DATE: October 2021

Calne Without Parish Council Road Safety Feasibility Study

STAGE 1 REPORT

Interim report – appraisal of evidence, initial findings and recommendations

1. Introduction

1.1. This report has been prepared to inform Calne Without Parish Council (the PC) of the interim findings of Stage 1 of the Road Safety Feasibility Study.

1.2. The PC prepared a Project Brief dated October 2020 which set out the project background, objectives and details required of the study (**Appendix A**). The Brief identified 16 locations and stated the problems that required investigating.

1.3. For each of the sites, the Brief requested options for addressing the problems, advice on whether the options would require consultation or traffic regulation orders (TRO), the likely effectiveness of measures, and the costs of each option.

1.4. The Brief requested an interim report identifying the key findings of the initial scoping and survey work and an outline of the anticipated outcomes. The purpose of the interim report is to allow the PC to prioritise the schemes to be taken forward for further analysis. This Stage 1 report presents the interim findings as requested.

1.5. In our fee proposal, Entran identified that to fulfil the Brief for each of the 16 sites would be likely to exceed the PC's anticipated budget and so our proposed scope of work included a short-listing of sites at Stage 1 to assist the PC in taking around eight sites forward to Stage 2.

1.6. The Stage 2 report will include sketch plans of available options, based on these Stage 1 findings, and give firm recommendations as to the most effective option to address the safety issues raised.

1.7. Entran was appointed on the basis of the scope of work and methodology as set out in our fee proposal dated December 2020.

1.8. In conducting an assessment of the identified sites, Entran has made reference to guidance and specification contained in the Design Manual for Roads and Bridges[i], Manual for Streets[ii], Manual for Streets 2[iii], LTN1/08 Traffic Management and Streetscape[iv], and the Traffic Signs Regulations and General Direction[v]. However, due consideration has also been given to guidance specifically aimed at improving safety in rural areas and villages; this includes Streets for All (South West)[vi], Reclaiming our Rural Highways[vii], Rural Roads Protocol[viii], and Traffic in Villages, Safety and Civility for Rural Roads[ix].

2. Methodology

2.1. The PC provided an initial set of data in the form of speed and volume counts as well as (redacted) letters from local residents and reports of incidents. Entran then contacted Wiltshire Council (WC), and the Police, and reviewed all publicly available data for personal injury accidents as well as any recent planning applications which included Transport Assessments with useful data.

2.2. Entran reported to the Parish Council on 12th April 2021 that a review of all available data had been completed as well as site visits to all 16 sites. We wrote to the Parish Clerk on 21st April 2021 with the initial Stage 1 findings. That letter included a Data Reference Log which summarised all available (empirical and evidential) evidence. The letter also included summary sheets for each site, setting out the findings and initial recommendations.

2.3. A first meeting was held with the PC Working Group on 22nd April 2022 to discuss the initial findings. It was agreed that the sites should be short-listed to around eight to take forward to Stage 2 based on the significance of the issues and the likelihood of successful intervention. At that meeting, the Clerk and two Councillors identified that there was additional information available that had not been originally passed to Entran; that information included additional surveys (speed, volume and distribution) and three additional redacted letters from residents.

2.4. The additional information was reviewed, which necessitated four additional/repeat site visits. The information from the Working Group was incorporated into the Data Reference Log and site summary sheets and the Stage 1 findings re-issued (Version 2).

2.5. Following the issue of the Version 2 data sheets, Entran requested a series of workshops with the Working Group to discuss the findings for each of the sites. The sites were grouped into subject headings as follows:

- Workshop 1 - Derry Hill and Studley (sites 1, 2, 3, 4 and 5)
- Workshop 2 – A4 (sites 13, 14, and 15)
- Workshop 3 – HGVs (sites 2, 7, 11, 12 and 16)
- Workshop 4 – Wider area (sites 6, 8, 9 and 10)

2.6. The Brief provided by the PC is clear that the issues raised are "*real problems experienced by residents*" and that the study is aimed very clearly at improving safety and convenience for all road users. The Brief states that in some locations standard solutions are inappropriate and that environmentally sensitive alternatives should be explored rather than the more standard urban highway solutions. Clearly, given the purpose of the study, safety is paramount.

2.7. This issue was discussed in detail in the workshops and by exchange of correspondence between Entran and Working Group members.

2.8. The Brief includes the Hans Monderman quote *"If you want drivers to behave as they should in a village, make sure it feels like a village".* This is taken from the publication Traffic in Villages which has informed the approach to this study, to improve safety for all highway users in the Parish.

2.9. In some instances, the study recommendation may not be to include additional signage or road markings. This is not a matter of aesthetics or landscape character but a pragmatic approach to road safety. Clearly, unnecessary clutter in rural areas does detract from the rural setting (as detailed in the reference literature); however, studies[x] have shown that information overload can harm driver concentration, causing them to miss critical information and that 'external-to-vehicle' distraction is a major contributory factor in road accidents, and widely under-reported.

2.10. The 'Manual for Streets' in 2007 introduced the need to differentiate between Roads and Streets. In short, the primary function of a road is *movement* whereas a street has both a *movement* and *place* function. 'Streets for All' and 'Traffic in Villages' state that excessive use of road signs and markings tends to cause drivers to infer that they are on a *road* where movement is the primary function and, in worst cases, that drivers therefore have priority. The safety of vulnerable road users such as pedestrians, cyclists and horse riders, is greatly improved by reducing vehicle speeds; however, a reduction in vehicle speeds can be achieved in a number of ways, not always requiring signs and lines.

2.11. The choice of measures or interventions needs to be tailored to each site and the most effective way of improving safety must be given careful consideration. In some instances, a regulatory speed limit may be effective. In other locations, softer measures to reinforce the nature of the village environment may have a better effect on speed or safety. In many cases the correct solution may be a combination of the two.

2.12. Following the series of workshops and feedback, the Data Reference Log and site summary sheets were updated again (Version 4) and are included here as **Appendices B and C** respectively. These include full details of the evidence base, summary of initial findings, whether the site should be taken forward to Stage 2 and recommendations for the Stage 2 study.

2.13. For ease of reference, the following sections are based on the workshops as they conveniently group the sites by location or subject. The following sections provide a commentary on the workshop outcomes.

3. Derry Hill and Studley

3.1. The Derry Hill and Studley workshop examined five sites (1 to 5), four of which are recommended to be taken forward to Stage 2.

Derry Hill

3.2. Within Derry Hill, the existing evidence shows that the traffic calming is not effective. This could be augmented by additional measures such as visual thinning using contrasting materials, or further measures to enhance the presence of significant features such as the school, church, shop, junctions and gateways. Appropriate options will be included in the Stage 2 report.

3.3. Previous concerns about car parking around the school appear to have reduced but we would recommend a parking survey is carried out to inform appropriate options for Stage 2.

3.4. The issue of rat running is not constrained to the A4 and A342 routing but is a wider issue relating to the Calne bypass which directs north/south traffic on the A3102 to a point on the A4 closer to Derry Hill. Additional traffic calming or speed reduction measures are unlikely to deter through-movement; however, if speed and congestion (caused by indiscriminate parking) can be addressed, then the residual through traffic will cause fewer concerns for local residents.

3.5. Visibility at the Church Road / A342 junction can be improved. Traffic on the A342 is exceeding the posted 40mph speed limit which has an adverse effect on stopping sight distance. Speeds on the A342 could be reduced by appropriate measures to reinforce the existing 40mph speed limit. Appropriate options will be included in the Stage 2 report.

Studley

3.6. The speed surveys suggest that a 30mph speed limit in Studley would have little effect in reducing vehicle speeds. Indeed, for most of Studley 30mph would not allow drivers to stop in the available road ahead (Highway Code: Rule 154). A 20mph Zone would need to be self-enforcing and would therefore require speed reducing measures. Given the nature of the existing lanes (narrow, sinuous, high banks), conventional traffic calming measures are unlikely to have a material effect on driver speeds. Softer measures (gateways, highlighting features such as the Chapel, junctions etc) to alert drivers to the nature of the village may have a beneficial effect. A 20mph speed limit (as opposed to a Zone) would require additional signage in the form of repeater signs at regular intervals.

3.7. The consensus of the Working Group was that there is likely to be community support for a 20mph speed limit (or Zone) in Studley. This would require a TRO and would be subject to WC and Police approval. Appropriate design options will be included in the Stage 2 report.

3.8. During the study, the issue of HGVs using Studley Lane and Norley Lane was added to the issues to address. At present there is a single advisory sign at Studley Crossroads stating that Studley Lane is unsuitable for HGVs. Improved advisory signs could be provided at Studley Crossroads and the Norley Lane junction with the A4 without the need for a TRO; however, the Working Group consensus was that a formal weight limit would be preferable. This would require agreement from Bremhill Parish Council as such a weight restriction would necessarily extend beyond the CWPC boundary. Any such weight limit would be 'Except for Access' in order to allow businesses and farms within the restricted area to continue to operate. The required weight limit area is shown in **Appendix D**. This would require a TRO and would therefore require formal consultation and consideration of objections. If such a TRO was unsuccessful then the improved advisory signs could be pursued,

4. The A4

4.1. The workshop which considered the A4 looked at three sites (13 to 15).

4.2. In each case, a common thread is the multiple speed limits between the Pewsham Way roundabout and the Black Dog. Over a distance of 3.75km the speed limit changes from 50mph, to 40mph, to 50mph, to National Speed Limit, to 50mph, then to National Speed Limit again.

4.3. There is insufficient evidence to establish whether this series of speed limits has a positive or negative effect on driver speeds in each of the zones. We would recommend simultaneous speed surveys are carried out at the mid-point of each speed limit to establish current driver behaviour, to inform Stage 2 of the study.

4.4. Irrespective of the speed survey findings, further investigation should be made into amending the length and/or end section of the safety barrier to the west of the A342/A4 junction following the fatal road traffic accident in this location.

4.5. If funding is available for vehicle activated signs (VAS) then this length of A4 would be a suitable location to reinforce the speed limit; however, the location (or locations) should be informed by the speed survey data.

5. Heavy Goods Vehicles

5.1. The HGV workshop discussed five sites (2, 7, 11, 12, 16). The issue of HGVs in Studley (site 2) has been discussed in Section 3.

Sandy Lane

5.2. The road width through Sandy Lane is generally sufficient for two large vehicles to pass; however, the proximity of high hedges on the eastern side may cause southbound drivers to drive closer to the centre of the road. This in turn would cause northbound drivers to drive close to the footway on the western side of the A342 which is likely to result in fear and intimidation of vulnerable road users. There is a physical restriction at the southern end of the village, caused by a slight 'S' bend. At this location two large vehicles cannot pass but the restriction is for a short length. An additional 'road narrows' sign for northbound drivers may assist, as might a more prominent chevron sign for southbound drivers. However, as this is a conservation area, WC have carefully chosen the existing signage to be sensitive to the setting while conveying the necessary information to drivers. Any additional measures to address vehicle speeds would require an up-to-date speed survey. At the request of the Working Group this site will be taken forward to Stage 2.

Blacklands

5.3. There was no empirical evidence to support habitual use of inappropriate roads by HGVs in the Blacklands area, other than when there have been road works on the A4. On balance, this site is not recommended to be taken forward to Stage 2.

Lower Compton

5.4. The implementation of a 40mph speed limit in Lower Compton, coupled with the opening of a second access to the Hills site, is considered to have addressed the issues raised previously and so this site is not recommended to be taken forward to Stage 2.

Old Derry Hill

5.5. The A342 Old Derry Hill forms part of the WC County HGV route as the most direct route from the A350 to areas such as Devizes. The narrow carriageway width at the top of the hill cannot readily be widened. There are no warning signs for drivers heading up the hill. For drivers heading down the hill, the highway authority has recently replaced the 'road narrows' sign with a 'bends in road' sign. On balance, this site is not recommended to be taken forward to Stage 2.

5.6. The working group discussed the issue of the Hills Waste Solutions route management plan for vehicles servicing the Lower Compton waste site; however, it was agreed that this matter would not be pursued at this stage.

6. The wider area

6.1. The final workshop examined four sites across the Parish that did not fall into any to the three previous workshops, namely sites 6, 8 , 9 and 10.

Ratford

6.2. The issue of conflict between drivers and horse riders in Ratford has been raised by local residents. At present there is no speed survey data to support a reduction in speed limit. If the reduction in speed limit is to be pursued, then a speed survey will be required. It is unlikely that the road through Ratford would meet the requirements for a 30mph speed limit. The introduction of a 50mph or 40mph limit may have a counter-productive effect in granting drivers 'licence' to travel at that speed in close proximity to horse riders.

6.3. Additional signage to alert drivers to the presence of horse riders appears to be the most productive means to address this issue. No TROs would be required to introduce this sign. Requirement for this sign is a 'concentration' of accompanied horses and ponies i.e., greater than surrounding roads. Confirmation from PC should suffice for WC purposes.

6.4. Signs are likely to be required within the Bremhill Parish area so agreement would be required from the neighbouring PC.

Mile Elm

6.5. The absence of PIAs since the road was resurfaced in this location appears to suggest that the previous issues have been addressed (although this correlation is not direct evidence that the resurfacing is responsible for the reduction in PIAs). This site is not recommended to be taken forward to Stage 2.

Stockley and Broads Green

6.6. The nature and layout of Stockley makes the introduction of village gateway features challenging; however, additional signage could be introduced to alert drivers to the rural nature of the village and the presence of vulnerable road users. This would not require a TRO but may require a public consultation period and specific highway authority approval. Any local reduction to 30mph would require a TRO. There is a reasonable case for reducing the speed limit to 30mph in Stockley which may allow for a 40mph 'buffer' speed limit extending through Broads Green. This would require a TRO and additional signage, augmented by appropriate gateway features such as planters or 'gate markers'.

7. Additional sites

7.1. During the series of workshops two additional sites were identified. These did not form part of the project Brief and are not part of the current study; however, they are listed here as potential sites for future assessment:

- Calstone – unclassified side road junction with A4 (visibility and speed issue similar to Site 5)
- Calstone – unclassified road between A4 and Sprays Farm (similar issues to Site 6)

7.2. These (and any other) sites could form part of a Stage 3 study if required.

8. General issues

Vehicle Activated Signs (VAS)

8.1. The PC has investigated the acquisition of vehicle activated signs (VAS) As these will be located in the highway, the type of equipment will need to be agreed with WC; however, a number of different options are already in use throughout the County.

8.2. Within the Parish, simple VAS signs which indicate driver speed, and whether they are above or below the speed limit, would be effective in reinforcing existing speed limits.

8.3. A study by the Transport Research Laboratory (TRL) for the UK Department for Transport concluded that VAS appear to be very effective in reducing the number of drivers who exceed the speed limit (rather than simply relying on the 85th %ile) and who contribute disproportionately to the accident risk. However, the study suggests that the signs are most effective when seen for the first time. This relates to drivers who do not regularly use the route, or all drivers shortly after the signs are erected. In the case of the A4 and A342 (for example) this suggests that the signs would be most effective if installed for short periods and then relocated. This has a revenue cost implication which will need to be discussed and agreed with WC prior to the PC acquiring the signs.

8.4. When considering the different type of VAS, a cost-effective solution would be to select an option which records and stores traffic data such as speeds and volume. This would be an effective tool in determining the effectiveness of the VAS itself, as well as any external interventions (i.e. reduced speed limits) and could replace the need for separate speed surveys in some instances.

Road signs in rural areas

8.5. Where signs are required, proper consideration needs to be given to their location in order that they are effective in serving their intended purpose, but sensitively located so as not to detract from the rural setting (see **Appendix E**.) The size and type of signs should be given careful consideration. Wooden posts should be used in preference to steel or plastic where suitable and legal. Signs should not break the skyline where practicable. As stated earlier, this not only serves to preserve and enhance the rural nature of the villages in the Parish, but also assists in enhancing the safety of vulnerable road users by retaining the village character, thereby ensuring drivers perceive the routes through the villages as streets rather than roads.

Decision making and jurisdiction

8.6. This report makes suggestions to the PC with regards to options available for addressing road safety issues. The Stage 2 report will make firm recommendations as to which options are likely to be most effective. However, the decision as to which options to pursue will lie with the PC.

8.7. It is important to note that all works within the public highway will require approval from WC as local highway authority. Therefore, even if the PC agrees to pursue a reduction in speed limit (for example) this does not guarantee its implementation; there are statutory processes of public consultation, consideration of objections and a formal legal process to implement a Traffic Regulation Order. It is important that the local community is aware that any recommendations from this Road Safety Feasibility Study will still be subject to the same statutory processes as any other requests for works or measures within the public highway.

9. Next steps

9.1. This Stage 1 report provides a summary of the Stage 1 findings based on all available empirical evidence and a series of workshops with the PC Working Group. The purpose of this report is to recommend a short-list of sites to be taken to Stage 2; to identify the evidence which supports the reported issues; to examine likely effective options to address those issues; and to state whether those options would require formal consultation or TROs.

9.2. An outcome of the Stage 1 study is an identified need to establish an order of priority for those schemes that are taken forward to Stage 2. The prioritisation will be based on the evidence base (empirical and evidential) as well as anticipated effectiveness and speed of delivery. Full details of the prioritisation methodology will be included in the Stage 2 study.

9.3. The Brief states that the Stage 1 report needs to be approved by the PC prior to Stage 2 being commissioned. This report will be presented to the Working Group for comment prior to it being presented to the PC.

9.4. If required, Entran will present the findings of the Stage 1 assessment to the PC, either at a PC meeting or by means of video conference if preferred. This is included in the Entran scope of work.

9.5. We would recommend that once the PC has agreed the Stage 1 report that it is available for public scrutiny prior to the commencement of the Stage 2 study.

9.6. If the PC approves the Stage 1 report, and then commissions Stage 2, the next stage of work will be to prepare sketch pans of the available options. The Stage 1 workshops have proven very effective so we would recommend that similar workshops are used to inform the preparation of the sketch schemes.

Appendix A
Project Brief

Project Brief
Road Safety Feasibility Study
Calne Without Parish Council

1 Introduction

1.1 Calne Without Parish Council approved the commissioning of a project to carry out a feasibility study into the road safety issues within the Parish The Council has however identified a number of road safety issues for which the standard solutions are inappropriate to the locations and the problems and are seeking environmentally sensitive alternatives to the more standard urban highway solutions.

1.2 The feasibility study should identify a number of location-appropriate solutions to the real problems experienced by residents.

2 Background

2.1 Calne Without Parish Council covers the rural area that surround the town of Calne in Wiltshire. The Parish includes the large village of Derry Hill and Studley and smaller communities of Stockley, Calstone and Lower Compton. A large part of the area is covered by the Bowood Estate. The Parish has 3 A roads the A4, A342 and A3012 running through it. Recent moves to improve air quality in Calne Town centre have seen traffic, in particular HGVs, removed from Calne Town centre and moved on to the surrounding rural routes through Calne Without.

2.2 The rural communities have seen significant increases in traffic and the conflict between users, walkers, cyclists, horse riders, cars, HGVs and agricultural vehicles is a constant cause of concern to local residents. Perceptions are of traffic, which is rat running, travelling too fast and is too big for the rural roads and that the pressure on the main roads is ever increasing.

2.3 The Parish Council has sought through the Wiltshire Council Community Area Transport Group to address the concerns of locals but often the problems do not meet the criteria for action by the Highways Authority or the solutions themselves are not effective to the identified problems.

2.4 The Parish Council has decided to commission a feasibility study to look at the Parishes problem areas and come up with environmentally sensitive and appropriate solutions to the actual and perceived traffic safety issues.

2.5 The report will be used by the Parish Council to identify a number of projects for the Parish Council to engage in either on its own or in partnership with adjacent Parishes or Wiltshire Council to improve road safety. The Parish Council is in receipt of Community Infrastructure Levy Funds which it could use to fund certain improvements. The Report will also inform the review of the Calne Area Neighbourhood Plan. And help in the review of any developer that may come to the attention of the Parish Council.

2.6 Successful plans are built on a thorough and comprehensive understanding of the special qualities and circumstances that combine to create an individual place.

2.7 The Parish Council understands that if you want drivers to respect the rural areas roads and villages then you must make them clearly identifiable as areas where pedestrians, cyclists and horse riders will be sharing the road and may have priority in certain areas.

"If you want drivers to behave as they should in a village, make sure it feels like a village" Hans Monderman 1945-2008

3 Contact Information

The Project is being taken forward by three Councillors supported by the Parish Clerk. The contact information for each is as follows:

Tenders should be returned by email to the Parish Clerk by the end of December 2020.

Cllr Jim Cook	Jim.cook@calnewithout-pc.gov.uk	
Cllr Keith Robbins	Keith.robbins@calnewithout-pc.gov.uk	
Cllr Alan Malpas	alan.malpas@calnewithout-pc.gov.uk	
Sarah Glen (Clerk)	clerk@calnewithou-pc.gov.uk	07771888956

4 Project Objectives

To make appropriate use of the following principles

- Improve road safety for all users;
- Reduce accident risk on Parish A roads at the junction with minor roads;
- Where safe, to create shared spaces where the traditional distinction between space for pedestrians and space for vehicles is minimised or abolished;
- Use inherently rural features such as hedges, banks, walls, the position of buildings and bridges as features to naturally calm traffic;
- Ensure that clutter is kept to the minimum necessary for the safe operation of the road network;
- Ensure that whatever works are carried out conserve and enhance the distinctiveness of the area.

5 Project details

5.1 For each of the specific locations below the objective of the project is to identify measures to reduce / alleviate the problems and improve safety through the use of highway acceptable environmentally led solutions.

5.2 For each of the identified locations a solution or number of solutions should be identified, evaluated and costed. The solutions should be categorised into a hierarchy according to the ease and cost of the solution and must identify any traffic regulation orders required for their completion.

5.3 The proposal should outline the methodology to be adopted for the feasibility study, the anticipated scope of the work, the timescale for the work, the cost and proposed output. The proposal should make provision for an initiation conference which should identify key risks to delivery of the anticipated output, an interim report (ideally at the halfway point of the work) a final report and presentation to the council of the findings.

6 Locations to be considered

Location	Problem
Church Road, Derry Hill	Speeding, 'Rat Running' and Traffic Calming
Studley Lane	Speeding, Pedestrian Safety and Cyclist Safety.
Studley Crossroads	Junction safety, accident Hazard; potentially linked to 'Rat Running'
Church Road (and Lansdowne Crescent East)	Daytime parking and school 'pick up and drop off times, speeding
Church Road A342 junction	Sight lines (to the left) for right hand turns.
Ratford	Conflict between Horse Riders and motorist
Sandy Lane	Safety, traffic speeds and HGVs too wide to pass
Mile Elm	Accident black spot on the bends
Broads Green	Safety, traffic speeds and rat running conflict between traffic pedestrians, cyclists and horse riders
Stockley	Safety, rat running, HGVs, conflict between traffic and pedestrians and cyclists.
Blacklands	HGV traffic and rat running
Lower Compton	Safety, HGVs and traffic speeds.
A4 from Forest Gate to eastern extent of Studley Crossroads	Safety, speeding
A342/A4 junction at Old Derry Hill	Safety, speeding and turns from A4 to A342 and vice versa
A4 Forest Gate Complex / Causeway Garage	Safety, turning into/out from the Forest Gate to/from the A4
A342 Old Derry Hill from Lansdowne Arms to The Well House	Safety, HGVs too wide to pass

7 Reporting

7.1 The Parish Council will expect an interim report which identifies the key findings of the initial scoping and survey work and an outline of the anticipated outcomes. The Parish Council will at this stage, if necessary, identify its priorities for the schemes to be taken forward for further analysis.

7.2 The feasibility report will also be required to identify the potential costs for improvements, the delivery risks and timescales as well as the requirements for official consultation.

7.3 Opportunities for external funding of any enhancements should also be identified.

8 Project Team and Experience

Contractors applying to undertake the work will be requested to provide evidence of competence, ideally with examples of similar work within this sector and details of the team that will be carrying out the work.

Appendix B
Data Reference Log

Ref	Site	Issue(s)	Data				SV	Comments
			Sp	Vol	PIA	Other		
1	Church Road, Derry Hill	a) Speeding b) Rat running c) Traffic calming	✓	✓		✓	✓	• Speed survey February 2020, 85th percentile 27.9mph. (Hardcopy 1a) • Volume survey 2004. (Hardcopy 1b) • Volume survey 2014. (Hardcopy 1c) • Other: Request form reporting speeding, which also states the speed cushions are insufficient in reducing the speed of wide-based vehicles and do not deter narrow base vehicles. (PDF 1d)
2	Studley Lane	a) Speeding b) Pedestrian and cyclist safety *c) HGVs*	✓	✓		✓	✓	• Other: Resident's request; more profound gateway to Studley Lane, improved signage; HGV no entry sign seems to now be insufficient (PDF 2a point 10.2); for the speed limit to be lowered to 30mph/20mph • Speed and volume Sept/Oct 2019
3	Studley Crossroads	a) Junction safety b) Accident hazard c) Rat running			✓	✓	✓	• PIAs indicate no change in frequency of accidents over past 5 years. (PDF accidents breakdown) • Other: Report of cyclists using private courtyard rather than cycle path into Derry Hill as a result of no/minimal signage. (PDF 3a)
4	Church Road (and Lansdowne Crescent East)	a) Daytime parking b) School pick-up / drop-off c) Speeding	✓	✓			✓	• Speed survey February 2020, 85th percentile 27.9mph. (Hardcopy 1a) • Number plate survey • No recent car parking survey.
5	Church Road j/w A342	a) Visibility (LH) for right turns	✓	✓	✓		✓	• Email showing speed findings in 2017, 85th percentile 52.1mph. (Email 'A342 Devizes Road, Derry Hill - Traffic Data Request (2010 - 2020)') • DfT permanent traffic count site on A342. • PIAs indicate a decrease in accident frequency in the past 5 years. (PDF accidents breakdown) • PC funding for VMS?
6	Ratford	a) Conflict between horse riders and motorists			✓	✓	✓	• PIAs indicate a decrease in accident frequency in the past 5 years. (PDF accidents breakdown) • Other: Resident request; a sign that there are live animals (mainly horses) constantly using this road. We understand "the police agree the road should not be 60mph". (PDF 6a point 10.1) • No speed survey available.

Contd.

7	Sandy Lane	a) Safety b) Speeding c) HGVs (too wide to pass)	✓	✓		✓	✓	• Speed survey December 2019, 85th percentile 34.7mph. *(Hardcopy 7a)* • Total volume, part of speed survey. *(Hardcopy 7a)* • PIAs indicate a decrease in accident frequency in the past 5 years. *(PDF accidents breakdown)* • Other: Request for a traffic survey (2019 survey conducted after request date). *(PDF 7b)* • Other: HGV route plan *(PDF HGV route network map)*
8	Mile Elm	a) Accidents (on bends)			✓		✓	• PIAs indicate no change in frequency of accidents over past 5 years. *(PDF accidents breakdown)*
9	Broads Green	a) Safety b) Speeding c) Rat-running d) Vulnerable road users	✓	✓		✓	✓	• Speed survey September 2019, 85th percentile 41.1mph. *(Hardcopy 9a)* • Total volume, part of speed survey. *(Hardcopy 9a)* • Other: Speeding complaints on straights. Resident request; extension of 40mph speed limit in Stockley to Broad's Green, gateway features also welcomed.
10	Stockley	a) Safety b) Speeding c) Rat-running d) Vulnerable road users	✓	✓	✓	✓	✓	• Speed survey December 2019, 85th percentile 42.7mph. *(Hardcopy 10a)* • Total volume, part of speed survey. *(Hardcopy 10a)* • PIAs indicate no change in frequency of accidents over past 5 years. *(PDF accidents breakdown)* • Other: Complaint of uncontrolled parking at the entrance/corner of hollow, restricting access, request for double yellow lines. *(PDF 10b)* • Other: Erosion of verge due to narrow lane, suggestion of providing passing places. *(PDF 10c)*
11	Blacklands	a) HGVs b) Rat-running			✓	✓	✓	• No PIAs in the last 5 years. *(PDF accidents breakdown)* • Other: Complaint of HGV's and volume using road as a rat run, damaging the road and water pipes. Resident request; to make the road 30 mph and apply a weight restriction to the route. *(PDF 11a)* • No speed survey available
12	Lower Compton	a) Safety b) HGVs c) Speeding			✓		✓	• Single PIA in past 5 years at the junction to A4. *(PDF accidents breakdown)* • No speed surveys available. • 40mph TRO advert (implemented)

Contd.

13	A4 Forest Gate to Studley Crossroads	a) Safety b) Speeding	✓	✓	✓		✓	• Speed survey (PSL 60mph) November 2019, 85th percentile 55.5mph. *(Hardcopy 13a)* • Speed survey (PSL 50mph) November 2019, 85th percentile 49.2mph. *(Hardcopy 13a)* • Volume survey 2003. *(Hardcopy 13c)* • PIAs indicate increase in accident frequency over the past 5 years. *(PDF accidents breakdown)* • PC funding for VMS?
14	Old Derry Hill A342 j/w A4	a) Safety b) Speeding c) Turns between A342/A4			✓		✓	• PIAs indicate no significant change in frequency of accidents over past 5 years. *(PDF accidents breakdown)* • No speed survey near this junction.
15	A4 Forest Gate / Causeway Garage	a) Safety b) Turning traffic					✓	• No speed survey near these junctions.
16	A342 Lansdowne Arms to The Well House	a) Safety b) HGVs (too wide to pass	✓			✓	✓	• Speed survey (PSL 40mph) Sept 2021, 85th percentile 38.1mph(N), 39.1mph(S). *(PDF)* • Other: HGV route plan *(PDF HGV route network map)*

KEY:

Green reference numbers recommended for Stage 2

Red reference numbers not recommended for Stage 2

Sp = speed survey

Vol = volume count (i.e. traffic count, manual or automatic traffic count (ATC))

PIA = personal Injury Accident

SV = Site visit

TRO = Traffic Regulation Order

Italics = Items in italics were not included in the original brief but were added during the Working Group workshops

Appendix C
Project summary sheets

Calne Without Parish Council - Road Safety Study

Site 1/4 – Church Road, Derry Hill

Issues:	**Available data:**
• Speeding • Rat running • Traffic calming • Daytime Parking • School pick-up/ drop-off	Speed: Feb 2020. 85%ile 27.9mph, mean 23.5mph Volume: 2004 AADF, 2014 AADF PIA: NA Other: ✓ (number plate survey)

Site visit date and conditions: 19/3/21 (dry, light), 22/4/21 (dry, light)

Findings:

7-day ATC (between Warren Cottage and 1 Morton Villa), hardcopy WC summary results available; 85%ile 27.9mph, mean 23.5mph; 80% of vehicles were exceeding the posted speed limit. This data indicates the 20mph speed limit is not self-enforcing, suggesting the traffic calming measures are ineffective. However, the survey was only conducted in one location away from traffic calming features, therefore not representing the variable speeds throughout the Church Road traffic calming.

Two traffic volume surveys have taken place on Church Road in 2004 and 2014. The 2004 survey showed average daily 2-way traffic flows of 2702 vehicles, this survey also included a speed survey with an 85%ile of 36.7mph, mean of 31.2mph. The 2014 survey showed average daily 2-way traffic flows of 1807. The two surveys are only 'snap shots' but suggest a reduction in daily flows between 2004 and 2014, together with a reduction in speeds between 2004 and 2020.

A resident's report suggests the speed cushions are ineffective in reducing the speed of wide base vehicles and do not deter narrow-base vehicles. The speed surveys appear to support these comments although the data does not differentiate between HGV/PSV speeds and car speeds. Local observations indicate that the speed table outside Derry Hill school the most effective measure in reducing vehicle speeds.

Parking and school pick-ups/ drop-offs are reported to be issues but there is no survey data to quantify the extent of parking and its impact. The Lansdowne Hall car park is available to school parents by private arrangement. Recent measures to reduce indiscriminate parking include signage, regular information to parents and travel plan measures such as walking trains.

Distance from Studley Crossroads to A342 via Old Derry Hill is 2km. Distance via Church Road is 1km. Informal vehicle journey time assessment (Entran) indicates 1 min 50 sec for the 2km route and 1 min 40 sec for the 1km route adhering to speed limits. Junction capacity and Church Road parking is therefore more likely to affect journey time reliability (and rat-running) than traffic calming.

Stage 1 recommendations:

Parking - surveys to quantify number and location of vehicles in order to inform remedial measures. These surveys are spot counts and can therefore be carried out informally.

Remedial measures could require additional waiting restrictions (requiring TROs) or could be soft measures such as further information and incentives to parents.

Speeds - Further classified ATC counts required in three locations along Church Road to establish whether 2020 observed 85%ile speeds are consistent.

Remedial measures could include additional Police enforcement (unlikely) or additional measures to augment the traffic calming. The bus route means that cushions cannot be replaced by tables, but cost-effective physical

measures could include visual 'thinning' using contrasting road surfacing along channel lines, and/or at road junctions. These measures could include innovative features to alert drivers to the presence of key landmarks such as the church, school, village shop, pub etc.

Rat running – Number plate surveys at A4 and A342 illustrate more than 50% through-traffic.

Initial journey time surveys suggest Church Road is just 10 seconds quicker than Old Derry Hill in free-flowing conditions. Additional traffic calming may reduce vehicle speeds to 20mph, but the difference in journey times is unlikely to deter rat-running. Issue of through-traffic relates to wider network (A4/A342) rather than local network.

Query: Why is 'rat-running' considered an issue? Is it because through-traffic travels faster? Is it because additional traffic at junctions has an effect on delays? Does the concern about congestion at Studley Crossroads relate to time delay, or driver safety? Further reductions in speed may make Church Road safer but would not resolve junction capacity issues. Extreme measures such as severing Church Road halfway (creating two cul-de-sacs i.e. Safer Neighbourhoods scheme) would address both issues but at significant inconvenience to residents.

Progress this site to Stage 2.

Auditor: JPB	Approved: RAF

Calne Without Parish Council - Road Safety Study

Site 2 – Studley Lane

Issues:	**Available data:**
• Speeding • Pedestrian and cyclist safety • *HGVs*	Speed: ✓ Volume: ✓ Other: ✓

Site visit date and conditions: 17/3/21 (fair, light)

Findings:

2019 speed surveys show Studley Lane 85%ile 25.6mph (N) 27.0mph(S) [2%-4% 30-35mph]. Norley Lane 85%ile 24.81mph (E) 21.25mph (W) [0%-1% 30-35mph].

Unreported PIA - precise location not known. Using Crash Map data, there have been no recorded PIAs on Studley Lane or Norley Lane in the past 5 years.

Requests from local residents to reduce the speed limit from the national speed limit to 30mph (or 20mph)

There have also been residents' claims that the signage and gateway into Studley Lane are insufficient in conveying the rural nature of this lane to those leaving the A4. Residents' request for features such as plants and trees would help create a gateway feature which demonstrates to drivers coming off the A4 the change in surroundings.

There is photographic evidence that the advisory 'Unsuitable for HGVs' sign, which is in poor condition, no longer fulfils its purpose as HGVs are using Studley Lane and Norley lane other than for access.

Recommendations:

Studley Lane differs in nature close to the A4 and further into Studley. Speed surveys on Studley Lane and Norley Lane show 85%ile speeds between 21-27mph so 30mph limit unlikely to affect vehicle speeds. New 20mph limit would need to be self-enforcing so additional features would be required.

The Studley Gardens development resulted in a physical and visual widening of Studley Lane close to its junction with the A4. The provision of a footway altered the nature of the lane , creating a sub-urban context for drivers leaving the A4. The 'gateways' into Derry Hill herald a reduction of speed into a 20mph zone. It would be unusual for a 'gateway' to mark an increase in speed limit (i.e., entering a national speed limit rural lane).

Studley Lane has natural traffic calming to the north of Vastern Timber in the form of a single-width narrowing followed by variable width carriageway throughout Studley. Narrow lanes can create conflict between drivers and vulnerable road users if vehicle speeds are high (or perceived to be high). Given the observed speeds, a 30mph speed limit is unlikely to be effective; a 20mph speed limit would require additional measures so full consideration needs to be given to the effectiveness of measureas alone versus the effectiveness of measures supported by a 20mph speed limit (TRO required).

The advisory 'unsuitable for HGVs' sign was re-mounted as part of the Studley Gardens development. It is visible to all drivers leaving the A4, but there is no advance warning, so HGV drivers are likely to have committed to the turn before they see the sign. A formal weight restriction (<7.5t except for access) similar to Derry Hill would allow advance warning to be added to the advance direction signs on the A4. The Working Group favours a formal weight limit, except for access (requiring a TRO) as opposed to improved advisory signage. This would necessitate agreement with neighbouring Parish.

Progress this site to Stage 2.

Auditor: JPB	Approved: RAF

Calne Without Parish Council - Road Safety Study

Site 3 – Studley Crossroads

Issues:

- Junction safety
- Accident hazard
- Rat running

Available data:

Speed: Oct 2019. 85%ile 49.2mph, mean 44.0mph

Volume:

PIA: ✓

Other: ✓

Site visit date and conditions: 17/3/21

Findings:

7-day ATC hardcopy summary results available show, 85%ile 49.2mph, mean 44.0mph and 12.3% of vehicles were exceeding the posted 50mph speed limit. This data demonstrates that users of the A4 in the vicinity of Studley Crossroads are keeping to the posted speed limit.

The PIA data available from Crash Map indicates that over the past 5 years there has little to no change in the frequency of personal injury accidents at this location. A breakdown of the PIAs is summarised below. Studley Crossroads was re-modelled as part of the Chapel Street development more than 10 years ago. The frequency of PIAs reduced following those improvements. It may be that there is a continued perception of safety issues that is not supported by the data.

Severity	2016	2017	2018	2019	2020
Slight	0	0	1	2	0
Serious	0	1	0	0	0
Fatal	0	0	0	0	0

The required min visibility for drivers emerging from the side roads is 2.4m x 160m, measured to the nearside kerbline. This is available, subject to regular verge maintenance. The preferred visibility would be 4.5m x 160m to allow drivers to give-way rather than having to stop. This is not available, thereby affecting junction capacity and queue lengths. The rat running issue relates to Church Road but affects the number of vehicles turning at the cross-roads, meaning this specific issue can be targeted by addressing 'Site 1'.

Recommendations:

Good visibility needs to be maintained in order to ensure safe egress from the side roads. This requires regular verge maintenance which may be a matter the PC wishes to address with WC.

The PIA data does not indicate a serious safety issue requiring physical remedial measures.

The limited visibility at the junction does reduce junction capacity; however, that has a beneficial effect in deterring rat-running.

General congestion at the junction may result in drivers becoming frustrated or feeling pressured and therefore pulling out onto the A4 injudiciously. This is mitigated in part by good visibility splays and appropriate vehicle speeds on the main road.

Do not progress this site to Stage 2 at this time.

Auditor: JPB

Approved: RAF

Calne Without Parish Council - Road Safety Study

Site 5 – Church Road j/w A342

Issues:	**Available data:**
• Visibility (LH) f • or right turns	Speed: 2017. 85%ile 52.1mph, mean 45.4mph Volume: (number plate count) PIA: ✓ Other: ✓

Site visit date and conditions: 20/3/21 (dry, light)

Findings:

7-day automatic traffic count just south of junction, email summary results available show 85%ile 52.1mph, mean 45.4mph. This data demonstrates the majority of vehicles are significantly exceeding the posted speed limit (40mph). Required visibility is related to vehicle speeds on major road so measures to reduce speeds would improve driver intervisibility.

2.4m x 120m (for 40mph) available. 2.4m x 160m available to centre line but not nearside kerbline. Low wall at back edge of highway. Highway verge maintained as rural margin (i.e., not mown), so high grass can impede visibility.

The PIA data available from Crash Map indicates that over the past 5 years there has been a decrease in the frequency of personal injury accidents at this location. A breakdown of the PIAs at this location is summarised below. The evidence suggests the higher speeds and limited visibility are not translating into serious incidents.

Severity	2016	2017	2018	2019	2020
Slight	1	1	0	0	0
Serious	0	0	0	0	0
Fatal	0	0	0	0	0

Recommendations:

Measures could be introduced to reduce vehicle speeds to 40mph approaching the junction. Given the 'A' classification of the road (A342) measures would comprise additional signage and/or road markings rather than formal traffic calming. In this location the A432 is straight and wide but with direct frontage access from houses. Some form of visual thinning (contrasting road surface) may have a beneficial effect by emphasising the presence of homes and people.

Variable message sign (VMS) likely to have a positive effect if funding available.

In addition to the above (or instead of), the verge south of the junction could be cut at an urban frequency or replaced with a stone finish for the extent of the visibility splay.

No TROs would be required.

Progress this site to Stage 2.

Auditor: JPB	Approved: RAF

Calne Without Parish Council - Road Safety Study

Site 6 – Ratford

Issues:	**Available data:**
• Conflict between horse riders and motorists	Speed: x Volume: x PIA: ✓ Other: ✓

Site visit date and conditions: 19/3/21 (dry, light)

Findings:

There is no empirical survey data for this site such as speed surveys or volume counts of vehicles or horse riders.

Residents have raised concern that the road lacks signage to indicate this road is frequently used by horse riders; there is also a suggestion that police agree the national speed limit is too high for a road of this nature. The stables fronting on to the road further indicate the frequent use by animals.

The PIA data available from Crash Map indicates that over the past 5 years there been a decrease in the frequency of personal injury accidents at this location. A breakdown of the PIAs at this location is summarised below.

Severity	2016	2017	2018	2019	2020
Slight	1	0	0	0	0
Serious	0	0	0	0	0
Fatal	0	0	0	0	0

Recommendations:

If the reduction in speed limit is to be pursued, then a speed survey will be required. It is unlikely that the road through Ratford would meet the requirements for a 30mph speed limit. The introduction of a 50mph or 40mph limit may have a counter-productive effect in granting drivers 'licence' to travel at that speed in close proximity to horse riders.

Additional signage to alert drivers to the presence of horse riders appears to be the most productive means to address this issue.

No TROs would be required to introduce this sign. Requirement for this sign is a 'concentration' of accompanied horses and ponies i.e. greater than surrounding roads. Confirmation from PC should suffice for WC purposes.

Progress this site to Stage 2.

Figure 9-7 Diagram 550.1 (S2-2-30) Accompanied horses or ponies likely to be in the road ahead

Auditor: JPB	Approved: RAF

Calne Without Parish Council - Road Safety Study

Site 7 – Sandy Lane

Issues:

- Safety
- Speeding
- HGVs (too wide to pass)

Available data:

Speed: Nov 2019. 85%ile 34.7mph, mean 30.4mph

Volume: NA

PIA: ✓

Other: ✓

Site visit date and conditions: 19/3/21 (dry, light)

Findings:

7-day automatic traffic count at SN15 2PY. Hard-copy summary results available show 85%ile 34.7mph, mean 30.4mph and 52.8% of vehicles were exceeding the posted speed limit. The survey was conducted less than 200m from the change in speed limit, drivers may still be slowing down at this point.

Requests for speed surveys had been made, however, these were dated prior to the latest survey.

The Wiltshire HGV route network map shows the A342 as a Local Lorry Route. This is the only designated HGV route from the A350 to Devizes. Residents have raised concern about the available road width for two HGVs to pass; this relates to the localised throttle at the southern end of the village (j/w Back Lane). In this location an HGV can pass a car at 30mph but two HGVs meeting at this point would have to slow or stop.

The PIA data available from Crash Map indicates that over the past 5 years there been a decrease in the frequency of personal injury accidents at this location. A breakdown of the PIAs at this location is summarised below. However, the decrease in PIAs

Severity	2016	2017	2018	2019	2020
Slight	2	2	1	0	0
Serious	0	0	0	0	0
Fatal	0	0	0	0	0

Recommendations:

It is unlikely that this length of A342 can be taken off the Local Lorry Route given it is the shortest route to Devizes from the A350. There is limited scope to widen the carriageway at the southern end of the village due to the close proximity of a house on the western side and wall on the eastern side. A significant road widening would require a compulsory purchase order which is unlikely to be successful given the low number of PIAs.

Additional signage could be introduced indicating 'road narrows' or a more prominent Chevron sign for southbound traffic; however, as this is a conservation area, care needs to be taken not to introduce unnecessary clutter. No TRO would be required for this sign. Safety and speeding measures will require a new speed survey to be undertaken.

Figure 4-1 Diagram 516 (S2-2-13)
Road narrows on both sides ahead

Progress this site to Stage 2

Auditor: JPB

Approved: RAF

Calne Without Parish Council - Road Safety Study

Site 8 – Mile Elm

Issues:	**Available data:**
• Accidents (on bends)	Speed: x Volume: NA PIA: ✓ Other:

Site visit date and conditions: 20/3/21 (fair, light)

Findings:

There is no recent empirical survey data for this site such as speed or volume surveys.

The PIA data available from Crash Map indicates that over the past 5 years there has little to no change in the frequency of personal injury accidents at this location. A breakdown of the PIAs at this location is summarised below. Leading to the bend, the necessary signs and markings are in place to inform drivers of the turn ahead.

Severity	2016	2017	2018	2019	2020
Slight	1	0	0	2	0
Serious	0	0	1	0	0
Fatal	0	0	0	0	0

Recommendations:

Double white lines have been introduced for the entire length of the bends on the A3102 close to Whetham House, prohibiting overtaking. Driver approaching from both directions are presented with 'double bends' warning signs (diag 513) in advance. Drivers approaching from the North also have a 'slippery road ahead' (diag 557). The first bend (when approach from either direction) has a series of reflective chevron signs, the second bend then has advance warning of 'junction on outside of bend' (diag 512.1).

Information from PC suggests PIA rate decreased following carriageway resurfacing although this correlation is not direct evidence that the resurfacing was the cause of the PIA reduction.

In this rural location the road is unlit and subject to the national speed limit, but the bends are very well signed.

Additional measures could include count-down rumble trips, or signs indicating an advisory speed as a supplement to the initial signs. This would not require a TRO.

Do not progress this site to Stage 2.

Auditor: JPB	Approved: RAF

Calne Without Parish Council - Road Safety Study

Site 9 – Broads Green

Issues:

- Safety
- Speeding
- Rat-running
- Vulnerable road users

Available data:

Speed: Sep 2019. 85%ile 41.1mph, mean 34.7mph

Volume: NA

PIA: ✓

Other: ✓

Site visit date and conditions: 19/3/21 (dry, light)

Findings:

7-day ATC (between Stockley and Broads Green road), hardcopy summary results available show 85%ile 41.1mph, mean 34.7mph and 19.8% of vehicles were exceeding the posted 40mph speed limit. This data demonstrates that majority of users in the vicinity are keeping to the posted speed limit.

Residents have requested an extension to the 40mph speed limit across Broad's Green (currently at the national speed limit), with gateway features welcomed. No houses have direct access onto the 60mph length of road so WC may resist the extension, particularly as the survey demonstrates vehicle speeds generally below the speed limit within in the 40mph limit.

There is a reasonable case for reducing the speed limit to 30mph in Stockley which may allow for a 40mph 'buffer' speed limit extending through Broads Green.

The PIA data available from Crash Map indicates that over the past 5 years there has little to no change in the frequency of personal injury accidents at this location. A breakdown of the PIAs at this location is summarised below.

Severity	2016	2017	2018	2019	2020
Slight	0	1	0	0	0
Serious	0	0	0	0	0
Fatal	0	0	0	0	0

The site location and data give no indication why rat-tunning would be occurring in the area.

Recommendations:

Further clarification of the perceived issues would be useful.

A localised 30mph speed limit in Stockley (Site 10), supported by a 40mph limit in Broads Green could be pursued with WC. This would require a TRO, additional signage and potential gateway features (planters etc).

Progress this site to Stage 2.

Auditor: JPB

Approved: RAF

Calne Without Parish Council - Road Safety Study

Site 10 – Stockley

Issues:

- Safety
- Speeding
- Rat-running
- Vulnerable road users

Available data:

Speed: Dec 2019. 85%ile 42.7mph, mean 36.8

Volume: NA

PIA: ✓

Other: ✓

Site visit date and conditions: 19/3/21 (dry, light)

Findings:

7-day ATC hardcopy summary results available show 85%ile 42.7mph, mean 36.8mph and 0.08% of vehicles were exceeding the posted 60mph speed limit. Although this data is a 'snapshot' of the area there is no indication to suggests excessive speed is an issue. However, vehicles travelling in excess of 40mph in close proximity to pedestrians, cyclists or horse riders may be perceived as travelling too fast.

The PIA data available from Crash Map indicates that over the past 5 years there has been little to no change in the frequency of personal injury accidents at this location. A breakdown of the PIAs at this location is summarised below.

Severity	2016	2017	2018	2019	2020
Slight	0	1	0	0	1
Serious	0	0	0	0	0
Fatal	0	0	0	0	0

Residents have complained about uncontrolled parking by the hollow; suggestion of double yellow lines made, also claims of verge erosion on the narrow lane; suggestion of new passing places.

The site location and available data gives no indication why significant rat-tunning would be occurring in the area.

Recommendations:

The nature and layout of Stockley makes the introduction of village gateway features challenging; however, additional signage could be introduced to alert drivers to the rural nature of the village and the presence of vulnerable road users. An example of this can be seen in Bishopstone near Swindon.

This would not require a TRO but may require a public consultation period and specific highway authority approval. Any local reduction to 30mph would require a TRO.

Progress this site to Stage 2.

Auditor: JPB	Approved: RAF

Calne Without Parish Council - Road Safety Study

Site 11 – Blacklands

Issues:	**Available data:**
• HGVs • Rat-runnning	Speed: x Volume: x PIA: Other: ✓

Site visit date and conditions: 19/3/21 (dry, light); 20/4/21

Findings:

There is no empirical survey data for this site such as speed surveys or classified volume counts indicating percentage of HGVs.

Residents' claim that HGVs were using this road for rat-running. Temporary highway works on the A4 east of Quemerford may have resulted in some drivers diverting from the A4 to Blackland crossroads past Blackland Lakes rather than past Blackland Mill; however, informal journey time surveys (Entran) indicate that this route is slower under normal circumstances so this may have only been a temporary issue.

Residents have also requested the speed limit being reduced from the national speed limit to 30mph and requests for a weight limit on the road. However, there is no evidence to support these requests at present.

Using Crash Map data, there have been no recorded PIAs on this road in the past 5 years.

Recommendations:

Further clarification is required as to whether the issues were short-term as a result of road works on the A4 or have persisted. If these issues are to be pursued, then classified counts will be required to determine current vehicle speeds and % HGVs.

Do not progress this site to Stage 2 at this time.

Auditor: JPB	Approved: RAF

Calne Without Parish Council - Road Safety Study

Site 12 – Lower Compton

Issues:

- Safety
- HGVs
- Speeding

Available data:

Speed: x

Volume: NA

PIA: ✓

Other: ✓

Site visit date and conditions: 19/3/21 (dry, light)

Findings:

The PIA data available from Crash Map indicates that over the past 5 years there has little to no change in the frequency of personal injury accidents at this location. A breakdown of the PIAs at this location is summarised below. However, the single PIA occurred at the junction with the A4 rather than along the Lower Compton road.

Severity	2016	2017	2018	2019	2020
Slight	0	0	0	0	0
Serious	0	0	0	1	0
Fatal	0	0	0	0	0

This route is one of the accesses to the Hills Waste Plant; therefore, HGVs will necessarily use this route. However, the opening of a second access will have reduced the number of HGVs on this road. HGVs may be driving at excessive speeds, however, there is no evidence at present to quantify this.

Recommendations:

Since the project brief was written a 40mph speed limit has been introduced on this road in response to the earlier concerns. We would recommend post-implementation speed surveys to assess the effectiveness of the lower speed limit, but this site can otherwise be removed from the study.

Do not progress this site to Stage 2.

Auditor: JPB

Approved: RAF

Calne Without Parish Council - Road Safety Study

Site 13 – A4 Forest Gate to Studley Crossroads

Issues:

- Safety
- Speeding

Available data:

Speed: Oct 2019. 85%ile 49.2mph, mean 44.0mph

Volume: AADT 2003, AADT 2012

PIA: ✓

Other:

Site visit date and conditions: 18/3/21 (dry, light)

Findings:

7-day ATC hardcopy summary results available show 85%ile 49.2mph, mean 44.0mph and 12.3% of vehicles were exceeding the posted 50mph speed limit. This data demonstrates that users of the A4 in the vicinity of Studley Crossroads are keeping to the posted speed limit. There are three speed limits within this study area, therefore this single survey does not convey the conditions along the whole length of this road. A second speed survey is available for the A4, however, not within this study area.

Two traffic volume surveys have taken place on the A4 (east of Studley Crossroads) in 2003 and 2012. The 2003 survey showed average daily 2-way traffic flows of 12445 vehicles. The 2012 survey showed average daily 2-way traffic flows of 12584. The two surveys are only 'snap shots' but suggest a marginal increase in daily flows between 2003 and 2012. DfT traffic count data is available for the A4 west of Studley Crossroads [Ref:56129] and at Stanley Park [Ref:77986]; however, the baseline dataset for both sites is corrupted at present so no data is currently available. This should be resolved prior to the Stage 2 study.

The PIA data available from Crash Map indicates that over the past 5 years there has been an increase in the frequency of personal injury accidents at this location. A breakdown of the PIAs is summarised below.

Severity	2016	2017	2018	2019	2020
Slight	2	0	2	3	0
Serious	0	1	0	1	0
Fatal	0	0	0	0	0*

**A PIA occurred in August 2020 at the junction of the A3/A342 which resulted in multiple fatalities; however, this incident does not appear in the Crash Map data. We have contacted the administrator to report this serious omission.*

Recommendations:

The frequent changes in the speed limit can have positive or negative effects. Drivers familiar with the road may ignore the lower speed limits as they know they are only for a short length, whereas other drivers may become more alert to driving conditions, taking the speed limits as an indication of the road character.

During the public consultation for the 50mph speed limit at Studley Crossroads the PC and local residents requested that it be extended to the junction with the A342 in order to minimise the number of changes in speed limit; however, WC's response was that the proposed limit met the criteria for the minimum length of a new TRO. A further approach to WC on this point is unlikely to be successful without further speed survey data in each of the speed limit areas. If funding is available for a VMS in this location it could be effective in reinforcing the limit.

Progress this site to Stage 2.

Auditor: JPB

Approved: RAF

Calne Without Parish Council - Road Safety Study

Site 14 – Old Derry Hill A342 j/w A4

Issues:

- Safety
- Speeding
- Turns between A342/ A4

Available data:

Speed: x

Volume: x

PIA: ✓

Other: ✓

Site visit date and conditions: 18/3/21 (dry, light)

Findings:

There is no empirical survey data for this site such as speed surveys or volume counts.

The PIA data available from Crash Map indicates that over the past 5 years there has little to no change in the frequency of personal injury accidents at this location. A breakdown of the PIAs at this location is summarised below. However, Crash Map did not include a recent fatal PIA which has been included as a result of local knowledge.

Severity	2016	2017	2018	2019	2020
Slight	1	0	1	1	0
Serious	0	0	0	1	0
Fatal	0	0	0	0	*1*

The junction layout allows drivers to join and leave the A4 at speed. The acute angle requires those leaving the A324 and joining the A4 to use their mirrors or look over their right shoulder to see traffic arriving from their right. The merge taper is commonly used for traffic joining a high-speed road from a slip road. A standard form of priority junction with a right-turn lane would be more appropriate in this location, particularly if the speed limit on the A4 was rationalised to either 40mph or 50mph in this location.

Recommendations:

The available public highway would allow this junction to be remodelled into a simple priority junction with a substantial right turn lane. This would cater for traffic turning right from the A4 onto the A342 and would provide a simple, legible exit manoeuvre for traffic turning left from the A342 onto the A4. This could be supported by a reduction in speed limit on the A4 hill to 50mph.

A change in speed limit would require a TRO.

The junction redesign would be costly and the relatively low number of PIAs may mean that it would not be a priority scheme for WC.

Further investigation into the extent of safety barrier is warranted.

Progress this site to Stage 2.

Auditor: JPB

Approved: RAF

Calne Without Parish Council - Road Safety Study

Site 15 – A4 Forest Gate/ Causeway Garage

Issues:	**Available data:**
• Safety • Turning traffic	Speed: x Volume: x PIA: Other:

Site visit date and conditions: 18/3/21 (dry, light); 21/4/21 (dry, light)

Findings:

There is no empirical survey data for this site such as speed surveys or volume counts of vehicles.

Using Crash Map data, there have been no recorded PIAs on this road in the past 5 years.

Both accesses fall within a 40mph speed limit on a length of road with a footway and street lighting.

Forest Gate has a ghost right-turn lane, but there are no right turn lanes for Causeway Garage, Pewsham Garage or the Lysley Arms.

Forest Gate has adequate visibility in both directions for a 40mph speed limit. Other commercial premises have limited visibility.

Recommendations:

Visibility requirements are related to the speed of vehicles on the main road. The posted speed limit is 40mph but no data is available to determine whether traffic is travelling within the speed limit in this location. If traffic is exceeding the speed limit, then the preferred approach to improving safety at these junctions would be to reduce traffic speed; however, if traffic is already travelling at or below the posted speed limit, then the approach would be to highlight the presence of the junctions to alert drivers to their presence. No TROs would be required.

A speed survey should be undertaken (this aligns with the recommendation for Site 13).

Do not progress this site to Stage 2 at this time.

Auditor: JPB	Approved: RAF

Calne Without Parish Council - Road Safety Study

Site 16 – A342 Landsdowne Arms to The Well House

Issues:

- Safety
- HGVs (too wide to pass)

Available data:

Speed: ✓

Volume: NA

PIA: ✓

Other: ✓

Site visit date and conditions: 18/3/21 (dry, light)

Findings:

There is no empirical survey data for traffic volume or HGV%; however, a speed survey in September 2021 found 85%ile speeds of 38.1mph northbound and 39.5mph southbound.

The PIA data available from Crash Map indicates that over the past 5 years there has been a decrease in the frequency of personal injury accidents at this location. A breakdown of the PIAs at this location is summarised below.

Severity	2016	2017	2018	2019	2020
Slight	1	0	0	0	0
Serious	0	0	0	0	0
Fatal	0	0	0	0	0

The Wiltshire HGV route network map shows the A342 as a Local Lorry Route.

Advance warning signs are in place at the top of the hill for northbound drivers, first advising of a 12% gradient, then showing warnings of 'double bend' (diag 513). The sign used to show gradient and 'road narrows' (diag 516), but this was replaced in favour of the double bend sign. No such signs are available for southbound drivers heading up the hill.

The majority of this length of road between the A4 junction and the Lansdowne PH was widened as part of a highway improvement scheme more than 15 years ago. The historic nature of Old Derry Hill means that the narrow section at the top of the hill is flanked on both sides by stone walls, offering limited opportunity to widen the road.

Recommendations:

It is unlikely that this length of A342 can be taken off the Local Lorry Route given it is the shortest route to Devizes from the A350. There is limited scope to widen the carriageway. A significant road widening would require a compulsory purchase order which is unlikely to be successful given the low number of PIAs. The speed survey demonstrates that most vehicles are travelling within the posted 40mph speed limit in this location.

Additional signage could be introduced indicating 'road narrows' and 'double bend' for southbound traffic; No TROs would be required for these signs.

Do not progress this site to Stage 2 (*however, separate work required regarding HGV routing to/from Lower Compton waste site*)

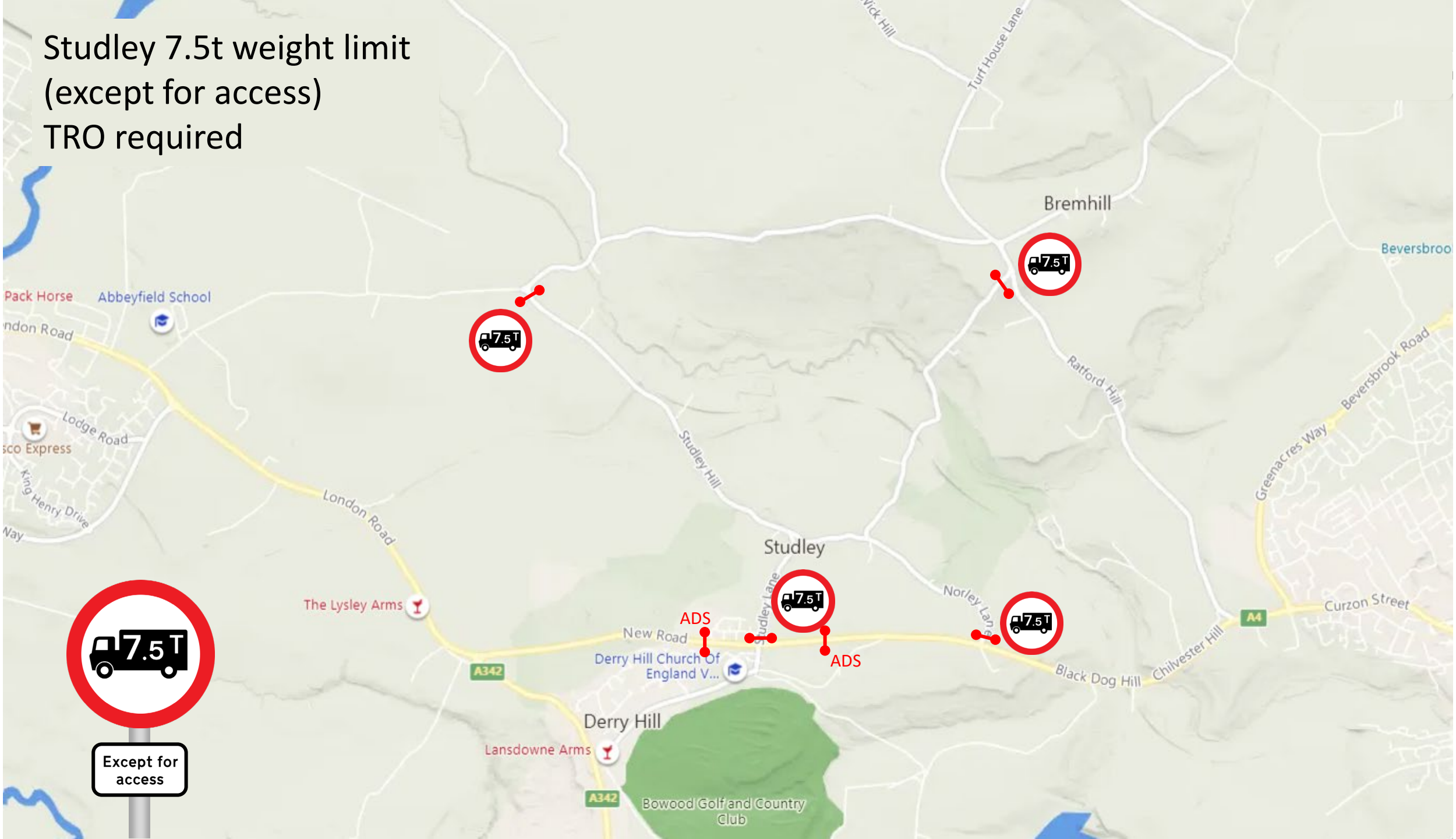
Auditor: JPB

Approved: RAF

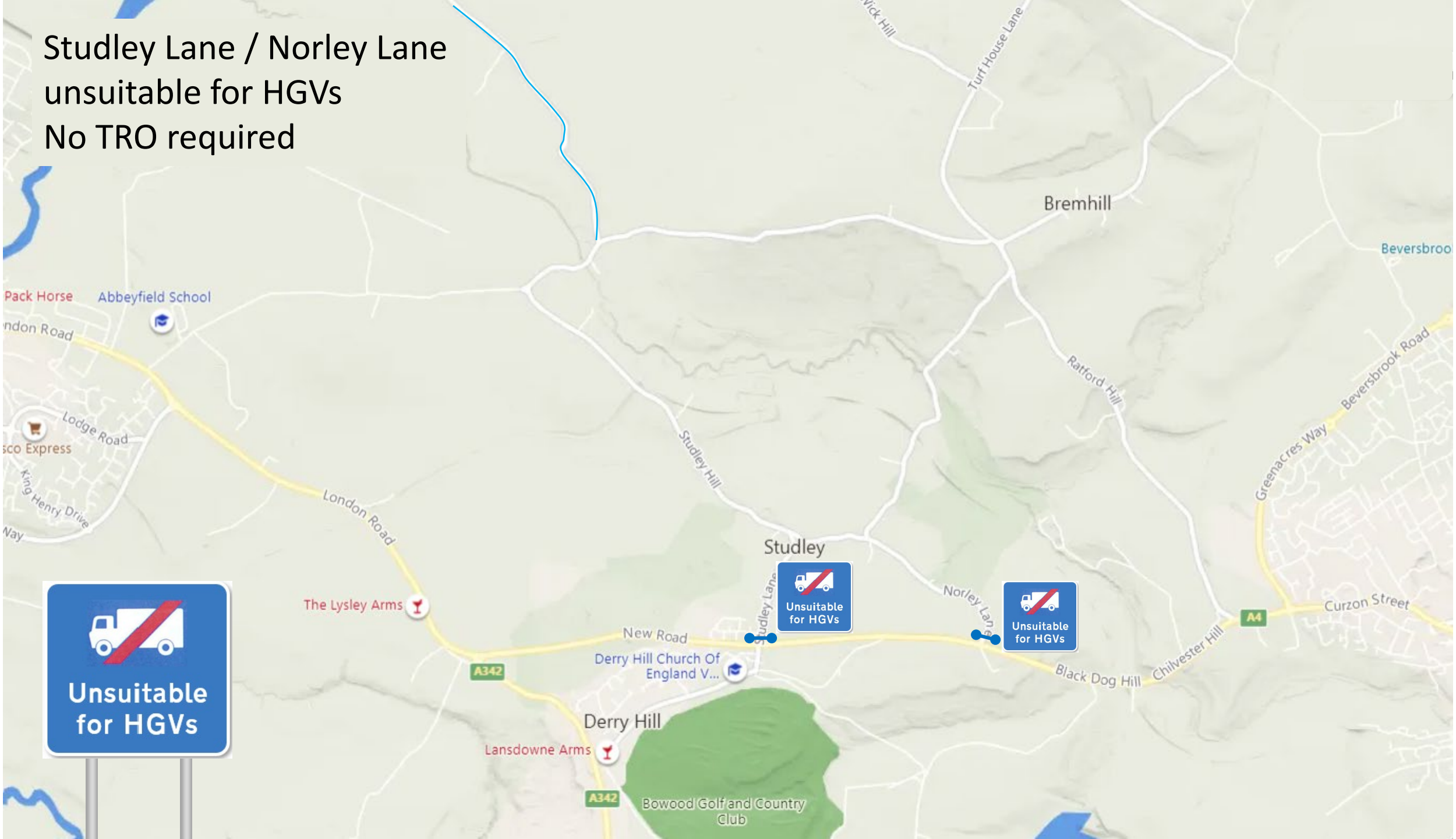
Appendix D

Studley wight limit area

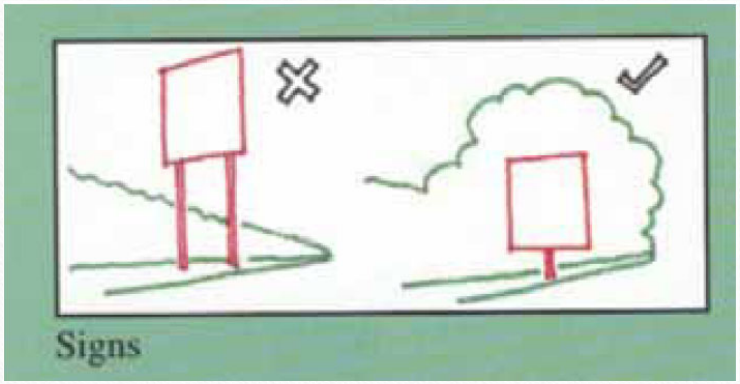
Studley 7.5t weight limit
(except for access)
TRO required



Studley Lane / Norley Lane
unsuitable for HGVs
No TRO required

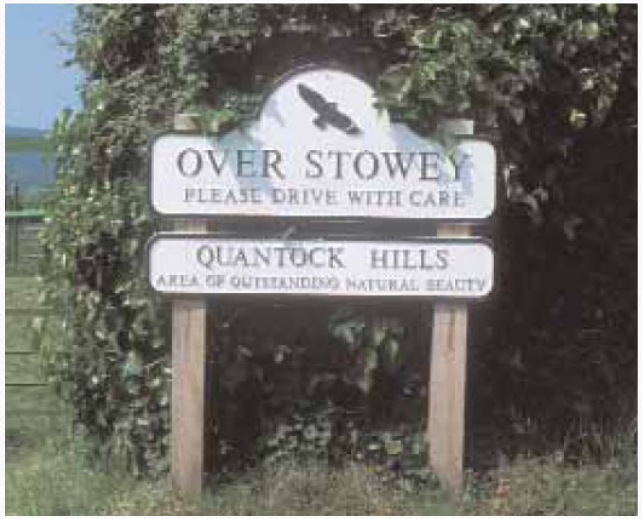


Appendix E
Signs in rural areas



Derbyshire County Council's guidance includes pointers on how to sensitively site signs

National Cycle Network (NCN) route signage can be incongruous (left photo) but need not be (right photo).



Villages in the Quantocks AONB now have high quality and locally distinctive name signs at the village entrances.

Appendix F
References

[i] DfT, Design Manual for Roads and Bridges
[ii] DfT / DCLG, Manual for Streets (2007)
[iii] CIHT, Manual for Streets 2, wider application of the principles (2010)
[iv] DfT, LTN 1.08 Traffic Management and Streetscape (2008)
[v] DfT, Traffic Signs Regulations and General Directions (2016)
[vi] Historic England, Streets for All (South West) (2017)
[vii] Dorset CC, Reclaiming our Rural Highways (2007)
[viii] Dorset CC, Rural Roads Protocol (2008)
[ix] Hamilton-Baillee, Traffic in Villages, Safety and Civility for Rural Roads (A toolkit for communities).
[x] Kings College psychiatric study on driver concentration; and, Literature review for the Scottish Executive by Dr Brendan Wallace.