LAND SOUTH OF THORNCLIFFE ROAD, LEEK

PLANNING REF: SMD/2017/0434

INDEPENDENT REVIEW OF SUBMITTED TRANSPORT DOCUMENTATION

1 INTRODUCTION

1.1 Vectos have been appointed on behalf of residents to review highways and transport matters relating to an outline planning application for a proposed residential development on land south of Thorncliffe Road, Leek.

1.2 Vectos is a transport planning, infrastructure design and flood risk, hydrology and sustainable drainage consultancy specialising in the property development sector.

1.3 The application (planning ref: SMD/2017/0434) is supported by a Transport Assessment (TA) produced by Encon Associates Limited.

1.4 We hold the following principle concerns in relation to the proposed development:

- A53 / Thorncliffe Road junction (capacity and road safety); and
- Accessibility and sustainability.

1.5 This note summarises the findings of our independent review of the submitted transport documentation.

2 A53 / THORNCLIFFE ROAD JUNCTION

2.1 At the time of appointment, the application and supporting TA considered the site access junction but did not include any capacity assessment of the adjacent A53 / Thorncliffe Road priority T-junction. However, a revised TA has since been submitted which includes an assessment of the junction using the PICADY – Priority Intersection module of the Junctions 9 software package.

2.2 A Manual Classified Count (MCC) has been undertaken at the junction to collect background traffic data for the assessment, this count took place on Thursday 12th October 2017. The Trip End Model Presentation Program (TEMPro) software has been used to uplift baseline traffic to provide background flows for future year assessments.

2.3 It is indicated in the TA that development vehicle trips have been forecast using the TRICS database. However, the full TRICS outputs have not been provided and it is therefore not possible to independently verify the validity of the survey sites selected to generate the trip rate information. Consequently, we cannot confirm suitability of the trip forecasts for use in the assessment of traffic impact.

2.4 It is noted that the trip forecasts have been assessed on the basis of an outline masterplan which includes 154 residential dwellings. No details have been provided on the type and composition of the proposed dwellings (e.g. number of bedrooms), further adding to the difficulty of assessing the trip generation predictions used in the assessment.

2.5 We have reviewed the geometric parameters used to model the A53 / Thorncliffe Road junction and hold concerns in relation to the inputs used in the assessment. When undertaking a junction capacity assessment using the PICADY module, the visibility of the minor arm is a key determining factor in delay and queuing. It is noted from the PICADY outputs included within the TA that 'minor arm geometry' inputs allow for a visibility of 30m to the left and 70m to the right.

2.6 In accordance with guidelines included within the Junctions user guide, the visibility of the minor arm should be taken 10m back from the give-way line of the arm. We do not believe the visibility inputs used in the assessment are achievable as Thorncliffe Road is banked by thick vegetation on its southern side and a restaurant building on its northern side which create significant obstructions to the visibility of road users approaching the junction along this road. On this basis, it is our view that the visibility used for the minor arm of the model is not accurate and the results presented in the TA are over-optimistic.

2.7 The existing arrangement at the A53 / Thorncliffe Road junction features a short left turn lane for southbound traffic turning into Thorncliffe Road from the A53. This lane has a give-way line marked on the carriageway which requires vehicles to give way to traffic on Thorncliffe Road. This existing arrangement creates potential for traffic to block back on to the A53 carriageway which could impact significantly on both highway operation and safety. However, it does not appear that the PICADY model used in the assessment has accounted for this.

2.8 It is acknowledged that southbound traffic turning into Thorncliffe Road from the A53 is of a low level in both the with and without development traffic scenarios. However, anecdotal evidence provided by local residents indicates that traffic along Thorncliffe Road increases significantly during the peak holiday periods as people seek to access the Peak District National Park. Additionally, there are a number of camp sites and caravan storage sites which are accessed via Thorncliffe Road. It is noted that the left turn lane would only provide storage for a single vehicle and consequently should multiple vehicles or a longer vehicle such as a car towing a caravan be forced to give way to traffic turning right into Thorncliffe Road this would block back onto the A53 creating a serious safety and operational issue. The introduction of development traffic to and from Thorncliffe Road could act to exacerbate this issue by increasing the likelihood of traffic turning left into Thorncliffe Road having to give way. As a result, we do not believe the operational and safety implications of the proposed development at the A53 / Thorncliffe Road junction have been fully considered.

2.9 At the location of the proposed access junction Thorncliffe Road is around 5.5m wide (based on measurements undertaken by residents). However, in paragraph 5.39 of the TA it stated that the width of the road is 6.75m. The disparity between the information included within the TA and reality is misleading and should be corrected.

2.10 The following conclusions have been drawn in the TA in relation to highway operation (paragraph 11.5):

"An assessment of the Thorncliffe Road/Buxton Road junction shows that the predicted traffic generated can be accommodated within the operational capacity of the junction and would not lead to a detrimental impact to traffic flows."

2.11 In summary, the model used to undertake the capacity assessment of the A53 / Thorncliffe Road does not accurately reflect conditions on the ground and the results of the assessment should not be accepted. The consultant has not included details of the survey sites selected in their TRICS assessment or any details of the type and composition of dwellings at the proposed development site. As a result, it is not possible to verify the validity of the development trip forecasts used in the assessment. Therefore, the conclusions drawn in the TA are not valid.

3 ACCESSIBILITY AND SUSTAINABILITY

3.1 The TA provides details of existing conditions around the site, including information on the accessibility of the site by sustainable modes of travel.

3.2 It is noted that there is presently no pedestrian footway on the southern side of Thorncliffe Road which would be the key 'desire line' for pedestrians from the proposed development to the centre of Leek. The provision of a new footway is proposed along the southern side of Thorncliffe Road from the proposed site access junction westwards towards the A53 junction. However, this proposed pedestrian appears to terminate before the junction at an access junction for an existing private property.

3.3 As a consequence, pedestrians would be required to walk in the carriageway for approximately 40m, which is clearly a significant safety issue. In addition, this is also likely to lead to westbound vehicles on Thorncliffe Road having to move out of their lane and into the centre of the road on the approach to the junction which would further compound potential safety issues. Furthermore, the road is subject to a 60mph speed limit, has no street lighting and has no natural surveillance. The combination of the factors does not create an environment which could be considered attractive to pedestrians and would not be conducive to encouraging trips on foot.

3.4 In addition, the pedestrian footway on the east of Buxton Road (A53) is narrow immediately south of the junction with Thorncliffe Road. This adds a further constraint to pedestrian movements to and from the site.

3.5 The consultant has included concentric circles in the main body of the TA to illustrate walking and cycling catchments from the proposed development site. The centre of the catchments appear to be located on the north western side of the site closer to Leek centre, which is misleading and overstates the accessibility of the site. The use of the concentric circles provides little detail of the availability of walking/cycling routes and the use of isochrones to illustrate walking/cycling times would be more robust in this instance.

3.6 As a fast, unlit rural road, Thorncliffe Road acts as a major constraint to trips by bicycle. Consequently, all but the most seasoned cyclists would seek to access the site by bicycle.

3.7 The www.staffordshire.gov.uk/ website includes a link to a cycle map of Leek an extract of which has been reproduced in **Figure 1**. This shows little cycle infrastructure or marked cycle routes in Leek. Most of the 'signed cycle routes' are to the west of the town centre which does not well suit the proposed development site on the eastern fringe of the existing urban area.

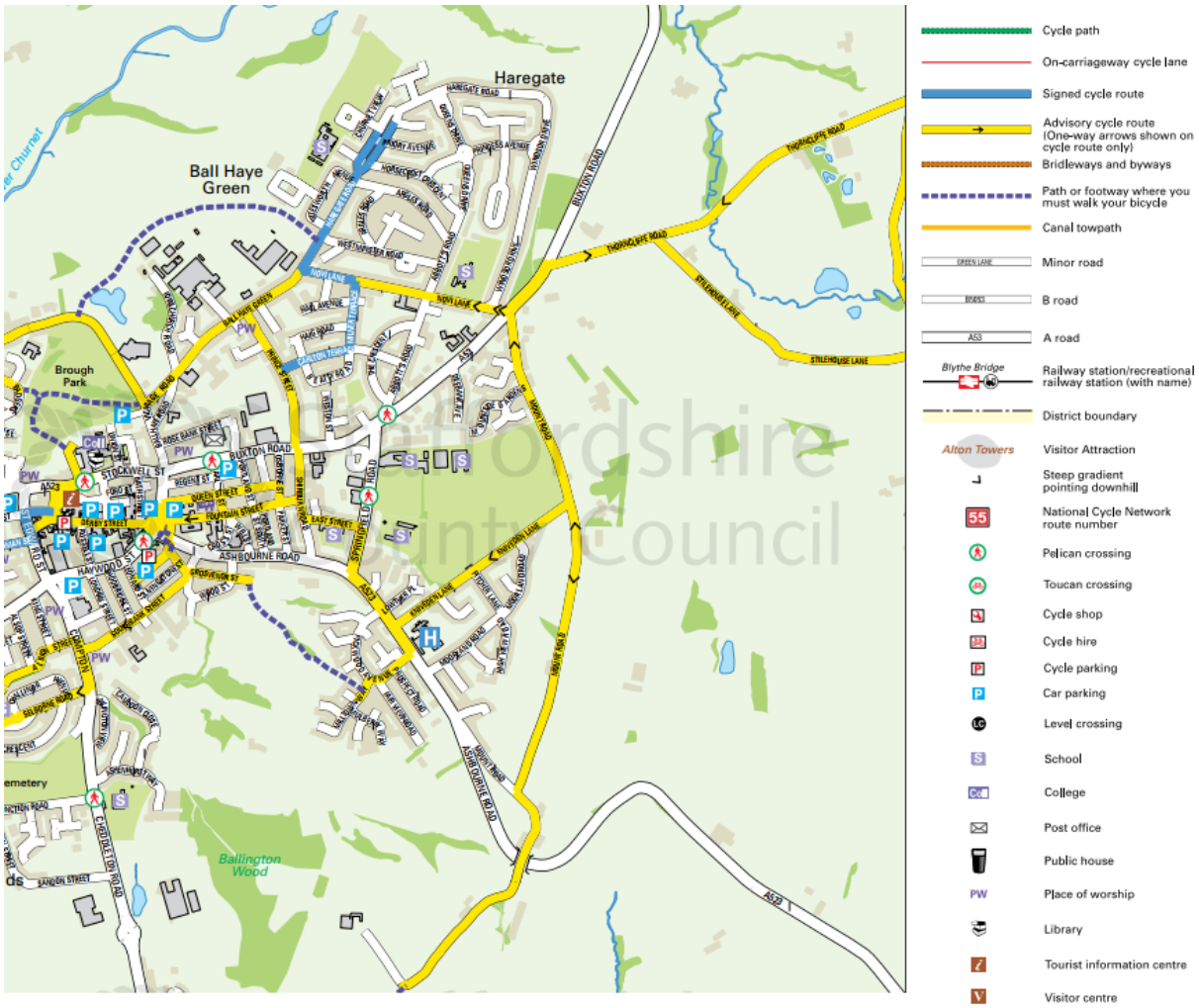

Figure 1: Cycle Infrastructure Map

3.8 There are two bus stops on the A53 for northbound and southbound services. These stops are basic flag and pole arrangements with no timetable information, seating or shelters.

3.9 It is our view that the TA has overstated the bus service most relevant to the site. Bus Route 16 operates on the between Hanley – Werrington – Leek – Buxton. However, the large majority of services only operate between Hanley and Leek bus station which is around 1.6km from the site. There are only 4 services per day (Monday – Saturday) which directly serve the stops closest to the site. These are as follows:

- Northbound: First service at 0840 and last service at 1540;
- Southbound: First service at 0945 and last service at 1645.

3.10 Clearly the timings of these services would not be suitable for commuters, further increasing future resident's reliance on the private car.

3.11 Additionally, on Sundays there are only two services per day.

3.12 As noted in the TA, there is no access to rail services in Leek. The nearest rail station is Congleton and access to this would almost certainly require a car.

3.13 The following is concluded in the TA in relation to the accessibility of the site (Paragraph 11.10):

"The location of the proposed residential development provides viable access to sustainable modes of transport with convenient access to local bus services serving the locality and the surrounding towns, suitable roads for cycling and with the provision of a new footpath connection, the improved viability for walking, which would likely encourage a reduction in car usage."

3.14 On the basis of our review of the accessibility and sustainability of the proposed site location, we do not believe that this is a reasonable conclusion to draw. As described, the site is poorly connected to residential, employment and leisure opportunities in the surrounding area by sustainable modes of transport. Therefore, it is highly likely that the use of private car will dominate amongst any future residents of the site.

4 SUMMARY

4.1 In summary, our key concerns are as follows:

- The accuracy of the operational assessment of the A53/Thorncliffe Road priority junction. Particularly the manner in which visibility from the minor arm and the left turn lane into Thorncliffe Road have been accounted for;
- Operational and safety issues potentially created by vehicles backing up onto the A53;
- Lack of/poor pedestrian links, particularly on Thorncliffe Road;
- Absence of cycle infrastructure in the vicinity of the site;
- Limited connections to public transport, including bus and rail; and
- The sites relative lack of proximity to residential, employment and leisure opportunities.

4.2 The National Planning Policy Framework (NPPF) provides guidance for planning authorities. At the heart of the NPPF is a presumption in favour of sustainable development. As a result of our concerns, we do not consider that the proposed development site represents a 'sustainable' location.