



Highway & Transport Report

Proposed Development on Land at
Halghton New Mill, Bryn Lane,
Nr Hanmer, Wrexham. SY13 3DT.

For and on behalf of:
Bleazard & Galletta

Assessment prepared by
Woodsyde Developments Ltd

Woodsyde Developments Ltd
The Poppies
Lower Road
Harmer Hill
Shropshire. SY14 3QX.
Tel: 01939 290483 Mob: 07527 352084
Email: andrew@awgough.co.uk

Contents:

1.0 Introduction and Proposals.

2.0 Site Location.

3.0 Highway Access Arrangements

4.0 Conclusion.

1.0. Introduction and Proposals.

Woodsyde Developments Limited has been instructed by Bleazard and Galletta to undertake a Highway & Transport Report for a proposed new access to serve Halghton New Mill, Bryn Lane, Nr Hanmer, Wrexham. SY13 3DT.

Access to the property is currently from a long-unmade track from Bryn Lane. This track passes adjacent to a watercourse and during prolonged rainfall or heavy summer storms the road invariably floods making access extremely difficult and dangerous to navigate.

Halghton New Mill is a 4-bedroom detached converted mill, with additional detached barns and gardens and grounds that extend to around 1.6 acres.

Given the issues with the existing access and flooding during the winter months and heavy summer storms the proposed access would be made available to the other property served by the lane, to provide them with a flood free safe and satisfactory access.

2.0. Site Location.

Halghton New Mill is located in the rural hamlet of Halghton, which is situated approximately 2 miles from the village of Hanmer. The market town of Whitchurch is approximately 6 miles to the east and Ellesmere approximately 8 miles to the south west. Wrexham is approximately 10 miles to the north west.

Access to the property is served from an unmade track from Bryn Lane. Bryn Lane is a county highway but is primarily a single vehicle width, similar to many of the roads in the immediate surrounding area.

The access runs along the side of a small watercourse which we understand floods during heavy or intense rainfall, making access exceedingly difficult to the property.

The site falls within the administrative area of Wrexham County Borough Council.



3.0. Highway Access.

The existing pedestrian and vehicular access to Halghton New Mill and adjacent property is from an existing unadopted stone track direct from Bryn Lane. The access is located in the bottom of a dip in the highway with the road rising sharply in both westerly and easterly directions. Furthermore, an existing watercourse flows along the dip in the topography and during prolonged rainfall tends to flood, breach its banks and flood the highway, access bellmouth and private access, making access to and from the property hazardous and dangerous. According to the Natural Resources Wales web pages the flooding at the access entrance is within Zone C2 which means that there is high risk of flooding with no likely arrangements for defences to that flooding.

The proposals therefore are to introduce a new access to the property, with this served from Halghton Lane to the west of the property. The access will be made available to serve the other property on the existing private drive-in order to avoid the flooding to the roads. The attached plan shows the proposed junction bellmouth in greater details, however the roads leading to the access are similar in feature, width and alignment that serves the existing access. Halghton Lane is considered to be primarily single carriage width typically 2.9m wide, with a generous highway verge and hedges set back behind these. At the point of access, the approach road from north and south are 2.9m and 2.95m wide respectively but has a slightly increased width of 3.7m immediately adjacent to the proposed access. The road does appear balanced and surface water run-off in the main dissipates to the verges, with no formal drainage available. It is noted that a highway ditch extends along the eastern side of Halghton Lane at the rear of the verge and fronting the boundary hedge line. This appears to disappear to the rear of the hedge opposite the proposed access within a pond.

Given the nature, level and alignment of Halghton Lane, whilst there is no speed limit and the immediate road network is therefore subject to the national speed limit, it is highly unlikely that the actual traffic speeds are anywhere near to this. From traversing the road, a number of times, the likely average 85%tile speeds along the frontage to the access proposal would be in the order of 35 – 40mph. The position of the access has been identified to provide maximum visibility and at the widest portion of the road.

In terms of junction visibility, we consider that these should accord with the guidance provided in Manual for Street 1 and 2 and be based on an 85%tile speed of around 35mph. Manual for Streets provides a basic formula for calculating stopping sight distance (SSD) and is summarised as follows:

$SSD = vt + \frac{v^2}{2(d+0.1a)}$: where

v = speed (m/s)

t = driver perception-reaction time (seconds)

d = deceleration (m/s²)

a = longitudinal gradient (%) (+ for upgrades and – for downgrades)

The desirable minimum SSD in general use will use a perception time of 1.5 seconds and 4.41m/s². 35mph provides 15.6464m/s.

Initially if gradients are set aside then the following calculation can be made:

$$\begin{aligned}\text{SSD} &= (15.6464 \times 1.5) + (15.6464^2 / 2 \times 4.41) \\ &= 23.4696 + 27.7562 \\ \text{SSD} &= 51.23\text{m}\end{aligned}$$

Based on the above calculation stopping sight distance and the junction visibility splays should be provided at a normal 'x' distance of 2.4m and a 'y' distance of 51.23m in both directions.

It can be seen from the attached layout plan that visibility in a southerly direction is available to a distance of 66.056m and 52.5m in a northerly direction to the nearside of the highway carriageway. Of course, greater distances are achievable when measured to the centre of the carriageway which I see no reason this could not be considered as the road highway is only 2.9m wide. This width means that all road users would tend to travel central to the carriageway, whether this is a motor vehicle, cyclist, horse and rider or any other form of transport.

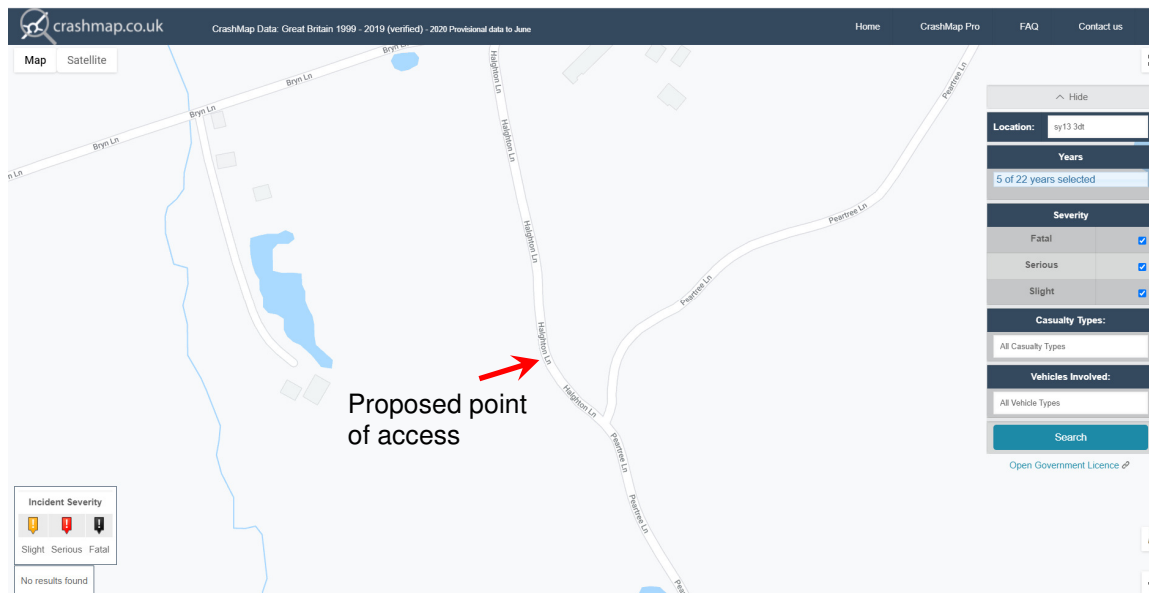
The access will be typically 5m wide, but in real terms will be wider as there are two gates serving two fields in the position of the access. The tarmac area will extend for 5m back from the highway edge and will be provided with 4.5m junction radii. Drawing HL-AA-100 – Access Arrangements Plan shows these dimensions and details based on a topographical survey.

In terms of traffic generation, the new access will typically replicate the existing arrangements and for the majority of the time will serve the Mill, however access will be made available to the other property served by the existing access when it is practically impassable due to flooding. The traffic levels will be no greater than currently exists so there will be no increase in movements to and from the highway network.

With regard to road safety, we have interrogated the website Crashmaps which is a national database which only use official data published by the Department for Transport which is based on records submitted to them by police forces.

The data is updated annually each summer for the preceding year.

The following is an extract of the maps which show that there have been no recorded incidents on any of the roads in the immediate vicinity of either the existing access or the location for the proposed access.



We consider that a safe and satisfactory access can be provided to Halghton New Mill and based on the analysis above the proposals are not considered to be significant and as such will not be detrimental to the free flow and safe movement of traffic on the immediate or wider highway network.

The proposals are for a new access to serve primarily an existing property and other existing property from the existing lane when that becomes flooded, where there will be no overall increase in traffic movements. The access will be provided with satisfactory visibility splays, based on visually assessed and traversing the road several times during a site visit to gain a basis to for the average traffic speeds. However, the site is in a rural location where the roads are predominantly single-track width, and they are reasonably tortuous and as such traffic speeds are low by their nature.

4.0. Conclusion.

It has been indicated that the proposals for a new access will have no impact on the highway network and is located in a position where maximum junction visibility is available.

It is acknowledged that the roads and lanes in the immediate vicinity are subject to the national speed limit but given the rural location, relatively narrow single vehicle widths and general alignment the traffic speeds are universally below this and from making a number of passes on the road we have assessed the speed to be in the region of 35mph at the extents of the visibility envelopes. In accordance with Manual for Streets visibility and SSD's have been calculated to be 51.23m. These are available at the point of access to the nearside channel, with greater distances available to the centre of the road where it is expected that road users will travel, whether by motor vehicle or any other means of transport.

There will be no additional traffic to consider as the proposal is for a new access to serve existing property as this becomes quite problematic during prolonged rainfall where the immediate highway and drive tends to flood and make passage difficult and dangerous.

Overall, the proposals are considered to be safe and satisfactory and in transportation terms, the proposals will not have a severe impact upon the local highway. Indeed, it is considered that there are no significant transport related reasons why the proposed access should not be acceptable in transportation terms.