



ADL Traffic and Highways Engineering Ltd

ADL House, Oaklands Business Park, Armstrong Way, Yate, Bristol, BS37 5NA
Tel: 01454 332 100 Fax: 01454 327 983 Email: cad@adltraffic.co.uk

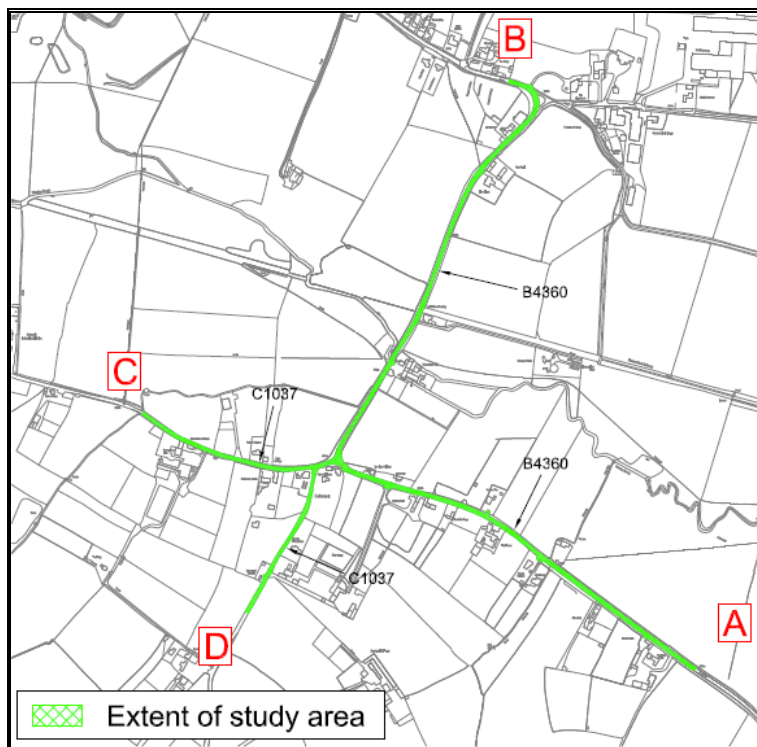
BRIEFING NOTE

B4360 COBNASH

(ADL REF: 3409/46, OCTOBER 2018)

Background:

A request was made by the Local Member in November 2016 to review the current National Speed Limit on B4360 through Cobnash village, between points A and B with a view to reducing the speed limit to 40 mph (or alternative if appropriate) and to review the current National Speed Limit on the C1037 between points C and D with a view to reducing the speed limit to 40 mph (or alternative if appropriate). The extent of the study is shown in the plan below.



ADL Traffic and Highways Engineering Ltd on behalf of Herefordshire Council and Balfour Beatty Living Places have been instructed to assess the suitability of reducing the speed limit on the B4360 and C1037 through Cobnash village.

Directors: A. J. Mendelsohn MSc, BSc (Hons), MIHT, MCIT L. E. Randall-Jones MSc, MIHT, MCILT, Dip. TE
A. M. Chapman CEng, BSc, MICE, MIHT, MCIWEM

Associate Directors: C. M. Chapman BSc (Hons) R. J. Green BA (Hons), MSc C. Turner BEng (Hons), MCIHT

Registered at the address above in England number 3121125 VAT Registration No. 674 4017 36

London Office: 1 Coldbath Square, London EC1R 5HL

Relevant Factors and Considerations:

Department for Transport Circular 01/2013 Setting Local Speed Limits (DfT Circular 01/2013) advocates for single carriageway rural roads:

At point 122 *“In most instances consideration of collision history, road function, mix of road user including presence of vulnerable road users, road geometry, engineering and environment and actual traffic speed should enable authorities to determine the appropriate speed limit on single carriageway rural roads”*

At point 123 *“Roads may have primarily either a through traffic function or a local access function. Both need to be provided safely. Mobility benefits will be more important for roads with a through function, while environmental and community benefits are likely to be of greater importance for the local access roads”*

At point 126 *“The choice of speed limits should take account of whether there is substantial roadside development and whether the road forms part of a recognised route for vulnerable road users, including whether there is a footway”*

At point 127 *“Table 2 sets out where speed limits should apply on rural single carriageway roads with a predominant motor traffic flow function given certain prevailing characteristics.”* However, this does not necessarily mean that speed limits should be automatically reduced.

TABLE 2	SPEED LIMITS FOR SINGLE CARRIAGEWAY ROADS WITH A PREDOMINANT MOTOR TRAFFIC FLOW FUNCTION. EXCLUDING VILLAGES
Speed Limit – (mph)	Where limit should apply
60	Recommended for most high quality strategic A and B roads with few bends, junctions or accesses.
50	Should be considered on lower quality A and B roads that may have a relatively high number of bends, junctions or accesses. Can also be considered where mean speeds are below 50 mph, so lower limit does not interfere with traffic flow.
40	Should be considered where there are many bends, junctions or accesses, substantial development, a strong environmental or landscape reason, or where there are considerable numbers of vulnerable road users.

At point 131 *“Fear of traffic can affect people’s quality of life in villages and it is self-evident that villages should have comparable speed limits to similar roads in urban areas. Therefore, it is Government Policy that a 30 mph speed limit should be the norm through villages”*

At point 133 it makes reference to Traffic Advisory Leaflet 01/2004 (DfT 2004) which suggests that *“reasonable minimum criteria for the definition of what constitutes a village for*

the purpose of applying a village speed limit of 30 mph would be that there were 20 or more houses (on one or both sides of the road) and a minimum length of 600 metres”

Engineering and Environment:

The extent of the B4360 which is under review; between east of Cobnash (Point A) and east of Kingsland (Point B) is approximately 1.5 kilometres in length. Also, the extent of the C1037 Hostel Lane which is under review between west of Cobnash village (Point C) and south of Cobnash (Point D), is approximately 600 metres in length. These roads are subject to the National Speed Limit.

The B4360 which is under review is a single carriageway with a width of approximately 6 metres from Point A to the B4360/C1037 junction, and approximately 5 to 6 metres between the B4360/C1037 junction and Point B.

The C1037 is a single carriageway from Point C to the B4360/C1037 junction with a width of approximately 6 metres. From the B4360/C1037 junction to Point D, the C1037 is a single track road with a width of approximately 5 metres.

Points A-B

Travelling westbound from Point A, the B4360 is relatively straight for the first 400 metres and this includes the accesses to five houses and four fields.

The B4360 is then characterised by a noticeable left-hand bend for approximately 215 metres. This includes access to two houses and connects to the Leominster Footpath 11. There are bollards outside The Whitley Printing Company on the south side to protect the property walls from vehicular traffic.

The B4360 is then relatively straight for approximately 125 metres. This includes access to a private road which leads to The Whitley Printing Company and Whitely Court on the east side of the road and access to the rear of Broomy Hill Garden Nursery and Timberworld Products on the west side of the lane. There is also access to Real Rustic Furniture Shop and access to one house.

At the junction with the C1037, the B4360 is characterised by a 90° right-hand bend for approximately 80 metres and this includes access to one house and the junction with the C1037.

The B4360 is then relatively straight for approximately 420 metres. This includes access to two houses, four fields, Morgan WT & Son Farm and a private lane. The Kingsland Footpath 3 can be accessed both east and west of the B4360, as well as Kingsland Footpath 1.

Following this section, the B4360 exhibits a right-hand bend for approximately 260 metres and this includes access to two houses and two fields.

The B4360 is then characterised by a 90° left-hand bend for approximately 80 metres. This provides two accesses to a private road which leads to Oakfields Farm, Mousehatch Farm and Hean Studio and one house. There are no footpaths or street lighting along this section of the B4360.

Point B denotes the end of National Speed Limit and beginning of 30 mph in the eastbound direction. The visibility to the 30 mph terminals as the motorists are travelling towards Kingsland village is no more than 60 metres due to the left hand bend. The visibility is well below the recommended 115 metres.

Points C-D

Travelling eastwards from Point C, the C1037 Hostel Lane is characterised by a left hand bend for approximately 370 metres, where it meets the B4360 at a junction. This section of the C1037 provides access to four houses, one field and two farms. At the junction with the B4360, there are bollards outside the property on the south side to protect the grass verge and property walls from vehicular traffic.

35 metres west of the junction with the B4360, the C1037 continues south as C1037 Cobnash to Lawton Road. It provides access to one house, Broom Hill Garden Nursery, a private lane and a private garden. The C1037 Cobnash to Lawton Road is 3 to 4 metres wide. There are no footpaths or street lighting along this section of the C1037.

There is SLOW road marking approximately 60 metres north of the sign which was observed to be faded.

There is a Junction on Outside of Bend Ahead Sign coupled with a Max Speed 20 plate for the eastbound motorists but this is outside the study area within the 30 mph speed limit. The 30 mph terminal signs are on yellow backing boards coupled with 30 roundels on red surface.

On the northern bend, there is a Sharp Deviation of Route to Left and Right signs (chevrons).

There are 30 mph terminal signs on a yellow backing boards coupled with red surfacing westbound and a NSL terminal signs eastbound at Point A.

Signage at the C1037, junction with the B4360

There is a Give Way sign associated with the B4360 for eastbound motorists.

Lines

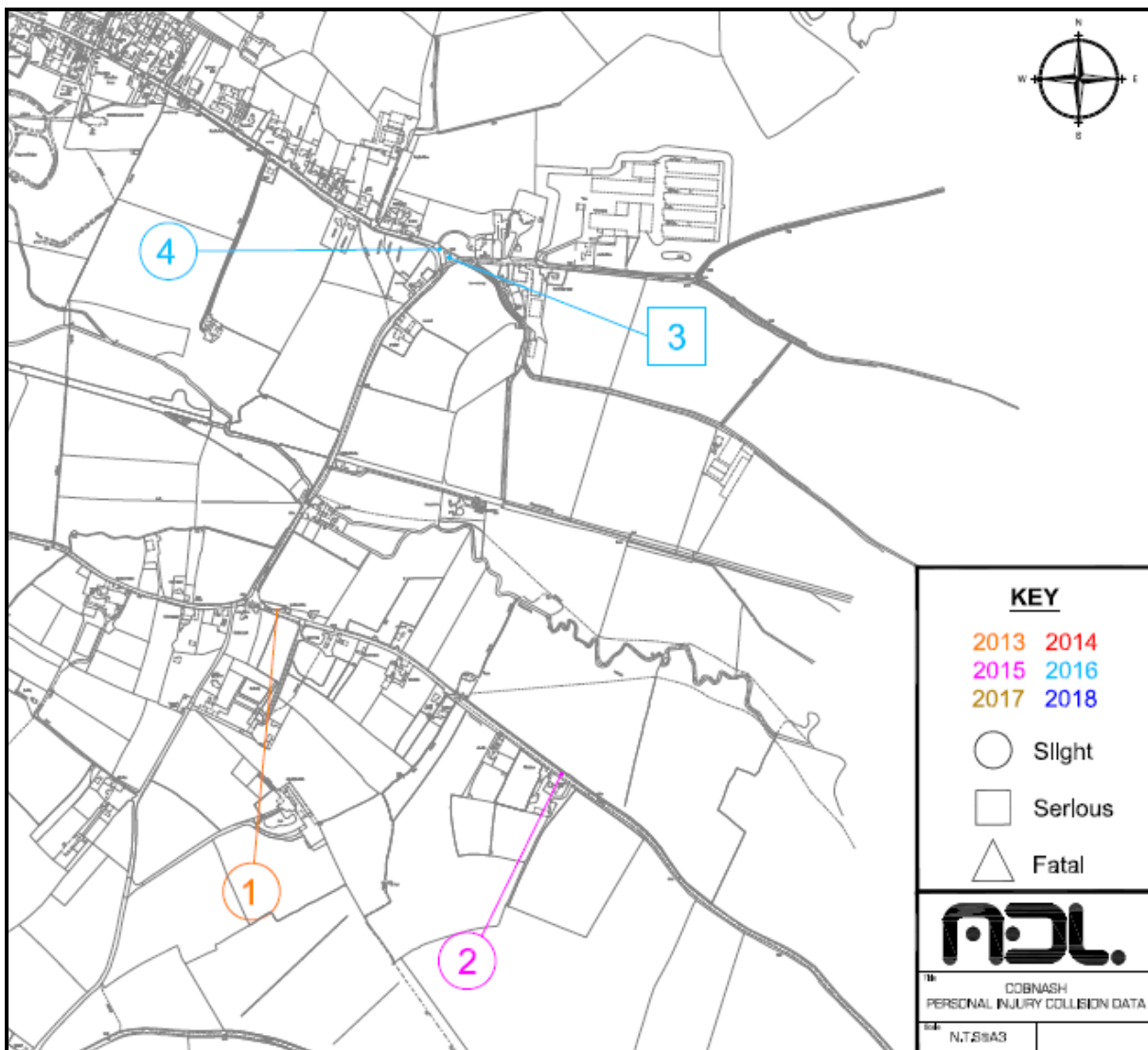
There are give way markings on the C1037 approach to the B4360. These markings are faded.

The centre lines on the B4360 and the C1037 have 6 metres mark and approximately 3 metres gap. The centre lines are faded at various sections.

Personal Injury Collision Information:

The table below depicts personal injury collisions that have occurred in five years between 1 February 2013 and 31 January 2018 inclusive - this being the latest validated data as at June 2018.

Plan Location	Date	Brief Description
1	18/10/2013	This collision involved a car and the driver was the only casualty recorded. The recorded very likely contributory factors were road being slippery, loss of control, poor turn/manoeuvre, travelling too fast for the conditions and inexperienced or learner driver. The collision was classed as slight injury.
2	13/03/2015	This collision involved a car and a motorcycle. The motorcyclist was the only casualty recorded. The recorded very likely contributory factors were poor turn/manoeuvre and failure to look properly by the car driver. The collision was classed as slight injury.
3	01/05/2015	This collision involved a motorcycle and the motorcyclist was the only casualty recorded. The recorded very likely contributory factors were indicated as travelling too fast for conditions, exceeding speed limit, aggressive driving, careless/reckless driving and loss of control. The collision was classed as serious injury.
4	19/07/2016	This collision involved two cars. The driver of one of the cars was the only casualty recorded. The recorded very likely contributory factors were loss of control and failure to look properly by the car driver. The collision was classed as slight injury.



This collision analysis shows that all 4 collisions were recorded on the B4360, two collisions were east of Cobnash Village either failing to look properly, losing control, or using a poor turn or manoeuvre. The two other collisions occurred on the sharp bend north of Cobnash Village and were caused by loss of control and failing to look properly, or travelling too fast

for the conditions, exceeding the speed limit and driving aggressively. These collisions occurred between 2013 and 2016. There have been no collisions recorded in 2017.

Existing Speed Survey Data:

Most road engineering and speed limit design refers to the 85th percentile speed. This is the speed that 85 percent of vehicles do not exceed when measured in free-flowing conditions at any single point on the highway.

One aim of a speed limit is to encourage more drivers to travel at about the same speed which has shown to reduce the likelihood of collisions. However, to be successful speed limits have to be evidence led and not set unrealistically low as this can quickly lead to an erosion of respect for speed limits.

Speed limits on their own are very unlikely to reduce vehicle speeds if they are set significantly lower than a prudent driver would choose to travel if there were no limit and such a course of action can lead to a worsening safety record.

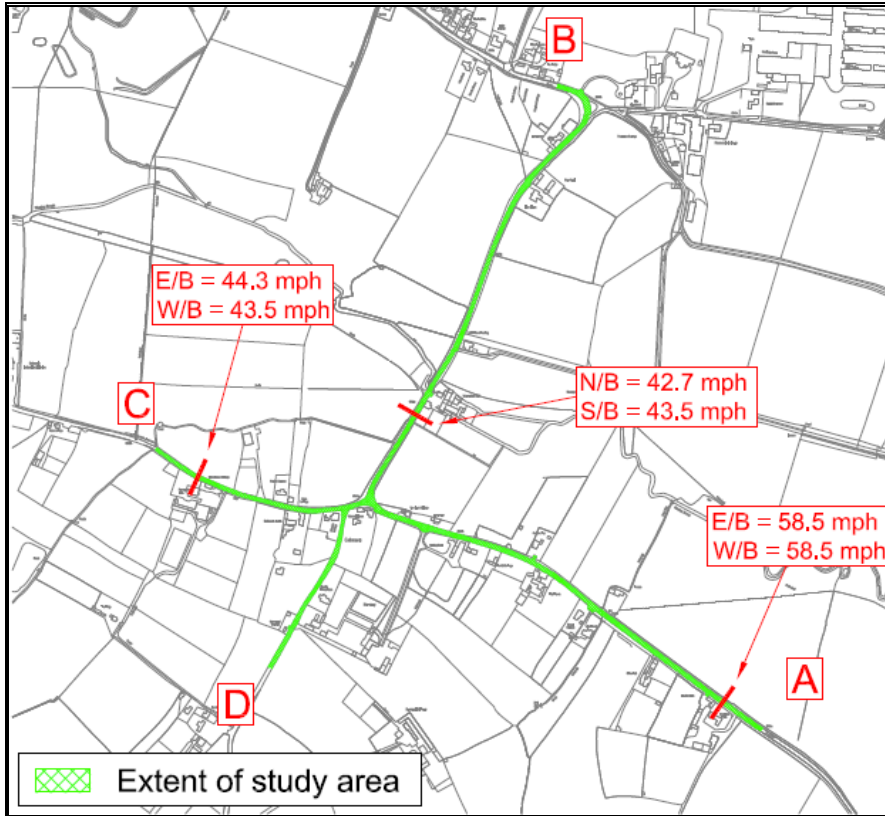
Research has shown that the safest and most responsible group of drivers travel at or below the 85th to 90th percentile speed and this leads to recommendations that speed limits should normally be set at or around the 85th percentile speed recorded under good conditions.

It's important to remember that a speed limit does not imply that it is a safe speed to travel at under all conditions. On all journeys on all types of road it is necessary to trust drivers to adopt lower speeds than the posted speed limit as conditions dictate and setting speed limits cannot be expected to replace this decision-making process.

Whilst the 85th percentile speed is an important and influential factor in deciding an appropriate speed limit other factors are also taken into account alongside the 85th percentile speed and may influence the recommendation. These are discussed in the review section below.

The speed surveys were undertaken at two locations on the B4360 and one location on the C1037. The table below depicts the average 85th percentile speeds recorded over a seven-day period commencing on 12th June 2018 at the following locations.

	Northbound	Southbound
Location 1 – B4360 (To the east of Cobnash village)	Eastbound – 58.5mph	Westbound – 58.5mph
Location 2 – B4360 (To the north of Cobnash village)	Northbound – 42.7mph	Southbound – 43.5mph
Location 3 – C1037 Hostel Lane (To the west of Cobnash village)	Eastbound – 44.3mph	Westbound – 43.5mph



With reference to information contained in the sections above:

Compliance to the posted National Speed Limit

The 85th percentile speeds at three locations – two on the B4360 and one on the C1037 indicate a very good level of compliance with the existing National Speed Limit.

Recorded 85th percentile speeds in relation to 40 mph speed limit

At Point B

As discussed in the page 4 of this report, the driver visibility to the current 30 mph speed terminals is well below the recommended 115 metres. In order to improve the visibility to these terminals, it is considered to be appropriate the relocate these terminals further south where the B4360 straightens past the bend. Due to the topography of the road at the bend

near Point B, it is likely that the vehicles speeds are likely to be low and hence the driver compliance to the 30 mph speed limit at this location is likely to be achieved with appropriate signing.

North of B4360/C1037 Junction (B4360)

The recorded 85th percentile speeds on the B4360 to the north of the B4360/C1037 junction are within the Association of Chief Police Officer's (ACPO) guideline for speed enforcement intervention level of 46 mph i.e. speed limit (40 mph) + 10% + 2mph. Therefore, a speed limit reduction to 40 mph is likely to achieve driver compliance on this section of the B4360 with appropriate signing.

East of B4360/C1037 Junction (B4360)

The recorded 85th percentile speeds on the B4360 approximately 660 metres east of the B4360/C1037 junction (i.e. in the vicinity of Point A) are above the speed enforcement intervention level of 46 mph i.e. for a speed limit of 40 mph.

Past Point A in the easterly direction, there is no developed frontage. It is at Point A onwards (in the westerly direction) that the motorists begin to see the development in the form of dwellings; albeit to the left hand side. Due to this visual impact and the fact that the motorists are approaching the B4360/C1037 junction, it is likely that the vehicles speeds between Point A and the B4360/C1037 junction to be below the 85th percentile speeds that have been recorded at Point A. Due to the road layout and roadside environment past Point A in the easterly direction, the vehicles are likely to speed up from this point eastbound.

Therefore, a speed limit reduction from Point A onwards from the current National Speed Limit to 40 mph in the westbound direction is likely to achieve driver compliance with appropriate signing.

West of B4360/C1037 Junction (C1037 Hostel Lane)

The recorded 85th percentile speeds on the C1037 to the east of the B4360/C1037 junction are below the ACPO guidelines for the speed enforcement intervention level of 46 mph i.e. for a speed limit of 40 mph. A speed limit reduction on this road from its current National Speed Limit to 40 mph is therefore likely to achieve driver compliance with appropriate signing.

C1037 (Cobnash to Lawton Road)

Given the road layout and topography of this section of the C1037, the vehicle speeds on this road are already likely to be very low. If the speed limit is reduced on this road, the drivers will see it as a target and start driving at this speed, instead of considering the local road conditions to influence their speeds. This in turn could worsen the safety records of this section of the C1037.

Speed Limit Recommendation:

1. Extend the existing 30 mph speed limit at Point B for approximately 270 metres south on the B4360 as shown in the plan on next page. This would improve the driver visibility to the 30 mph terminals as they travel from a higher speed limit section to 30 mph speed limit section thereby achieving driver compliance.
2. Reduce the speed limit of the B4360 from Point A to the new 30 mph speed limit from its current National Speed Limit to 40 mph. Point A marks the beginning of the visible roadside development and hence a speed limit reduction at this point with appropriate signing is likely to achieve driver compliance.
3. Reduce the speed limit of the C1037 from the junction with the B4360 for a distance of approximately 420 metres in the westerly direction. The point 420 metres west of the B4360/C1037 junction provides adequate verge to install the speed terminals. Past this point, the road bends to the right and immediately after the development in the form of dwelling and farming related business is visible to the motorists which is likely to enforce the speed limit visually.
4. Not to reduce the National Speed Limit of the C1037 Cobnash to Lawton Road.

The recommendations are shown on a plan in the next page.

