of the site redevelopment will provide an improved layout and more formalised access compared to the current arrangement. In addition, proposed pedestrian improvements being delivered by Norfolk County Council will improve pedestrian amenity along Claypit Road, linking into existing pedestrian facilities on High Street in Foulsham.

Finally, interrogation of the TRICs database has highlighted that the proposed residential use is likely to generate a similar or lower level of vehicular trip generation compared to the existing extant B2 permission. This is likely to represent a significant under-estimate of actual activity on the site, which adds further weight to the likely traffic reduction associated with the proposed residential use.

This should allay any fears of the Local Highway Authority that the proposed redevelopment of the site will result in an increase in traffic generation, with no detrimental impact expected along Claypit Road, or Foulsham more generally, as a result of the proposed development.