



## Trench Lock – Haybridge Road, Hadley Safety Scheme

### Consultation Briefing Note

Ref: NM20-CP01  
October 2020





## 1.0 Background

Concerns have been raised by residents and Hadley & Leegomery Parish Council regarding pedestrian and cyclist safety and the speed and type of vehicles along Trench Lock to Haybridge Road. It has been requested that a study is undertaken with a view to implementing engineering measures to reduce vehicular speed, increase pedestrian/cyclist safety and improve overall road safety in the vicinity.

This document sets out the review that has been undertaken and proposed measures to mitigate the identified issues.

The review area of Trench Lock through to Haybridge Road, Hadley is shown in red in Figure 1.1



Figure 1.1 – Review Area

Furthermore to the above, concerns have also been raised regarding the speed of traffic along Sommerfeld Road/Hadley Road, in particular through the residential area and the section by Middle Pool. A review of this area has also been undertaken and there is a recommendation at the end of this report on how we can mitigate these issues.

## 2.0 Traffic Data

Three automated traffic counts (ATC's) were installed on 7<sup>th</sup> – 13<sup>th</sup> March 2020 along the review area to collect vehicular traffic data (see ATC 2, ATC 3 and ATC 4). Due to other roadworks taking place at the time, and then issues relating to Covid-19, ATC 1 was installed at a later date; this data was collected on 7<sup>th</sup> – 13<sup>th</sup> September 2020.

The ATC's were located as shown in figure 2.1 below:

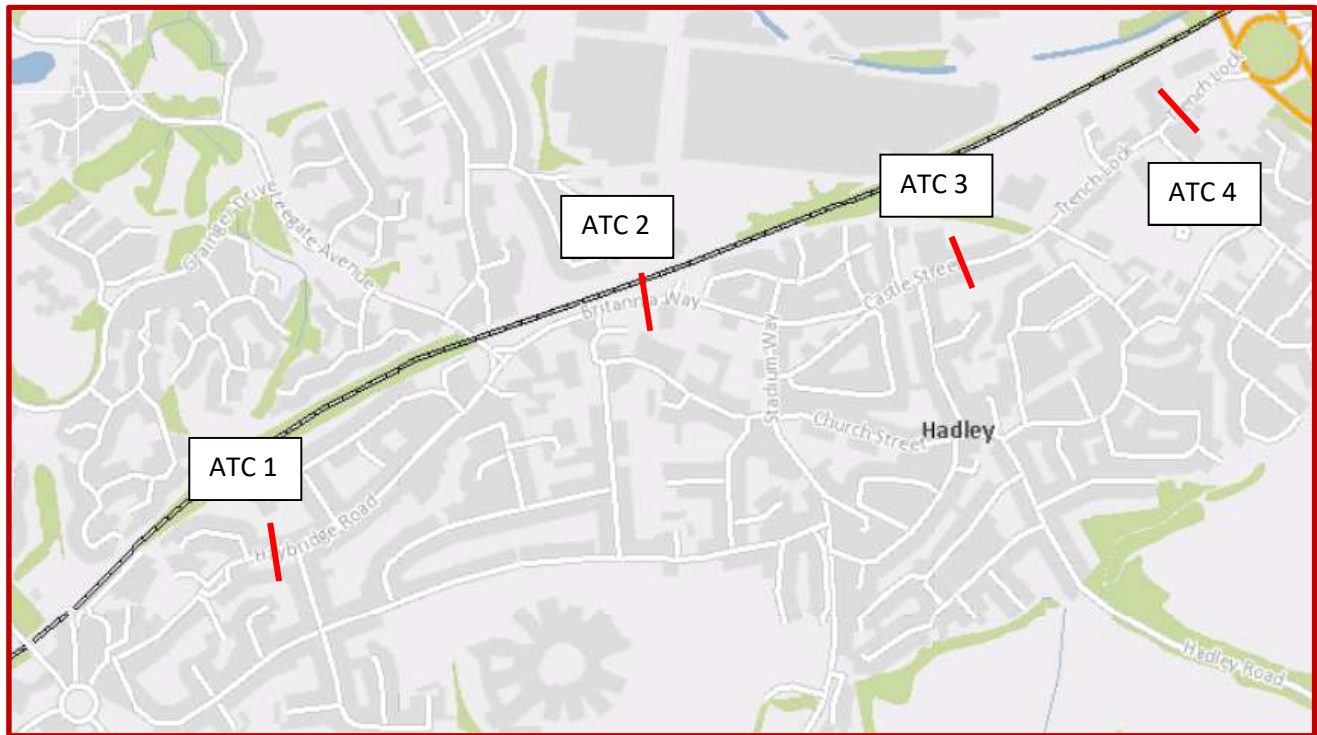


Figure 2.1 ATC locations

The information obtained from the ATC's is summarised below in Table 2.2 Traffic Count Summary.

Location	Permitted Speed Limit	Total number of vehicles 2-way	Mean Speed	85 <sup>th</sup> ile Speed
ATC 1 – Haybridge Road	30	95238	26.5mph	30.2mph
ATC 2 – Britannia Way	30	108952	30.1mph	34.3mph
ATC 3 – Castle Street	30	105847	26.6mph	30.9mph
ATC 4 – Trench Lock	30	110751	20.7mph	25.8mph

Table 2.2 Traffic Count Summary

The data collected shows that speeds generally conform to the existing 30mph speed limit along the route. However the 85<sup>th</sup> percentile speeds are slightly higher than the posted speed limit at location 2 and are close to the West Mercia Police enforcement levels of 10% + 2mph = 35mph. Therefore measures will be proposed to mitigate the excess speed at this location.



### 3.0 Personal Injury Collision (PIC) Data

A collision analysis has been undertaken for the 5 year period from February 2015 to February 2020, a summary is shown below in Table 3.1.

Road Name	Category	2015	2016	2017	2018	2019	Total
<b>Trench Lock – Haybridge Road</b>	Slight	4	3	3	3	1	<b>14</b>
	Serious	1	1	1	0	0	<b>3</b>
	Fatal	0	0	1	0	0	<b>1</b>
	<b>Total</b>	<b>5</b>	<b>4</b>	<b>5</b>	<b>3</b>	<b>1</b>	<b>18</b>

Table 3.1 Personal Injury Collision Summary

There were eighteen personal injury collisions reported to West Mercia Police in the five year period up to September 2019, resulting in fourteen slight, three serious injuries and one fatal.

Table 3.2 below, provides further details of the collisions. Please note these are not listed in date order as the site number corresponds to the attached location plan (see Appendix 7.1).

Site No.	Date	Time of Day	Road/Weather condition	Description of Causation
1	21/10/16	08:08	Fine/Dry	Driver failed to look properly when exiting a junction.
2	15/01/17	16:50	Wet/Rain	Driver failed to notice red light and when braked, skidded into the vehicle in front who had stopped for the red light.
3	17/02/15	16:45	Fine/Dry	Driver failed to give sufficient room to cyclist causing a glancing blow with the body of the car, causing the cyclist to fall.
4	11/03/15	07:12	Fine/Dry	Driver failed to look properly and failed to give way to oncoming motorcycle on mini roundabout.
5	21/05/15	14:56	Fine/Dry	Driver failed to look properly and collided with a vehicle who was waiting to turn into a junction.
6	07/07/15	12:08	Fine/Dry	Driver overtook another vehicle who was intending to turn right at the traffic lights, causing both vehicles to collide.
7	13/10/15	19:42	Fine/Dry	Driver failed to look properly, making an inappropriate turn at the roundabout causing another vehicle to break suddenly.
8	09/06/17	19:20	Fine/Dry	Pedestrian intentionally stepped out in front of vehicle, suffering minor injury.
9	21/06/17	06:47	Fine/Dry	Driver failed to look properly when exiting from a junction.
10	16/10/17	08:05	Fine/Dry	Cyclist collided with a bus.
11	04/12/17	18:45	Fine/Dry	Driver failed to stop and collided with the rear of another vehicle.
12	02/09/18	21:19	Wet/Rain	Driver failed to give way to a cyclist at mini roundabout.
13	20/12/18	08:45	Fine/Dry	HGV hit a vehicle who was stationary at the roundabout after failing to notice them.
14	29/02/16	19:47	Wet/Rain	Pedestrian has ran across the road in front of vehicle.





15	15/04/16	08:30	Wet/Rain	Motorcycle has stopped at traffic lights and has been hit from behind by another vehicle who has failed to look properly and stop.
16	02/09/18	21:19	Wet/Rain	Diver failed to give way to cyclist on roundabout who was approaching from the right, causing slight injuries.
17	28/05/16	18:07	Fine/Dry	Driver has stopped to allow a vehicle to turn into a junction, vehicle behind has collided causing a collision involving all three vehicles.
18	13/09/19	15:25	Fine/Dry	Cyclist failed to look properly and has collided with a vehicle when cycling away from a bus stop.

*Table 3.2 Personal Injury Collision Detail*

The causation factors mainly relate to drivers and pedal cyclists failing to look properly or misjudging their vehicle path or speed, especially around the mini roundabout at Trench Lock.

There is no correlation to the time of day and the road/weather conditions which suggests that they did not have a large impact on the collisions.

As shown on the attached location plan Appendix 7.1: NM20-CP01/COL/LOC/001, the recorded collisions are fairly spaced out along the whole route, however there is a small cluster at the mini island at Trench Lock and also some of the larger junctions along Britannia Way.

In summary, many of the injury collisions reported have been due to a failure to look properly or misjudgement of vehicle path, therefore measures to improve these areas should reduce the risk of similar collisions following the schemes implementation.



## 4.0 What changes are proposed?

As part of our investigations, a number of options are being considered and detailed below.

### 4.1 Option 1 – Controlled Crossings

It is proposed that two zebra crossings could be installed as an improved facility for pedestrians and they would replace the existing crossing point along Trench Lock, near to the 24/7 garage/Jungleland and also the crossing point at the top end of Haybridge Road, near to Haybridge Roundabout.

This option provides greater visibility as belisha beacons highlights the crossing to vehicles. It also encourages pedestrians to cross at the safest location, making this a more desirable crossing point, especially for those with young children who may wish to access the local amenities in the area and those wanting to access the local industrial area. It would also provide a safer crossing point for those wanting to access the local college.

At peak times, crossing at these current locations can be difficult due to the amount of vehicles using the route.

Zebra Crossings are required to be installed on roads with an 85<sup>th</sup> percentile speed of less than 35mph. From the collection of recent traffic data, speeds are below this threshold therefore no further engineering measures would be required to bring speeds down further.

Advantages	Disadvantages
<ul style="list-style-type: none"> <li>- Improve crossing over the current facility.</li> <li>- Belisha beacons and road markings highlight the crossing to approaching vehicles.</li> <li>- Helps improve the priority given to pedestrians.</li> <li>- Reduction in public anxiety.</li> </ul>	<ul style="list-style-type: none"> <li>- More costly to install than the existing uncontrolled crossing.</li> <li>- Increased maintenance liability as faults can occur with the electrical equipment.</li> <li>- Possible increase in queuing during peak periods due to high vehicle flows and pedestrian crossings.</li> </ul>

*Refer to Appendix 7.2 for proposed location plan.*



## 4.2 Option 2 – Additional uncontrolled crossing points

Option two is to install additional uncontrolled crossing points along the route to further improve pedestrian safety. Crossing points help to make crossing safer by reducing the width of the carriageway and highlighting the crossing to drivers.

The crossing points can be achieved by installing a new dropped crossing with tactile paving, along with a coloured road surface to further enhance the crossing point to both pedestrians and drivers, making these more desirable for pedestrians and noticeably more visible to drivers. Where possible, the crossing points could be built out further into the carriageway; this would not only shorten the distance pedestrians have to cross, but will also narrow the carriageway, thus slowing vehicles down and act as a form of traffic calming.

Existing uncontrolled crossing points would also be looked at and improved to ensure consistency throughout the route.

Advantages	Disadvantages
<ul style="list-style-type: none"> <li>- Physical features to slow vehicle speeds.</li> <li>- Provide protection for pedestrians waiting to cross.</li> <li>- Narrower crossing width.</li> <li>- Visual measure to highlight crossing point.</li> <li>- Not as costly as a controlled crossing.</li> <li>- No electrical connections, therefore reducing overall costs on installation and ongoing maintenance.</li> </ul>	<ul style="list-style-type: none"> <li>- Uncontrolled crossing so priority remains with vehicles.</li> <li>- Less effective than a controlled crossing.</li> <li>- Pedestrians may still choose to cross at other points along the route.</li> </ul>

*Refer to Appendix 7.3 for proposed location plan.*



### 4.3 Option 3 – HGV Restriction

Concerns have been raised by local residents regarding the number of large vehicles who use the route. Option three will look to implement a HGV restriction (from Trench Lock Interchange through to Haybridge Roundabout) to prevent large vehicles from using this a rat run to gain access from the A442 to Wellington and vice versa.

The ATC data for each location (see section 2.0 Traffic Data) was analysed to understand the HGV traffic patterns along the whole of the review area. For the purposes of this assessment, HGVs were considered as the following vehicles:

- Two axle truck or bus;
- Three axle truck or bus;
- Four axle truck;
- Three axle articulated vehicle or rigid vehicle and trailer;
- Four axle articulated vehicle or rigid vehicle and trailer;
- Five axle articulated vehicle or rigid vehicle and trailer;
- Six (or more) axle articulated vehicle or rigid vehicle and trailer;
- B-Double or heavy truck and trailer; and
- Double or triple road train or heavy truck and two (or more) trailers.

In the ATC classifications, two axle truck or bus, three axle truck or bus and four axle truck are not considered heavy vehicles, however, these have been included in this assessment as flows for the other larger vehicles are minimal.

The following tables provides an analysis of the two way traffic HGV flows at each ATC location:

ATC Location	Total Vehicle Flow	HGV Flow	Percentage HGV Flow
Haybridge Road	95238	6236	6.5%
Britannia Way	108952	6097	5.5%
Castle Street	105847	5473	5.2%
Trench Lock	110751	5358	4.8%

Table 4.3 – Two Way HGV Flows

The Department for Transport (DfT) 'Annual Road Traffic Estimates 2019' states that HGV traffic accounts for 5% of total vehicle traffic per billion miles. The above figures are marginly higher than the national average for what you would expect to see on an urban minor road.

In light of this, there are businesses which rely on heavy goods vehicles accessing the premises along this route and the premises can only be accessed by these roads. Therefore the restriction would have an exception to permit the use of heavy goods vehicles when accessing these premises only.

There are alternative routes suitable for larger vehicles, such as the A442 and A5223. Signing from the main distributor routes would also be reviewed as part of the scheme to ensure that drivers are aware of the weight restrictions, which will allow them to take a more suitable and appropriate route. By limiting heavy goods vehicles in this area it will enhance the sense of safety in the local community.

This would be subject to a formal legal consultation and therefore could receive objections by members of the public and other statutory consultees such as the Police.





Advantages	Disadvantages
<ul style="list-style-type: none"> <li>- Prevent the route being used as a 'rat run' by large vehicles.</li> <li>- Prevent damage to the road or to any building on or near the road.</li> <li>- Preserving and improving the amenities of the area.</li> <li>- Reducing danger to pedestrians/cyclists or other traffic using the road.</li> </ul>	<ul style="list-style-type: none"> <li>- Large vehicles will still be able to gain access to businesses.</li> <li>- Subject to a formal legal public consultation and could be objected to.</li> <li>- Difficult restriction for the Police to enforce so would rely on self-regulation by robust signing.</li> </ul>

*Refer to Appendix 7.4 for proposed location plan.*



## 4.4 Option 4 – Lining and signing improvements

This option looks to, in strategic locations along the route, remove some of the existing centre line and narrow the width of the carriageway by installing lining along the edges.

This lining could be used to provide an advisory cycle lane on both sides of the carriageway, reducing the overall width of the running lanes for vehicles and providing a designated lane for cyclists; thus improving the safety provisions available to cyclists who use this route on a regular basis. By providing a safer cycling infrastructure this benefits individuals and the community as a whole, and thus encouraging more people to switch journeys to active travel. This not only improves physical and mental health, but also promotes a better quality of life and is better for the environment.

Alternatively, in sections where an advisory cycle lane may not be appropriate, in its place install sections of hatching or edge of carriageway lining either side of the carriageway. This would have the same outcome by reducing the width of the running lanes for vehicles, however it would not provide a designated lane for cyclists. This option would be beneficial along Britannia Way and its junction with High Street as the area is more open and the road is wider than in other areas and this could be a contributing factor to the higher speeds recorded along this particular stretch.

By not having a designated driving lane (centre line), motorists tend to be more cautious and attentive as the road can appear riskier. This element of uncertainty looks to provide a positive influence on driver's behaviour by encouraging lower speeds.

Another option could be to install additional designated on street parking for those houses where off street parking is limited; in particular along Haybridge Road where designated parking is already available. By having designated parking areas, this would prevent vehicles from parking inappropriately on footpaths, making these more accessible for pedestrians, particularly those in wheelchairs or with pushchairs. It would also reduce the lane widths of the carriageway as the centre line would be removed.

This option can also include the installation of SLOW markings at strategic points along the route with appropriate signing, for example junction warning signs around the areas where there have been a number of recorded collisions.

In addition to the above option, ensuring all existing road markings are visible and in good condition is a quick and easy way to improve the safety of the area as these markings easily show vehicles of any approaching hazards which they need to be aware of.

This is also true of traffic signs and it is important to ensure that sign clutter is kept to a minimum. This option explores the tidying up of both markings and signs but also the removal of unnecessary signage in the area.

Advantages	Disadvantages
<ul style="list-style-type: none"> <li>- Lower cost option than physical measures.</li> <li>- Quick and easy to implement, no need for statutory consultation</li> <li>- Could supplement other options.</li> </ul>	<ul style="list-style-type: none"> <li>- Not as effective as vertical measures.</li> <li>- Does not physically prevent drivers from driving at higher speeds.</li> <li>- Potentially high maintenance costs if road markings are heavily trafficked.</li> </ul>



<ul style="list-style-type: none"> <li>- Visually narrows width of carriageway which brings vehicles closer together and looks to address driver behaviour.</li> <li>- Improves safety for cyclists giving them a designated cycle lane.</li> <li>- Encourages cyclists to use the road rather than footways.</li> <li>- May increase numbers of people engaging in active travel.</li> <li>- Provide designated areas for vehicles to park and prevent parking on footways.</li> <li>- Drainage is not affected.</li> </ul>	<ul style="list-style-type: none"> <li>- Parking areas would be shared and would not be allocated to individual homes.</li> <li>- Some disruption to residents if large amount of traffic management is required to carry out works.</li> </ul>
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*Refer to Appendix 7.5 for proposed location plan.*



## 4.5 Option 5 – Parking Restrictions

Install additional parking restrictions on those junctions where there are currently no restrictions, in particular around those junctions where there have been a number of recorded collisions.

The restrictions would prevent vehicles from parking too close to the junction and would be approximately 10-15m in length on both sides. By limiting parking around the junction, this would improve visibility for drivers when exiting the junction and would also keep the area clear for pedestrians when crossing over.

Additionally, these restrictions would be subject to formal legal consultation, the outcome of which will largely determine what, if any, restrictions can be introduced.

Advantages	Disadvantages
<ul style="list-style-type: none"><li>- Lower cost option than physical measures.</li><li>- Improves vehicular access to junctions.</li><li>- Improves visibility when exiting junctions.</li></ul>	<ul style="list-style-type: none"><li>- Subject to a formal legal consultation and could be objected to.</li><li>- May result in vehicles parking on neighbouring roads, presenting issues for residents.</li></ul>

*Refer to appendix 7.6 for proposed location plan.*



## 4.6 Option 6 - Permanent Speed Indicator Devices

Installation of permanent Speed Indicator Signs (SID's). The message displayed can be varied to ensure the appropriate message is being delivered to the vehicles.

There are up to three potential locations for the SID to be installed; it is recommended that a minimum of two locations are considered to allow both directions of traffic to be targeted with this measure and located in areas where there are higher recorded speeds and collisions.

This option has been used in conjunction with other traffic calming measures in other areas of the Borough and has been well received as a traffic calming measure.

There is already a static speed camera in situ along Haybridge Road which has had a positive impact on speeds already, however with the introduction of the additional speed indicator devices it will ensure that there is a consistent message along the whole route and not just in one targeted location.

As the Parish Council have purchased their own mobile SID's, the installation of a permanent SID along this route allows the mobile SIDs to be regularly available on other roads which cause concerns for residents, therefore improving the wider area for the community.

Advantages	Disadvantages
<ul style="list-style-type: none"> <li>- Visual measure to remind drivers to adhere to the speed limit.</li> <li>- The 'shock' factor of these signs mean they are effective and targeting drivers who drive at excessive speed.</li> <li>- Quick and easy to implement.</li> <li>- Whilst permanent, the signs could be removed if they were felt they were no longer required or become less effective.</li> <li>- Supplements all other proposed options.</li> <li>- Provides continuous data for vehicles speeds and allows for assessment of scheme success.</li> </ul>	<ul style="list-style-type: none"> <li>- The effectiveness of the signs may reduce over time as driver become familiar with the location and the message.</li> <li>- Does not physically prevent drivers from driving at higher speeds.</li> <li>- Can be a target for drivers speeds if not set correctly.</li> </ul>

*Refer to Appendix 7.7 for proposed location plan.*





## 4.7 Option 7 – Speed Limit Change and Gateway Features

Following a review of vehicle speeds along Sommerfeld Road and Hadley Road, in particular the area near to Middle Pool, this option looks to introduce new gateway features and to change the speed limit by introducing a short 40mph section.

The speed data collected in January 2020 shows that the average speed of vehicles were travelling in excess of the posted speed limit of 30mph and are above the West Mercia Police enforcement levels of 10% + 2mph = 35mph in all three locations.

Due to the nature of the road layout in this area, especially when leaving the residential area, it naturally lends itself to be of a higher speed limit, therefore it would be more beneficial and cost effective to raise the speed limit, rather than introduce significant engineering measures to ensure drivers are conforming to the existing 30mph limit.

The information obtained from the ATC's is summarised below in Table 4.8 Traffic Count Summary.

Location	Permitted Speed Limit	Total number of vehicles 2-way	Mean Speed	85%ile Speed
ATC 1 – Sommerfeld Road (near junction of Trench Lock 3)	30	38980	31.8mph	37.4mph
ATC 2 – Sommerfeld Road (near to access for Middle Pool)	30	33197	36.7mph	42.9mph
ATC 3 – Sommerfeld Road (near to the junction of Hadley Road)	30	38188	36.6mph	42.3mph

Table 4.8 – Traffic Count Summary

The 40mph buffer zone would start near to the residential area of Patchett Close and end at the existing gateway feature for Wombridge.

As well as the above buffer zone, new gateway features would also be installed at the start of the 30mph section for Sommerfeld Road which would include new speed limit signs and carriageway markings. This would not only enhance the change in speed limit (from the new 40mph buffer zone to the 30mph speed limit) but it would also highlight to drivers that they are entering a residential area which will help to reduce the excess speed and mitigate the speeding concerns that have been raised.

Advantages	Disadvantages
<ul style="list-style-type: none"> <li>- Proposed measures would be reasonably quick to install.</li> <li>- No consultation required for the gateway signs.</li> <li>- Reduction in public anxiety.</li> <li>- Highlights the 30mph speed limit for the residential area.</li> </ul>	<ul style="list-style-type: none"> <li>- Speed limit change subject to public consultation.</li> <li>- Will rely on good driver behaviour to conform to the posted speed limits.</li> </ul>

Refer to Appendix 7.8 for proposed location plan.



## 5.0 Recommendation

In order to reduce the number of collisions involving pedestrians and cyclists and improve the overall safety for these users, it would be favourable to introduce some form of permanent traffic calming measures along this route.

The Network Management Team recommends that consideration is given to implementing all the options that have been proposed. In doing so, the scheme looks to address each of the concerns raised.

A combination of the controlled crossings and installing new/upgrading the existing uncontrolled crossing points would improve the safety for pedestrians, in particular children who use the road to access the local schools and college.

Furthermore, with the possibility of the introduction of cycle lanes, this would increase cyclists overall safety and would look to encourage more users to utilise this route through active travel means. Also with improved lining and signing across the review area, this would enhance the overall safety of the route, ensuring that drivers are aware of any approaching hazards, such as pedestrians/cyclists and junctions and also specifically target areas where higher speeds were found.

Having SID's located in strategic locations along the route, in particular where there have been serious collisions and higher recorded speeds would be beneficial as this would serve a visual reminder to those drivers who travel above the permitted speed limit for the road and again, enhance the overall safety in these targeted locations.

In addition to the above, with limited HGV's and larger vehicles on the road, this would again enhance the area, making the route more accessible and safer for other road users.



## 6.0 What will happen next?

The outcomes of discussions between the Network Management Team, Local Members and the Parish Council will be reviewed in detail and a decision will be made based on how best to proceed. Should agreement be reached, the scheme will be taken forward to wider consultation with residents of Sutton Way directly affected by the scheme.

It is considered that the public consultation stage will be a direct test of public support for one or a combination of the options presented before proceeding to detailed design. The outcome of the public consultation will be reviewed in detail and a decision will be made based on the content of the comments received in the context of the wider transport network.

Factors that will be taken into account will include, but not necessarily be limited to:

- Road safety
- Network operation
- Level of support
- Detail of any objections

### What will happen if the proposal are not supported?

The content of any objection will be considered and responded to accordingly. Should the proposals receive a high level of objection, it is unlikely that the proposal will be taken forward and an alternative option may be considered. The format of any alternative proposal would be based on the content of any objection. Any alternative scheme would then be put forward as part of the future capital programme and would need to be prioritised alongside other similar schemes.



## 7.0 Appendix

Appendix 7.1: Collision Locations

Appendix 7.2: Option 1 – Controlled Crossing

Appendix 7.3: Option 2 – Additional Uncontrolled Crossings

Appendix 7.4: Option 3 – HGV Restriction

Appendix 7.5: Option 4 – Lining and signing improvements




Appendix 7.6: Option 5 – Parking Restrictions

Appendix 7.7: Option 6 – Vehicle Activated Signs

Appendix 7.8: Option 7 – Speed Limit Change and Gateway Features



## Document Control

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