CUMBRIA COUNTY COUNCIL AND EDEN DISTRICT COUNCIL

# A66 NORTHERN TRANS-PENNINE PROJECT

# LOCAL IMPACT REPORT

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## EXECUTIVE SUMMARY

This local impact report ("LIR") has been prepared jointly by Cumbria County Council ("CCC") and Eden District Council ("EDC") together "the Councils" to set out the impacts upon the local area of National Highways' ("NH") proposed A66 Northern Trans-Pennine Project ("the Project"), which has been submitted for Development Consent.

The Project is intended to improve connectivity through increased resilience, reliability and capacity on the national road network between Cumbria, Scotland and North West England and the North East, East Midlands and North Sea ports.

Acknowledging these benefits, the Councils support the Project and see real opportunities for it to support economic growth and levelling up, specifically in Cumbria. Importantly, the Project will contribute to improved road safety by helping to ensure a consistent standard of road design across the route and by eliminating many hazardous features, such as right turn crossings.

However, there will be nonetheless some adverse impacts arising from both the process of constructing the Project and from its operation due to the increased traffic flows that the improved route would accommodate (average 30% increase on the A66 as shown on page 77 of the Transport Assessment [APP-236]). These impacts need to be appropriately mitigated in order to minimise effects on local people, communities and businesses, as well the environment of the area.

Whilst making clear their support for the Project, the Councils want to see the issues set out in this LIR addressed by NH through the ongoing design and development of the Project and for the Examining Authority ("ExA") to ensure that the impacts are appropriately mitigated through the consenting process, including where relevant through legal side agreements and/or protective provisions (where appropriate).

The Project is in general accordance with local and national Government policies for growth and transport. This LIR is structured around the key impacts that the Councils have identified and sets out the mitigations that need to be introduced, including those matters on which dialogue with NH will continue during the Examination.

The Councils are keen to fully engage in the Examination process and to discuss and seek agreement with NH on remaining matters of disagreement.

The Councils have identified seven key tests that form the basis of this LIR. Whilst the Councils are supportive of the Project, there are outstanding concerns that need to be satisfactorily addressed by NH:

## CLEAR AND EFFECTIVE JUNCTION AND CONNECTIVITY STRATEGIES

- All proposed junction improvements along the A66 need to have a transport modelling assessment agreed with the local highway authority. The Councils, however, are particularly concerned that the capacity of the existing junctions in Penrith at M6 J40 and the proposed grade separated junction at Kemplay Bank will not accommodate the forecasted increase in traffic levels and the potential traffic congestion that could arise around Penrith.

- Penrith already sees significant congestion at peak periods (including Fridays, weekends and holiday seasons) resulting in queuing on the M6 and A66 which impacts on local and long-distance journeys, which is unacceptable to road users and the Councils. The M6 and A66 already acts as a barrier to connectivity between communities in and around Penrith and the proposed improvements could further exacerbate severance if not addressed through appropriate design that supports cycling and walking in the Penrith area.

- The traffic flow assumptions need to be evidenced to provide assurance on the robustness of the forecast capacity demands. A traffic modelling assessment is required to demonstrate to the Councils that the junction designs will provide sufficient capacity for the junctions to operate effectively and accommodate the future traffic flows; and does not result in congestion or delays. The design should also mitigate impacts on loss of connectivity for local communities.

- The access junction proposals and implications for the site operations at Skirsgill between J40 and Kemplay Bank are not agreed. The access design to the depot needs to ensure that safe and effective operational access is provided for all user groups, including walking and cycling.

## DE-TRUNKING (AND LOCAL HIGHWAY AUTHORITY RESPONSIBIILTIES)

- CCC in its capacity as local highway authority will not accept transfer of assets unless there is clear understanding and agreement relating to asset condition, liabilities, remedial works and funding of future maintenance. CCC will also need to be resourced by NH to undertake the necessary work to implement the de-trunking requirements.

- The Project is proposing the de-trunking of approximately six miles of the old A66 in Cumbria that will no longer be required as part of the strategic road network and NH is expecting to transfer these lengths of road to CCC. In addition, the Project will include new lengths of local highway and structures to connect with, or cross, the new A66. The division of responsibilities between NH and CCC and the interface between the local and strategic networks must be clarified and agreed as part of this consenting process.

- There must be an agreement with NH on the principles for asset transfer and the method for assessing and agreeing commuted sum payments as part of the Development Consent Order ("DCO") process. This agreement must include, for example, the type and condition of the assets, the liabilities and remedial work needed, design suitability, funding of future maintenance and ownership details.

- The Project, which is at outline design stage, includes departures from standards that represent a safety risk. As the Project goes through detailed design stage CCC must approve any departures relating to the local road network.

## ACTIVE TRAVEL (INCLUDING APPLEBY HORSE FAIR)

- There is potential for lost or reduced connectivity as a result of the Project, due to direct severance by the new road or arising from closed or altered junctions, for example the removal of right-turn movements for safety reasons. This can result in increased journey time and length, which has a disproportionate impact upon non-motorised users.

- Walking, cycling and horse-riding ("WCH") routes need to be provided in accordance with recognised standards and secured as permanent infrastructure. The Councils must have assurances that any gaps in the current WCH corridor will be resolved in the final design and that the design must be confirmed as acceptable by Active Travel England.

- The Councils require clarity on the design of routes, proposed statutory status, ownership, suitability, functionality and maintenance responsibility (including commuted sum); these matters must be resolved to ensure the sustainability of the Project.

- Appleby Fair ("the Fair") is the largest horse fair in Europe, which takes place each year in June for one week. It attracts approximately 10,000 people from the travelling community including a large amount of horse-drawn traffic. The impacts of the Project upon the safe and

effective operation of the Fair must be carefully managed and consideration must be given to the existing Fair traffic management plan.

## DIVERSIONS AND NETWORK RESILIENCE

- Pre-construction and during construction, there will be a need for planned diversions using parts of the local highway network. Without clearly signed diversions, there will be a significant number of drivers with the local knowledge who use the local highway network to find alternative routes when faced with delay. Therefore, improvements to the local road network are still required. The suitability of the local network is constrained in a number of locations by the age and condition of the infrastructure, for example, narrow or twisty alignments, historic structures with weight and height limits, capacity constraints and propensity to flooding.

- During future planned maintenance and operation, there will be need for tactical diversions to deal with closures and incidents. The constraints referenced above are also relevant here.

- The Councils have concerns about the impacts of diversions upon the local network. These must be agreed with the Councils as part of the Construction Management Plan. Whilst diversions need to be managed across the whole network there are two specific areas of concern:

    - Kirkby Stephen – It would be unacceptable for a diversion route to be directed along the A685 diversion route through the centre of Kirkby Stephen and the Conservation Area, which is constrained by a single lane traffic light junction, narrow roads, height and weight limits. Provision must be made to prevent drivers with local knowledge from using this route as a diversion.

    - Penrith – the proposed diversions in and around Penrith and network resilience if and when the bridge at Eamont Bridge on the A6 is closed. The Project proposes to close the Brougham junction that is used as the diversion route for Eamont Bridge and with no alternative route there is no resilience in the network either during construction or once in operation.

- A Route Management Strategy is required to understand the impacts, inform and agree the choice of diversion routes and importantly to identify appropriate mitigation to be delivered and / or funded by NH. This strategy will establish how NH and the local highway authority

will work together with the local authority being resourced by NH for its diversion management activity to enable delivery of the Project.

- The Project presents an opportunity to introduce measures that would improve resilience of the route and driver information, including for example, improved variable messaging systems and better integration and data sharing with local stakeholders.

## IMPROVED FACILITIES FOR HEAVY GOODS VEHICLES ("HGVS")

- The Project will result in increases in the volume of HGV traffic using this part of the A66, with volumes expected to double by 2051 (APP-237 Table 5.34).

- Current and proposed HGV parking, toilets and services provision is inadequate, and this results in inappropriate parking of HGVs and associated anti-social behaviour, which will be exacerbated by the Project. Therefore, new provision of HGV facilities, including those for female drivers, must be included to complement upgrades to existing facilities.

- Department for Transport guidance sets out that on the trunk road network a rest area should be provided every 28 miles. An analysis of the existing service areas on the A66 and surrounding routes reveals that there is a gap of circa 40 miles in provision for north west - south east movements during the day. At night, this gap increases to 65 miles as Stainmore Services is closed at night (although some HGVs still park overnight in the site).

- The Councils welcome the freight study that has been commissioned by NH and have made representations to the NH to ensure that the scope of the study is sufficient to identify the issues and potential solutions and that its eventual recommendations, including new facilities, are implemented through the DCO.

## MAXIMISING SOCIO ECONOMIC BENEFITS

- The Project will bring positive economic benefits, but the Councils wish to see NH maximise the opportunities for local businesses and people to secure opportunities to work on the Project. However, it is recognised that due to local labour supply shortages, workers will come to the area to work on the Project. The management of the incoming workers needs to be properly planned to minimise risk of negative impacts.

- The Councils require that strategies relating to skills and employment, supply chain support and worker accommodation need to be developed by NH, in agreement with the Councils, to support local opportunities and training, maximise the benefits for the local economy and to prevent harm to the visitor economy through the loss of visitor accommodation. The Councils and Cumbria Local Enterprise Partnership (LEP) are working proactively to further define essential interventions that ensure potential harm is mitigated and economic opportunity is seized by the host communities.

- The opportunities for legacy benefits to the community from the Project need to be maximised, for example, re-use of worker accommodation and construction compounds for permanent uses of benefit to the community.

## ENVIRONMENTAL MITIGATION

- The construction of the Project has impacts upon a range of environmental issues including climate change, biodiversity, landscape, air quality, rivers and drainage, etc. which must be mitigated.

- Some assessments presented within the ES are not sufficiently progressed to the extent that the significant effects, that are predicted to be experienced by sensitive receptors within the statutory protection of the Councils, are not adequately and appropriately mitigated. This is due to an absence of survey information or an absence of design information that would remove or reduce any uncertainty as to the eventual effect.

- The Project will require significant temporary and permanent land take within the rural landscape impacting the area's sensitive biodiversity, including the River Eden SAC. NH's adoption of a 'no net loss' rather than 'net gain' strategy is inconsistent with the Government's objectives on biodiversity and particularly for a Project of this scale. The Councils would like to see the Government's target of 105 biodiversity net gain included within the Project requirements.

- The Project will have a significant carbon footprint resulting from embodied carbon with the highway infrastructure and emissions associated with significant volume of additional traffic using the A66 when complete. The construction of this road will render the Government and Council's commitments to achieving net zero by 2030-2050 impossible without more detailed emissions calculations and firm proposals for mitigation.

- The Project sits within an area of national significance for its landscape and the tourism is attracts. The Councils are concerned at the limited detail in many aspects of the NH's Landscape and Visual Assessment with insufficient information provided on key sensitive receptors and how impacts will be mitigated. The Councils want to see greater detail on how the loss of extensive areas of trees and hedegrows will mitigated and/or replaced in line with the Project's stated objective of planting two trees for every one lost.

- Natural Flood Management is a key aspect for reducing the risk of flooding and the Councils would like to see a joined up approach to landowners affected by the new road network so that biodiversity is maximised for existing and potential new Department for Environment, Food and Rural Affairs agriculture farming projects soon to be replaced by Environment Land Management proposals.

# 1 INTRODUCTION

1.1 This LIR has been produced by Cumbria County Council and Eden District Council in response to the Project. The Project is being progressed by an application for Development Consent by NH that was accepted by the Planning Inspectorate on 19th July 2022. If granted, the DCO will permit the dualling of the remaining single carriageway sections of the A66 within Cumbria between M6 Junction 40 ("J40") at Penrith and Scotch Corner.

1.2 This LIR has been jointly produced by the Councils as local planning authorities and host authorities for a large part of the Project. CCC also comments in its capacity as the local highway authority. Local government in Cumbria will change from 1st April 2023. The current six district councils (including EDC) and CCC will be replaced by two new unitary authorities. From 1st April 2023, a single new authority, Westmorland and Furness Council, will be the new host authority for that part of the Project located within Cumbria and Eden.

**Purpose of this LIR**

1.3 Under Section 60 of the Planning Act 2008, local planning authorities are invited to submit a LIR as part of the DCO application process. The purpose of a LIR is to give: '...details of the likely impact of the proposed development on the authority's area...'. Under Section 104 of the Act, the Secretary of State 'must have regard to' the LIR when determining whether or not to grant Development Consent pursuant to a DCO Application.

1.4 This LIR draws upon the Councils' local knowledge and experience to identify the different social, environmental, or economic impacts that the Project will have on the local area.

1.5 The Project will have a wide range of positive, neutral, and negative local impacts. This LIR identifies many of these impacts and considers how the negative impacts on the local area can be minimised and mitigated, and ways in which the benefits from the Project can be maximised. It considers the role that the DCO and legal side agreements can play in helping to mitigate and minimise the negative impact to deliver positive benefits.

1.6 This LIR does not assess the detailed compliance of the Project with the National Policy Statement on National Networks ('NN NPS'), nor does it seek to replicate the assessments contained within the Environmental Statement ("ES") that accompany the DCO application.

1.7 NH has undertaken a number of statutory and non-statutory consultations through the pre-application process for the Project. This LIR builds on the Councils' responses to these consultations and, where appropriate, appends copies of the consultation responses.

1.8 This LIR also aligns with the Councils' Statement of Common Ground (APP-277) that is being developed between the two Councils and NH to identify areas of agreement / disagreement and to support ongoing dialogue during the examination process.

1.9 It should also be noted that the Councils have a Planning Performance Agreement (PPA) in place with NH. The PPA assists the two Councils' in ensuring that there is adequate resource for engagement with the Project, which is particularly critical as the Project is following a trial 'Project Speed Pathfinder' process with the intention of halving construction time for the Project.

1.10 This funding support will currently expire at the end of the DCO Examination period. The Councils are very concerned about their ability to engage post-Examination in discussions around detailed design and further interactions of the Environmental Management Plan ("EMP"). This could delay the delivery of the Project or other projects in Cumbria whilst resource is focused on the Project.

**Content of the LIR**

1.11 In compiling this LIR, the Councils have had regard to the guidance contained in the Planning Inspectorate Advice Note One ('Local Impact Reports') which sets out the topics that an LIR may consider, including: 'local area characteristics such as urban and landscape qualities and nature conservation sites; local transport patterns and issues; and socio-economic and community matters.'

1.12 This LIR comprises the Councils' assessments of these relevant issues.

1.13 The structure of the LIR is as follows:

1.13.1 **Background:** This section summarises the Project, provides a description of the area in which the Project is located and explains the Councils overall support for the Project including the 'key tests' that need to be met for the full benefits of the Project to be realised.

1.13.2 **Planning and Highway Matters Policy Context:** This section provides a brief overview of the planning and highways policy context for the Project at a national, regional and local level.

1.13.3 **Main Impacts:** Sections 4 – 10 focus on explaining the 'key tests' in more detail, setting out where the Councils have concerns about the impacts of the Project, how those impacts are mitigated and the process for securing mitigation.

1.13.4 **Appendices:** The report is appended by documents which provide information to further support the content of the LIR:

(a) Appendix A: The Councils Assessment of Departures from Standards

(b) Appendix B: Technical Assessment of Project Impact on Appleby Horse Fair

(c) Appendix C: Assessment of Potential Diversions Routes

# 2 BACKGROUND

2.1 The Project comprises the improvement of the A66 between the M6 at Penrith and the A1(M) at Scotch Corner. The Project seeks to improve journey times on the A66 by

dualling the remaining 18 miles of single carriageway sections on this length of the road.

**Project Summary**

2.2 The proposed dualling involves a mix of online widening of the carriageway with some offline works (i.e., new sections of road that follow a different route but reconnect into the main A66 alignment). The Project also includes other improvements made along the route, such as junction improvements at the M6 J40 at Penrith, and associated improvements to junctions along the A66 to link it into the local highway network.

2.3 NH has divided the Project into eight Schemes. Six of these Schemes are located in Cumbria, as indicated on Figure 1.1 of the Project Design Report [APP-009]:

2.3.1 M6 J40 Penrith (Project 01);

2.3.2 M6 J40 to Kemplay Bank Roundabout (Project 02);

2.3.3 Penrith to Temple Sowerby (Center Parcs) (Project 03);

2.3.4 Temple Sowerby to Appleby (Projects 04 and 05); and

2.3.5 Appleby to Brough (Warcop) (Project 06).

**Site description and surroundings / location**

2.4 The A66 generally follows the line of a long-distance Roman road being straight in alignment for large sections, with notable deviations as it passes around key settlements along the route, including Penrith, Temple Sowerby, Kirkby Thore, Appleby- in-Westmorland and Brough.

2.5 The Project is located in a rural area of low population density. Whilst the A66 is a fast, strategic road, the connected local road network is characterised by roads of limited capacity, particularly for heavy goods vehicles ("HGVs"), constrained by narrowness, sharp bends, proximity to buildings and bridge height, and weight limits.

2.6 The Project crosses an extensive Public Rights of Way ("PRoW") network, comprising footpaths, bridleways and other designations.

2.7 Penrith is a key settlement on the route of the A66 within Cumbria. It is located at J40 of the M6 and performs the role of a key service, education and employment centre

and supports significant housing growth. Penrith is an important transport interchange. Alongside the A66 strategic road network, Penrith is served by the West Coast Mainline with direct rail services to London, Manchester and Scotland.

2.8 From Penrith heading eastwards, the road corridor generally passes through valleys characterised by large regular fields and areas of deciduous woodland. Eastwards from Appleby-in-Westmorland, the elevation rises rapidly from approximately 170 metres Above Ordnance Datum ("AOD") at Brough to a high point of approximately 440m AOD as it passes over Bowes Moor, at which point it leaves Cumbria and enters County Durham. This elevation and altitude make the area susceptible to adverse weather conditions resulting in weather related road closures and disruption.

2.9 The majority of the land that surrounds the A66 is agricultural, with a number of farms lying adjacent to, and having direct access onto the A66. Some of this land is classified as Grade 2 which is defined as 'very good' agricultural land.

2.10 The route passes between the Lake District National Park, the Yorkshire Dales National Park and the North Pennines Area of Outstanding Natural Beauty ("AONB"). The area has a significant economic dependence on the visitor economy largely based on the high quality local landscapes and environment.

2.11 There are a number of areas of historic interest along the route including conservation areas, Scheduled Monuments, and a large number of Grade I, II* and II listed buildings. Some of these, including the Countess Pillar near Penrith, lie in close proximity to the A66. There are also a number of Roman remains in the area, some of which are close to the route of the Project.

2.12 The River Eden is designated as a main river and crosses the A66 at Coupland Viaduct and 3km south-east of Appleby-In-Westmorland. This river is a designated as a Special Area of Conservation ("SAC"), part of the UK National Site Network of important high quality conservation habitats. Flood Zones 2 and 3 associated with the River Eden, its tributaries and other watercourses are located along the route.

**Principle of Dualling the A66**

2.13 The Councils strongly support the principle of dualling the remaining single carriageway sections of the A66 between Penrith and Scotch Corner as well as the proposed improvements to key junctions along the route. A suitably designed Project will improve connectivity, road safety and journey time reliability all of which will

significantly support economic growth aspirations of Eden and Cumbria and specifically:

2.13.1 bolster connectivity to increase accessibility and support inward investment across Cumbria.

2.13.2 better connect Cumbria and its businesses to national and international markets, which includes significant nuclear, manufacturing and energy sector activity centred on west Cumbria and Carlisle; areas which also see pockets of significant deprivation.

2.13.3 bolster resilience of the route and improved safety for all users.

2.13.4 accommodate predicted future traffic flows and the aims of the Northern Powerhouse and Levelling Up agenda.

2.13.5 better support local trips, providing improved access to employment, local services and education; and

2.13.6 provide better access to support the area's important visitor economy.

2.14 The Councils acknowledge that NH has engaged in a statutory and non-statutory consultation process. However, they are aware that the inclusion of the Project within 'Project Speed Pathfinder' has seen the DCO application being developed and submitted against extremely tight deadlines, which has resulted in less detailed information being presented regarding certain specifics of the proposals.

2.15 Whilst supportive of the principle of the proposed A66 dualling and the significant benefits it can provide; it is also the position of the Councils that there are a number of potentially adverse social, economic, and environmental impacts that require suitable mitigation for the Project to be fully consistent with the policies and objectives of the NN NPS and other relevant policy context. The Councils therefore anticipate that the examination process can be used to clarify impacts and secure additional mitigation to reduce any negative impacts.

2.16 Following engagement with Members, the Councils would request that the Project considers existing public transport provision available along the route with a view to identify and support opportunities for improvements to the public transport network.

2.17 Throughout the Project's engagement and consultation programme, the Councils have consistently reiterated a number of 'key tests' which need to be met to ensure that the benefits of the Project are fully realised. These include areas where mitigation is required to minimise negative local impacts and ensure the benefits of the Project are realised. The key tests are listed below and presented in detail in subsequent chapters:

2.17.1 clear and effective junction strategies, including an effective solution for Kemplay Bank, M6 J40 and Skirsgill;

2.17.2 no loss of connectivity for local communities;

2.17.3 a clear strategy for sections of the A66 that are "de-trunked";

2.17.4 an active travel route for walking and cycling along the A66 corridor;

2.17.5 a clear strategy for the establishment of alternative/diversion routes and to ensure network resilience;

2.17.6 improved facilities for HGVs;

2.17.7 maximising socio-economic benefits; and

2.17.8 environmental mitigation to minimise harm and boost benefit.

2.18 This LIR should be read alongside the following documents:

2.18.1 Statement of Common Ground (SoCG) [APP-277];

2.18.2 Principal Areas of Disagreement Summary Statement (PADSS) [AS-001]; and

2.18.3 Relevant Representation (RR) [RR-123].

# 3 OVERVIEW OF PLANNING AND HIGHWAY POLICY CONTEXT

3.1 This chapter presents an overview of the national, regional and local policy context relevant to the economic development priorities of Eden and Cumbria. The chapter provides evidence to further support NH in ensuring a comprehensive understanding of the opportunities and challenges relating to the development of the Project. The Councils wish to continue to work together with NH to address these opportunities and challenges.

## National Policy Context

3.2 The current National policy context is driven by the government's Autumn Statement 2022 which includes acceleration of priority major infrastructure projects to drive growth, increase energy security and deliver on net zero targets. Aligned to this is the Government's levelling up of the country to tackle regional and local inequalities and encourage private investment across the UK and, 'building back greener' committing the UK to a target of reaching net zero emissions by 2050 through the government's Net Zero Strategy.

3.3 The Road Investment Strategy 2 (RIS2) 2020-2025 commits to the dualling of the A66 to support the levelling up agenda and create the economic infrastructure for growth whilst at the same time, national active travel policy through Gear Change, commits to ensuring that new local and strategic A-road Projects such as the A66, include appropriate provision for cycling. And Local Transport Note (LTN) 1/20 provides guidance to local authorities on designing such high quality and safe cycle infrastructure.

3.4 The NN NPS sets out the need for, and Government's policies to deliver, development of nationally significant infrastructure projects ("NSIPs") on the national road and rail networks in England. It provides planning guidance for applicants of NSIPs on the road and rail networks. It provides the basis for the examination by the ExA and decisions by the Secretary of State. The NN NPS also provides guidance and imposes requirements on matters such as good design and the treatment of environmental impacts and a core policy document at the heart of this Project.

3.5 The Highways Agency Design Manual for Roads and Bridges ("DMRB") provides standards, advice notes and other documents related to the design, assessment and operation of trunk roads and motorways in the UK, including advice on departures from standards. CCC will be required to address departures from standard on the local roads that will fall within the red line boundary of the Project in line with this guidance.

3.6 Guidance notes relevant to WCH design, and which should be considered by NH in the Project design include Sustrans Traffic-free Routes and Greenways Design Guide and the British Horse Society advice note on Specifications and Standards Recommended for Equestrian Routes in England and Wales.

## Regional Policy Context

3.7 Transport for the North's ("TfN") Strategic Transport Plan 2019 identifies Strategic Development Corridors that reflect economic links across the north. The Plan recognises the importance of 'Connecting the Energy Coasts' of the North, which includes Cumbria in the West across to the North East of England recognising the agglomeration of non-carbon energy and advanced manufacturing economic clusters.

3.8 TfN's Electric Vehicle Charging Infrastructure ("EVCI") Framework 2022 ("the Framwork") sets out a whole network; whole system approach to Electric Vehicle ("EV") charging across the North of England. The Framework sets out that the acceleration towards a zero-carbon transport network needs to be at the heart of public policy making and investment decisions. The Framework identifies that there are potential gaps in coverage which are likely to emerge without public sector intervention including the more rural area of Cumbria and the A66, a significant challenge which originally emerged from the TfN's Transport Decarbonisation Strategy 2021. The Project must include provision of EVCI as part of its design to future proof the Project, in line with the Government's Transport Decarbonisation Plan.

## Local Policy Context

3.9 The Cumbria Transport Infrastructure Plan is CCC's local transport plan and sets out the policy framework for transport and connectivity in supporting sustainable growth in Cumbria for the period 2022-2037. It recognises that the development and delivery of accessible, sustainable and connected transport networks is essential to support communities and economic growth and that the success of the plan is very much dependent on effective partnerships and alignment of outcomes.

3.10 The Cumbria Highways Asset Management Strategy 2020-2025 presents the standards and levels of service for the highways infrastructure assets across Cumbria. The Strategy commits to working in partnership with other organisations and with communities to achieve the shared objectives of the Plan.

3.11 Supporting national policy – Gear Change and LTN 1/20 – is the Penrith Local Cycling and Walking Infrastructure Plan which sets out the priority cycling network and reflects the importance of connectivity across the town to increase active travel and reduce car journeys, helping to encourage modal choice and alleviate vehicular movement on the strategic and local road networks.

3.12 The Eden Local Plan 2014-2032 sets out planning policies for the district and allocates land for various uses. The Plan contains a number of environmental policies with the following Eden Local Plan policies being of most relevant to the Project:

3.12.1 Policy COM2: Protection of Open Space, Sport, Leisure and Recreation Facilities;

3.12.2 Policy ENV3: The North Pennines Area of Outstanding Natural Beauty; and

3.12.3 Policy ENV1: Protection and Enhancement of the Natural Environment, Biodiversity and Geodiversity.

# 4 CLEAR AND EFFECTIVE JUNCTION CONNECTIVITY STRATEGIES

**Key Headlines**

- All proposed junction improvements along the A66 need to have a transport modelling assessment agreed with the local highway authority. The Councils, however, are particularly concerned that the capacity and connectivity of the existing junctions in Penrith at M6 J40. The proposed grade separated junction at Kemplay Bank will not accommodate the forecast increase in traffic levels and the potential traffic congestion that could arise around Penrith and uninterrupted access for blue light services must be maintained.

- Penrith already sees significant congestion at peak periods (including Fridays, weekends and holiday seasons) resulting in queuing on the M6 and A66 which impacts on local and long-distance journeys, which is unacceptable to road users and the councils. The M6 and A66 already acts as a barrier to connectivity between communities in and around Penrith and the proposed improvements could further exacerbate severance if not addressed through appropriate design that supports cycling and walking in the Penrith area.

- The traffic flow assumptions need to be evidenced to provide assurance on the robustness of the forecast capacity demands. A traffic modelling assessment is required to demonstrate to the Councils that the junction designs will provide sufficient capacity for the junctions to operate effectively and accommodate the future traffic flows; and does not result in congestion or delays. The design should also mitigate impacts on loss of connectivity for local communities.

- The access junction proposals and implications for the site operations at Skirsgill between J40 and Kemplay Bank are not agreed. The access design to the depot needs to ensure that safe and effective operational access is provided for all user groups, including walking and cycling.

**Junctions**

4.1 The Project should develop effective junction solutions that are able to support forecast traffic flows and alleviate any congestion issues. Junctions that are critical to diversion routes should be enhanced to address capacity and resilience concerns. Junction capacity needs to be informed by a clear approach to traffic modelling and forecasts. Maintaining the current levels of congestion and delays is unacceptable for the Councils.

4.2 The impacts on local routes through Penrith are not certain. Modelling shows significant traffic using Clifford Road and Ullswater Road is shown to see significant additional traffic, but with little negative operational impact. This creates uncertainty with the results of the forecasts of future years with and without the Project in place and as such it is not possible to understand the mitigation that may be needed. There may be traffic implications for Clifford Road and Ullswater Road which need further investigation.

4.3 CCC operate a highway maintenance depot from Skirsgill Lane, south of the A66 west of Kemplay Bank, and which is accessed solely from the westbound carriageway of the A66. The depot provides several key functions to ensure road safety, including highway maintenance and winter maintenance including snow ploughing and gritting. It also contains buildings that provide essential services for at risk adults and children. The current design compromises access to the depot which is critical during the winter period to ensure the ongoing operation of the highway network and existing congestion causes operational difficulty and delay.

4.4 These junctions require design changes in order to address the Councils' concerns over their capacity and resilience. There is no base year modelling data for current peak hour queues or the comparison of flows to capacity presented in the Transport Assessment or Combined Modelling Appraisal Report (CoMMA) for either J40 or Kemplay Bank Roundabout junction. However, NH 2019 GPS data showed speeds of between 32 and 37mph for both directions, yet these are averages for 24 hours throughout a month and in practice, much slower speeds are experienced in peak periods.

4.5 Similarly for Fridays, 24hr speeds between 26 and 39 mph eastbound (with April, May, August, September, October and November all below 30mph) and between 25 and 39mph westbound (with May, July, September and October below 30mph) are apparent. Speeds are lower still for Fridays that are Bank Holidays or school holidays with 17mph shown in May for the eastbound movement and 21mph shown in July for the westbound movement.

4.6 It is understood that new traffic surveys were undertaken by NH in September 2022 and that further modelling will be undertaken. This modelling must show to the Councils' satisfaction that current and forecast traffic demand from the Project can be accommodated without adverse impact arising from congestion or delay.

**Connectivity**

4.7 The Councils do not wish to see any loss of connectivity for communities and key destinations across the route. The main areas that will suffer an impact on connectivity are around Penrith (M6 J40, Kemplay Bank and Skirsgill) and at a number of locations along the route where right turn movements will be removed or where the new road severs an existing route.

4.8 Connectivity for vehicle movements is reduced in a number of locations where right turn movements are to be eliminated, but no provision is made for alternatives. This has an implication for local journey times and impacts on particular locations which are highlighted in the Councils' Principal Areas of Disagreement Summary Statement (PADSS) document reference AS – 001.

4.9 The existing and proposed connectivity of the communities and key services along the A66 has been assessed by the Councils, both for motorised and non-motorised forms of transport. In general, the proposed improvements to the A66 have tried to minimise the impact to local communities by providing several grade-separated junctions that allow all movements. However, the key areas that will suffer an impact on connectivity are set out below.

**M6 J40 to Kemplay Bank Roundabout (and the A6 south)**

4.10 There is a 'blue light hub' comprising both fire and ambulance services located at Kemplay Bank Roundabout. The emergency services directly access the A66 from this facility as a means of providing the fastest response. There is potential for the construction period to have a detrimental impact on the traffic flow and accessibility

of the hub from the Kemplay Bank Roundabout. It is vital that access is maintained to this facility at all times and the Councils need assurance from NH that robust mitigation plans are put in place and agreed with Cumbria Ambulance Service and Cumbria Fire and Rescue Service prior to the construction period commencing.

**A66 / Brougham Junction**

4.11 The Project proposes the removal of right turn movements at the Brougham junction, resulting in vehicles travelling from Brougham to the Centre Parcs junction having an additional distance of approximately 4.6km to travel (via Kemplay Bank). Vehicles travelling eastbound from the Kemplay Bank Roundabout will no longer be able to turn right into Brougham and instead will have to access Brougham via the A6 Eamont Bridge and the B6262 or via the Center Parcs junction.

4.12 Although the settlement of Brougham is not considered to contain any 'essential' services or facilities used by the wider community, the village does house a small community as well as tourist attractions including Brougham Castle and Brocavum Roman Fort. Therefore, there is a potential for local people and visitors to be impacted by these proposals.

4.13 This currently all-movements junction is used as a temporary diversion route during flood events and the banning of those movements will cause a reduction in network resilience. This is not acceptable unless there is alternative mitigation in place.

**J40 and Kemplay Bank Roundabout**

4.14 There is an existing capacity problem at M6 J40, Kemplay Bank and the linking section of the A66, which results in congestion in these areas with a knock-on effect on the local highway network.

4.15 As calculated from the figures in table 7-2 of [APP-236] growth between J40 and directly east of Kemplay Bank is shown to be 50% between 2019 and 2044 with the Project in place.

4.16 The Vissim base model applied in the Project's Transport Assessment shows some discrepancies regarding validation and it is not clear whether the model fully represents the current congestion at M6 J40 and Kemplay Bank and the relationship these junctions have with alternative routes through the centre of Penrith. This creates

uncertainty with the results of the forecasts of future years with and without the Project in place.

4.17 The forecast Vissim model has been adjusted to represent a Friday, however this has not fully considered the build-up of traffic from mid-day and the full impact of Fridays in summer months and has not been applied to the base year model. There is also no indication of the induced demand that the Project may create given the current junction is at capacity at these times. This underplays the operational impact of the regular extra traffic demand on a Friday at this location.

4.18 Retention of only three lanes on the M6 J40 overbridges and the retention of traffic signals on the slip roads onto M6 north and A66 west will limit capacity of this junction despite the proposed Project providing additional lanes on the approaches. This will have a knock-on effect of more traffic congestion in Penrith and road safety implications of traffic queuing back onto the M6 southbound carriageway north of J40.

4.19 This section of the A66 is demonstrably worse for traffic speeds than the rest of the route and shows that demand is often in excess of the capacity of the two roundabouts. The average speeds need to be seen in relation to the posted speed limits on the A66 which are either 60mph or 70mph for this section. The capacity constraints are of equal concern for the local roads which also cross the route at these two roundabouts.

4.20 The daily two-way traffic flow between 2019 and 2029 is predicted to increase by 15% without the Project in place and with the Project in place by 29%. Between 2019 and 2044 there is a predicted increase of 32% without the Project and 49% with the Project. These predictions are significant and are at odds with the level of physical increases in capacity being provided by the Project at J40 in particular. Therefore, the models must be reviewed and agreed with the Councils to ensure the junctions work without congestion and delays, particularly at the seasonal peak.

**Skirsgill Depot**

4.21 The depot site is currently accessed solely from the westbound carriageway of the A66. This results in traffic entering the depot from the west or leaving the depot to travel east having to travel via the Kemplay Bank or M6 J40 roundabouts. During peak period congestion, this can cause very lengthy delays, particularly for site traffic approaching from the west. There is a gated access to the depot from the

southbound slip road onto the M6 at J40, which effectively provides direct access from the J40 roundabout. This avoids the need for a circuitous journey via Kemplay Bank for traffic approaching via J40 and must be secured as a regular access to the depot to ensure that it can operate effectively.

4.22 Whilst this gated access has been used minimally in recent years, its proposed retention by NH is strongly supported and it is expected to be brought back into use by the Councils in due course.

# 5 DE-TRUNKING

**Key Headlines**

- The highway authority will not accept transfer of assets unless there is clear understanding and agreement relating to asset condition, liabilities, remedial works and funding of future maintenance. The Council will also need to be resourced by NH to undertake the necessary work to implement the de-trunking requirements.

- The Project is proposing the de-trunking of approximately six miles of the old A66 in Cumbria that will no longer be required as part of the strategic road network and NH is expecting to transfer these lengths of road to the local highway authority In addition, the Project will include new lengths of local highway and structures to be provided to connect with, or cross, the new A66. The division of responsibilities between NH and the local highway authority and the interface between the local and strategic networks must be clarified and agreed as part of this consenting process.

- There must be an agreement with NH on the principles for asset transfer and the method for assessing and agreeing commuted sum payments agreed as part of the DCO process. This agreement must include, for example, the type and condition of the assets, the liabilities and remedial work needed, design suitability, funding of future maintenance and ownership details.

- The Project, which is at outline design stage, includes departures from standards that represent a safety risk. As the Project goes through detailed design stage the Councils must approve any departures relating to the local road network.

5.1 The Councils support the principle of dualling the remaining single carriageway sections of the A66 between Penrith and Scotch Corner, as well as improvements to

junctions along the route. A suitably designed scheme will improve connectivity within and beyond Cumbria, improve resilience, road safety and journey time reliability, and help to support future economic growth and investment.

5.2 Indicative areas of de-trunking have been noted in de-trunking plan [APP-357 to APP-360]. However, the Project needs a clear strategy for the sections of the A66 that will be de-trunked, so that assets adopted by CCC in its capacity as local highway authority are at an acceptable and agreed standard and appropriate commuted sums are provided to support future upkeep. The transferred assets should be subject to improvements where necessary to reflect their new role as part of the local road network. There is no agreed approach to de-trunking and CCC must have a full understanding of the liabilities that may arise, particularly with regard to the risks that apply to structures.

5.3 There are a significant number of existing structures within the length of road to be de-trunked. CCC will require agreement on the extent of structural inspection and records as well as the works proposed to be carried out prior to handover or agree as funded post-construction work by CCC or NH.

5.4 New offline carriageway works will lead to a length of approximately 9.5km of the old A66 which will no longer be required as strategic road, and which will be de-trunked. NH are seeking to transfer the ownership of this land to the local highway authority this has the potential to create liabilities and costs for CCC.

5.5 NH has advised that drainage asset condition survey information is unavailable within areas of known localised flooding. NH assumes satisfactory drainage conditions with evidence and have proposed full asset inventory surveys to be undertaken six months prior to transfer of asset ownership. Alongside this, NH proposed a series of remediation measures for more adverse condition grades, including removing blockages and gully cleaning. CCC must review the extents of asset conditions in these surveys, prior to any formal agreement.

5.6 The de-trunked sections of the route would need to be designed and modified as necessary through the implementation of the Project to properly reflect their new classification and functional purpose and to address any safety concerns. These de-trunked sections provide an opportunity, as part of an enhanced local road network, to improve connections to and from the A66.

5.7 Crucially, it is assumed that any de-trunked sections of the existing A66 do not include a maintenance backlog, and that commuted sums will be provided by NH to support future upkeep. The Council requires that transferred sections of the route should be subject to enhancements where these are considered to best reflect their new role, for example, improved junction safety or the introduction of improved facilities for Non-Motorised User ("NMUs"), supported by suitable surveys and safety assessments.

5.8 CCC will not accept transfer of assets unless there is clear understanding and agreement relating to asset condition, liabilities, remedial works and funding of future maintenance. The agreement to assets transfer must include:

5.8.1 clarity on the extent, nature and restrictions on landownership proposed to be handed over (freehold/ leasehold, mineral rights, etc);

5.8.2 confirmation on the location, restrictions and rights to existing statutory undertaker infrastructure not being diverted to the new strategic highway;

5.8.3 identification of the type and extent of assets to be transferred;

5.8.4 assessment of the condition of the assets to be transferred and the works required to bring those assets up to an acceptable condition for the local highway authority to take over their ownership and maintenance;

5.8.5 identification of ancillary works to be undertaken consequential on the local highway authority taking responsibility for those assets. Thought will need to be given to the timing of any additional interventions by the CCC, as there will be an expectation from stakeholders and the local community that the disruption due to Project construction would be over and no further disruption expected due to local highway authority works;

5.8.6 commuted sums must be paid by NH to the local highway authority for the maintenance, in perpetuity, of those assets.; and

5.8.7 agreement on the timeframe for correction of defects within the agreed residual life of an asset, encountered after completion of handover.

5.9 NH intend to de-trunk Kemplay Bank Roundabout once the Project is constructed. In discussion with CCC, NH has indicated it intends to assume maintenance responsibility for the new bridge structures of the roundabout. The extent of

responsibilities for this de-trunked asset will need to be clearly set out. It is also the Councils' requirement that all new bridges, underpasses and similar major structures that will form part of the local highway network post construction will become the responsibility of NH. The highway authority is not willing to accept the liabilities for these new structures on the local road network.

5.10 CCC has produced a De-trunking Principles document which sets out its requirements for agreeing the transfer of assets and the value of the commuted sum. The document sets out CCC's expectations in relation to de-trunking and has been shared with NH. It is expected that the document would inform NH's De-trunking and Asset Handover Approach and Asset Adoption Plan. The Council must have an opportunity to review these documents and agree the approach for the approval of any asset transfer and require meaningful progress will be made over the forthcoming months to address this.

5.11 The status of de-trunking is unsatisfactory. It is recommended that meaningful negotiations and dialogue take place as soon as possible to ensure that de-trunking principles are agreed in a legalside agreement. The following list (not exhaustive) provides examples of areas of risk concern for CCC that need to be resolved as soon as possible:

5.11.1 Skirsgill Depot impact: further clarity is required regarding how the works affect the access into the depot.

5.11.2 Adoption: There is currently no clear indication on a red line boundary of the areas to be adopted together with a list of assets within the red line boundary.

5.11.3 Traffic / Diversions: There is no clear indication of what this entails or what agreements are being made and in some cases the line has moved from the agreed position. Overall ownership details of assets transferred to the Highways Authority need to be detailed and agreed.

5.11.4 Ground investigation works: CCC have yet to be consulted on ground investigation works which is essential due to the lead in times for permit requirements. CCC have a full programme for the next five works and without essential programming this may have an impact on the Project.

5.12 NH have assessed departures differently from the CCC's service procedure on Departures from Standards (2019), with a focus on the impact on Project delivery and the red line boundary, rather than safety of road users. As such, the Councils carried out an assessment of over 100 departures (pre DCO submission) that identified some safety risks, including some that were rated high or critical. This is attached as Appendix A. Such departures would require extensive mitigation works that were considered might affect the red line boundary and / or require extensive safety and operational justification. Departures where a solution appeared achievable require detailed design development within the red line boundary.

5.13 All identified departures must be designed out by the Project contractors in conjunction with the highway authority during detailed design or robust departures from standard developed to ensure safety risks are mitigated as far as reasonably practicable. The process for agreeing departures must be clarified to ensure that CCC have the opportunity to approve them. CCC will update the Departures from Standard assessment with reference to the DCO plans and agree departures with NH.

# 6 ACTIVE TRAVEL (INCLUDING APPLEBY HORSE FAIR)

**Key Headlines**

- There is potential for lost or reduced connectivity as a result of the Project, due to direct severance by the new road or arising from closed or altered junctions, for example the removal of right-turn movements for safety reasons. This can result in increased journey time and length, which has a disproportionate impact upon non-motorised users.

- WCH routes need to be provided in accordance with recognised standards and secured as permanent infrastructure. The Councils must have assurances that any gaps in the current WCH corridor will be resolved in the final design and that the design must be confirmed as acceptable by Active Travel England.

- The Councils require clarity on the design of routes, proposed statutory status, ownership, suitability, functionality and maintenance responsibility (including commuted sum); these matters must be resolved to ensure the sustainability of the Project.

- Appleby Fair is the largest horse fair in Europe, which takes place each year in June for one week. It attracts approximately 10,000 people from the travelling community including a large amount of horse-drawn traffic. The impacts of the Project upon the safe and effective operation of the Fair must be carefully managed and consideration must be given to the existing Fair traffic management plan.

6.1 The Project should support the delivery of an east-west corridor suitable for WCH. The design details need to be agreed and must comply with recognised standards, including LTN 1/20, Gear Change and Active Travel England guidance. Clarity is needed regarding maintenance responsibilities. The Project should also address the needs of travellers to Appleby Horse Fair and incorporate meaningful improvements for horse drawn traffic.

6.2 There is a need for a continuous east-west route and the potential gaps in the network at Coupland and to the east of Kemplay Bank are not acceptable. The whole route must be legible, well-signed and easy for users to navigate, serve the main destinations and be appropriate for all types of users.

6.3 The proposed provision on the de-trunked A66 is narrow (less than 2m wide in places), unsegregated, does not include side road treatment or have appropriate crossing points. It crosses the old A66 in numerous places which should be avoided in order to make it coherent and attractive. The proposals as they stand, would create an unattractive and undesirable route for pedestrians and cyclists. The Councils require sight of the safety audit of the WCH facilities and the designer's comments so that they can understand the risks associated with the departures from standards. De-trunked sections of the A66 must be designed appropriately for WCH to create a safe and attractive route connected to main settlements along the route.

6.4 There is a lack of proper provision for pedestrians and cyclists at M6 J40 and through Kemplay Bank roundabout. The number of crossing points creates an unnecessarily complex junction for pedestrians and cyclists to navigate, which results in journey delay for active travel users. Provision at both roundabouts should be improved to align with LTN 1/20 guidance for facilities that can be used by all users. There are however, competing objectives and it is recognised that a balance needs to be struck between traffic capacity and the needs of WCH users.

6.5 The provision for NMU's at J40 remains largely unchanged from the current situation, apart from the new proposals for those approaching the roundabout from the A66 westbound. To navigate the roundabout and continue their journey, these users will

be required to use eight separate traffic light-controlled crossing points. Given the nature of the junction, this would ideally be a grade-separated facility, removing interactions with traffic, facilitating improved traffic flow and safe passage of NMUs in a convenient and efficient manner. However, it may be possible to look at other options, including provision of off-line enhancements to facilitate longer NMU journeys. The Councils require discussions with NH to review other options that may improve the connectivity of this route for NMUs.

6.6 The proposed new junction arrangement at Kirkby Thore means that NMUs could come into conflict with vehicles (often large, given the proximity of the Gypsum plant). Further consideration must be given to resolving this conflict which is exacerbated by the proposed severance of Main Street. This will reduce connectivity for these users and compromise access to quiet local roads, PRoW network and NCN68 to the northeast is currently unsatisfactory. It is unclear whether the new route proposed near the existing bridleway (BW 336018) will be suitable for horse riders to use, and whether this will be an official diversion of the existing bridleway.

6.7 There is a need to clarify the design detail and the level of separation to be provided between pedestrians, cyclists, equestrians and vehicles for the numerous crossing points of the A66 (bridges, underpasses etc).

6.8 Proposals at the Kemplay Bank roundabout seek to achieve design synergy with the Bridge Lane proposals that are being developed as part of the Penrith Local Cycling and Walking Infrastructure Plan. It is required that NH assess options away from the M6 J40 roundabout for securing provision for NMUs across the M6 motorway.

6.9 The Councils have been contacted by the British Horse Society regarding the lack of provision for horse riders. NH must engage with the British Horse Society and user groups to ensure no provision is lost or severed as a result of the Project and that (where practicable) provision for horse riders is made along the east-west corridor and north-south at key junctions.

6.10 It is unclear how the active travel user can access the proposed provision or where the proposed infrastructure connects to. For example, there is no indication whether the east-west link on Roman Road and Priest Lane continues further along the B6412.

6.11 Near Kirkby Thore, the WCH route crosses the proposed de-trunked road, however, no facilities appear to be provided to ensure safe crossing given the speeds and visibility. The level of segregation from traffic should be enhanced and the design

controls should prioritise NMUs where highway standards allow. The design must be amended so that cycling and walking provision is continuous on the northern side of the road rather than switching sides several times.

6.12 The Council are aware of potential ownership issues relating to the existing road outside New Hall Farm, Coupland. It is vital that this is resolved in a way that allows NMUs to utilise this road and connect eastwards to the proposed new provision that runs to the north of the A66. An alternative and preferred option for connection would be to continue the route from the local road staying to the north of the A66 and continuing onward to Café 66.

6.13 With regards to the Project affecting several PRoWs, NH must divert any PRoW as close as possible to the original route. Where this is not feasible, full justification must be provided. It is specifically noted that Bridleway BW 350/021 near Warcop has proposed alterations resulting in the permanent diversion of the route by approximately 1km. This extension is likely to have a negative impact on residents and others.

6.14 The Councils have previously highlighted opportunities for further development of active travel interventions along the Project route where gaps remain.

**Appleby Horse Fair**

6.15 The Appleby Horse Fair is the largest Horse Fair in Europe, attracting estimated figures up to 10,000 Gypsy and Travellers and over 20,000 visitors from the settled community. It takes place in early June every year and lasts for one week, having an impact on the town and the surrounding highway network.

6.16 A Multi-Agency Strategic Coordination Group ("MASCG") was established in 2008 to develop an operational plan to provide coordinated community leadership. The MASCG has developed the Appleby Horse Fair Traffic Management Plan ("AHFTMP") which is designed to minimise the impact on the highway network during the various phases of the Fair and to maintain safety for those visiting the Fair and using the impacted highway network.

6.17 The AHFTMP deals with three phases of activity: migration to the Fair – including encampment within Eden district; Fair activity in Appleby and the surrounding area; and departure from the Fair. It covers matters such as legal powers, traffic movements

to the Fair, road closures, stopping places, one-way systems, traffic regulation orders and car parking.

6.18 The Councils must see engagement from NH and their contractors to ensure that the AHFTMP can be updated and modified as appropriate to address the impacts of the Project, both during construction and operation. The Construction Traffic Management Plan (CTMP) for the Project must address provision for Fair traffic and ensure that impacts are properly managed and mitigated.

6.19 The Councils specifically wish to highlight the following:

6.19.1 Ideally, non-motorised traffic should be discouraged from using the A66, and NH must consider how this can best be achieved, through Project design, traffic management and information systems, such as variable message signs

6.19.2 Measures in the CTMP must demonstrate how horse drawn traffic can safely access Appleby Horse Fair.

6.19.3 As the A66 between Appleby and Kirkby Thore will be on a new alignment, the existing A66 will be de-trunked and downgraded to a local distributor road and will become an attractive alternative for equine traffic approaching or leaving Appleby to the west. This is welcomed and the design standards for the de-trunked road will need to take this into account.

6.19.4 De-trunking of the existing A66 carriageway to a local road will create the opportunity for further stopping places in the vicinity of the Fair, which may require an extension of the AHFTMP to prevent this from happening or provide a new opportunity for managed parking areas in the run up to and during the Fair.

6.20 The Councils require NH to provide either direct funding to provide stopping places, for horse drawn vehicles travelling to Appleby Horse Fair, on the de-trunked sections or ensure the work is undertaken by its Delivery Integration Partner ("DIP") contractors prior to being de-trunked. Funding must be provided to install mitigation measures to prevent unsafe / illegal parking along the de-trunked sections.

6.21 The Councils prepared a technical assessment (Appendix B) of the effects of the Project upon Appleby Horse Fair, which was shared with NH in January 2022.

6.22 The junction arrangements at the west side of Appleby are very limited and do not provide for sufficient movement to and from the A66. This becomes critical during the holding of the Appleby Horse Fair contributing to major congestion in the town. As a minimum an eastbound access needs to be provided onto the A66 in this location to help manage traffic during the operation of the Fair. The Councils recommend a westbound exit from the A66 at the junction, so that fair-bound traffic does not need to travel through Appleby.

**Brough Hill Fair**

6.23 Brough Hill Fair takes place annually on land near Eastfield Farm attracting a small number of travellers (less than ten caravans in recent years). It is being partially relocated by NH as a result of the Project. NH has asked CCC to consider taking ownership of the fair site and associated operational responsibilities. CCC is not willing to assume this responsibility which currently sits with the Ministry of Defence as landowner.

6.24 It is essential therefore that NH explores alternative options for the future management of the fair site to ensure its continuous operation.

# 7 DIVERSIONS AND NETWORK RESILIENCE

**Key Headlines**

- Pre-construction and during construction, there will be a need for planned diversions using parts of the local highway network. Without clearly signed diversions, there will be a significant number of drivers with the local knowledge who use the local highway network to find alternative routes when faced with delay. Therefore, improvements to the local road network are still required. The suitability of the local network is constrained in a number of locations by the age and condition of the infrastructure, for example, narrow or twisty alignments, historic structures with weight and height limits, capacity constraints and propensity to flooding.

- During future planned maintenance and operation, there will be need for tactical diversions to deal with closures and incidents. The constraints referenced above are also relevant here.

- The Councils have concerns about the impacts of diversions upon the local network. These must be agreed with the Councils as part of the Construction Management Plan.

Whilst diversions need to be managed across the whole network there are two specific areas of concern:

- Kirkby Stephen – It would be unacceptable for a diversion route to be directed along the A685 diversion route through the centre of Kirkby Stephen and the Conservation Area, which is constrained by a single lane traffic light junction, narrow roads, height and weight limits. Provision must be made to prevent drivers with local knowledge from using this route as a diversion.

- Penrith – the proposed diversions in and around Penrith and network resilience if and when the bridge at Eamont Bridge on the A6 is closed. The Project proposes to close the Brougham junction that is used as the diversion route for Eamont Bridge and with no alternative route there is no resilience in the network either during construction or once in operation.

- A Route Management Strategy is required to understand the impacts, inform and agree the choice of diversion routes and importantly to identify appropriate mitigation to be delivered and / or funded by NH. This strategy will establish how NH and the local highway authority will work together with the local authority being resourced by NH for its diversion management activity to enable delivery of NH's Project.

- The Project presents an opportunity to introduce measures that would improve resilience of the route and driver information, including for example, improved variable messaging systems and better integration and data sharing with local stakeholders.

7.1 This section is split into the impact of the Project resulting from diversion routes (during construction and operation) and the impact of the Project on network resilience. Consideration should be given to enhancing the existing strategic diversion routes, specifically the A6 and A685. The impact of the Project on permanent diversion routes needs to be assessed and mitigated during the planning and construction phases. To increase the resilience of the route once operational and improve driver information, the Project should incorporate the use of more and smarter technology, for example variable message signs. The Councils have strong concerns that drivers with local knowledge will make use of local roads and may not use the official diversions. Therefore, the Councils require mitigation measures on

these routes to prevent future maintenance liabilities, and to reduce the impact on local residents.

**Diversions during Construction**

7.2 The Councils have produced (and shared with NH) a Diversions Assessment report (Appendix C) which assesses suitability of potential diversion routes in Cumbria that may be utilised by the Project during its construction. Routes were identified in the report that could be made suitable if mitigation measures were applied, consisting of minor to moderate improvements. The Councils recommend that such mitigation works be undertaken before any route is required by the Project during construction.

7.3 Figure 12.9 of the ES identifies indicative diversion routes [APP-120]. However, 2.7 Environmental Management Plan Annex B13 CTMP [APP-033] includes no specific details relating to diversion routes on the local road network and which diversions would be used in combination. The Councils require more detail regarding the measures to be taken to mitigate risks on the local road network. It should also be noted that prior to construction, CCC must approve a set of diversion routes and improvement works required to make those routes satisfactory.

7.4 Appendix F of the Transport Assessment [APP-236] does provide a description of the proposed diversionary routes for each scheme which is broadly the same as Figure 12.9 of the ES Possible Diversion Routes [APP-120]. However, it is noted in the final paragraph of Appendix F that continued consultation will be required to agree local routes with the Councils once a detailed program of closures has been identified, such that conflicts with other constraints (for example, other planned road works) can be avoided.

7.5 It is not anticipated that this level of detail will be determined by NH before the end of the Examination. Following high-level review of the potential routes and rat-runs, the Councils continue to be concerned by the construction impact of the Project on the local community.

7.6 Potential diversion routes and rat-runs were reviewed by the Councils in a previous assessment, which indicated all routes were unsuitable without mitigation. All comments and risks that were raised remain valid and must be resolved by NH and agreed with the Councils.

7.7 Current modelling of construction phases shows unrealistic and inappropriate use of minor local roads, such as Clifford Road in Penrith, which runs alongside Wetheriggs Country Park. A further modelling exercise is needed to ascertain what the true impact of construction will be and whether traffic will be delayed further on the A66 or use other local routes such as through Kirkby Stephen.

7.8 An assessment of potential diversion routes is required to understand how concerns will be addressed, including the following examples:

7.8.1 Unsuitable junctions with significant turning hazards;

7.8.2 Roads with sharp bends, frequent undulations with poor sightlines;

7.8.3 Very narrow lanes or single-track roads with soft verges and poor existing road conditions;

7.8.4 Restricted road widths in residential areas;

7.8.5 Large volumes of parked cars on roads;

7.8.6 Roads and junctions prone to vehicular accidents

7.8.7 Roads already prone to congestion, e.g., around Penrith;

7.8.8 Lack of provision for NMUs;

7.8.9 Exacerbation of noise and air pollution caused by HGVs in residential areas;

7.8.10 Town, structural and environmental weight limits;

7.8.11 Low bridges and unsuitable headroom for HGVs;

7.8.12 Local schools and nurseries in proximity;

7.8.13 Roundabouts unsuitable for HGVs; and

7.8.14 Known flood zones.

**Diversions during Operation**

7.9 With traffic levels set to double by 2051 on the A66, there will be increased pressure on existing permanent diversion routes. The Councils have concerns about the

impacts of diversions upon the local network and the potential disruption to communities. Specific areas of concern which the Councils request are addressed by NH include:

7.9.1 The longest diversion (proposed in Figure 12.9 of the ES) runs through Kirkby Stephen and is already deemed highly unsuitable by CCC in its current operational use. The restricted road widths through the town centre and conservation area, and narrow roads pose significant hazards, especially when HGVs use this diversion. Also, the low headroom (14' 6") bridge at Kirkby Stephen Station is a major hazard for HGV drivers, pedestrians and rail users. Concerns have been raised by the local community at Kirkby Stephen that the A685 may become a route for traffic avoiding road works on the A66. NH must provide further details of their traffic management plan for the A685, including the interface with and cumulative impacts of the proposed Lune Gorge Project.

7.9.2 The increase in additional loads and frequency of traffic caused by diversions may have adverse impacts on 'remote' structures during construction and operation (I.e., tactical diversions). Bridges along these routes were structurally assessed around 20 to 30 years ago and since then, standards have changed, and structural conditions are likely to have deteriorated. The Councils require NH to undertake reassessments of all bridges within the local network, confirming their suitability, and upgrading them prior to handover where necessary.

7.9.3 British Gypsum, located north of Kirkby Thore, is a major employer in the area, which transports a large volume of product by road. There is potential for temporary adverse impact on this business during the construction period due to traffic control measures, such as lower speed limits or diversions on the access to the site. The Councils stress the importance of ensuring that the temporary impact on the site is kept to a minimum.

**Network Resilience**

7.10 The existing A66 lacks monitoring and messaging systems to warn drivers of adverse weather conditions, accidents, closures and other incidents. The Project presents an opportunity to install systems that will address this weakness, combining existing infrastructure with the latest technologies, such as variable message signs ("VMS"). This would improve the end-to-end journey experience, with road users kept

informed and able to make informed travel decisions. VMS would be particularly useful in managing traffic during Appleby Fair week.

7.11 Installing EV charging points presents a significant opportunity in addressing the TfN's findings regarding potential gaps in coverage which are likely to emerge without public sector intervention, including the more rural area of Cumbria and the A66. Due to the rural nature of Cumbria, where demand is too low to for charging infrastructure to be a viable investment, the Project becomes a strong mechanism to help deliver on the Government's net-zero carbon emissions by 2050 target.

7.12 Other opportunities to improve technology across the A66 and improve the resilience of the network include:

7.12.1 Installing strategic CCTV traffic surveillance cameras with the potential for information sharing and collaboration with highway authorities, and live updates to inform sat-nav systems?

7.12.2 Exploring the introduction of Air Quality Management sites across the route to monitor and control air quality as traffic levels increase.

7.12.3 An enhanced variable messaging system (VMS) across the A66, interlinked with local authority infrastructure, can provide a comprehensive management and control mechanism for the whole network.

7.12.4 Exploration of data sharing opportunities and improved collaboration with key stakeholders. For example, the link to the Police Command and Control System would be particularly valuable for dealing with major events and incidents that may not be entirely traffic related.

# 8 IMPROVED FACILITIES FOR HGVS

**Key Headlines**

- The Project will result in increases in the volume of HGV traffic using this part of the A66, with volumes expected to double by 2051 (APP-237 Table 5.34).

- Current and proposed HGV parking, toilets and services provision is inadequate, and this results in inappropriate parking of HGVs and associated anti-social behaviour, which will be exacerbated by the Project. Therefore, new provision of HGV facilities,

including those for female drivers, must be included to complement upgrades to existing facilities.

- DfT guidance sets out that on the trunk road network a rest area should be provided every 28 miles. An analysis of the existing service areas on the A66 and surrounding routes reveals that there is a gap of circa 40 miles in provision for north west – south east movements during the day. At night, this gap increases to 65 miles as Stainmore Services is closed at night (although some HGVs still park overnight in the site).

- The Councils welcome the freight study that has been commissioned by NH and have made representations to NH to ensure that the scope of the study is sufficient to identify the issues and potential solutions and that its eventual recommendations, including new facilities, are implemented through the DCO.

8.1 Further consideration of the adverse impacts arising from substantial increase in HGV traffic is required. The Project should ensure the provision of high quality and dedicated HGV parking and service provision to meet the increased demand and to support the logistics sector.

8.2 The Project will substantially increase the volume of HGV traffic using this part of the A66, with volumes expected to double by 2051. 2019 HGV percentages of traffic is shown to be 25% in the AM, 27% Inter Peak (IP) and 22% PM (an average of A66 links). For the A66 the 2019 to 2044 growth in the numbers of HGVs is shown to be 7% AM, 6% IP and 4% PM without the Project. With the Project in place the growth is 14%, 11% and 11% respectively over the same time period.

8.3 In considering the current issues on the A66, the Penrith Parking and Movement Study, (jointly commissioned by the Councils and Penrith Town Council ("PTC")) highlighted a number of issues relating to HGV parking including:

8.3.1 Lack of parking provision around the town;

8.3.2 unsafe parking along the A66;

8.3.3 parking issues within uncatered areas of the Gilwilly Industrial Estate, including various anti-social behaviour issues such as the dropping of litter and noise issues;

8.3.4 illegal and nuisance parking of HGVs in Castletown and the surrounding area;

8.3.5 a need for enforcing existing parking restrictions, increasing the number of patrols and ensuring that the offending HGV companies are contacted, and action taken.

8.4 The Study suggested a package of interventions to address these issues including the following HGV focussed interventions:

8.4.1 providing additional dedicated parking for HGVs, motorhomes, coaches and caravans; and

8.4.2 developing a strategy to discourage overnight parking e.g., HGVs in areas of Castletown and Gilwilly (in and around Gilwilly Lane / Cowper Lane and Eden Business Park).

8.5 A gap analysis of the existing service areas on the A66 and surrounding routes reveals that there is a gap of circa 40 miles in provision for north west – south east movements during the day. At night, this gap increases to 65 miles as Stainmore Services closes 8pm Mon to Thurs and 2pm on Fri and is shut on weekends (although HGVs park overnight at the site). This north west – south east movement sees the highest level of HGV volumes.

8.6 As it is expected that there will be an approximate increase of 100% in vehicle traffic by 2051, it is recommended that a potential new service area be provided to cater to this demand and a recommended location for this would between Appleby and Bowes to reduce the distance between other truck stops on the A1(M) and M6. A review of existing service areas finds that Stainmore Services would be considered as substandard in terms of existing access arrangements (which have contributed to recorded fatalities) and parking provision.

8.7 In the longer term, there needs to be provision on the network for vehicles (including HGVs) transitioning to alternative fuels, primarily battery electric. As ranges will be less than is currently the case with diesel trucks, drivers will need more facilities to park up and recharge/refuel. The current insufficient facility provision currently will become more severe within the next 5 years and beyond. This applies for both Stainmore and Penrith, with existing facilities needing to be increased/enhanced to accommodate extra traffic from the Project and extra stopping demand due to fleet transitions, requiring new energy infrastructure as well as upgraded driver facilities.

8.8 NH has recently commissioned a freight study for the A66, to consider the provision of HGV facilities along the route. The Councils' view (shared with NH) is that the scope of the study must include:

8.8.1 consideration of the forecast growth in HGV traffic arising from the Project;

8.8.2 reviewing the adequacy of existing facilities to meet the HGV/logistics sector requirements and minimising anti-social behaviour

8.8.3 identifying the need for additional/improved facilities for HGVs to meet the future demand from increased HGV traffic

8.8.4 identifying the need for additional/improved facilities to allow for the future changes in the HGV fleet with the transition to electric power or alternative sources of fuel

8.8.5 developing options for addressing the inadequacies – this could include improving existing facilities, but it could also include provision of new facilities.

8.8.6 Assessing the value for money of the options, including benefits as well as costs, and making recommendations.

8.9 The Councils welcome the freight study and look forward to engaging with NH in its development. The outcomes of the study must be used to shape the Project and ensure the necessary provision of HGV facilities to avoid adverse impacts arising.

# 9 MAXIMISING SOCIO ECONOMIC BENEFITS

**Key Headlines**

- The Project will bring positive economic benefits, but the Councils wish to see NH maximise the opportunities for local businesses and people to secure opportunities to work on the Project. However, it is recognised that due to local labour supply shortages, workers will come to the area to work on the Project. The management of the incoming workers needs to be properly planned to minimise risk of negative impacts.

- The Councils require that strategies relating to skills and employment, supply chain support and worker accommodation need to be developed by NH, in agreement with

the Councils, to support local opportunities and training, maximise the benefits for the local economy and to prevent harm to the visitor economy through the loss of visitor accommodation. The Councils and Cumbria Local Enterprise Partnership (LEP) are working proactively to further define essential interventions that ensure potential harm is mitigated and economic opportunity is seized by the host communities.

- The opportunities for legacy benefits to the community from the Project need to be maximised, for example, re-use of worker accommodation and construction compounds for permanent uses of benefit to the community.

9.1 The Project should maximise the economic benefits resulting from the Project, deriving social value and legacy benefits. This should include support for skills development and apprenticeship projects to enable local take-up of employment opportunities generated by the Project.

9.2 TfN's Connecting Energy Coast Strategic Development Corridor links advanced manufacturing businesses and energy generation facilities located in the North East, Tees Valley, Lancashire and Cumbria. It is anticipated that investment within this corridor could unlock employment, supply chain and housing opportunities.

9.3 The Connecting Energy Coast Strategic Development Corridor strategy document recognises that the economic centres across the corridor need to be better connected within the corridor itself and with the north-south transport corridors into Scotland and the rest of England.

**Cumbria's Economy**

9.4 Cumbria has nationally significant strategic resources and economic and natural assets which play an important national role, providing critical capacity that supports industries. The economy is poly-centric and is at the forefront of the transition to a post-carbon economy, with world-class energy, nuclear and defence expertise and a high concentration of advanced manufacturing activity, together with associated supply chains.

9.5 Its world-famous landscape attracts 42 million visitors a year, supports an increasingly diversified network of rural businesses and plays a crucial role in food supply via significant land-based, farming and food manufacturing activity.

Supporting sectors such as health, construction, logistics and professional services also make a key contribution to the £11.7bn economy.

9.6 Despite those assets, Cumbria's economy faces major challenges, particularly in relation to labour supply and productivity. Difficulties caused by a declining working age population have been intensified as Cumbria has followed the national trend of increasing rates of economic inactivity since the pandemic. Taken together, these labour market issues have highlighted the need for people to be able to access work and learning opportunities across a broader area. Added to this, productivity in relative terms has been on a steady decline in Cumbria over the past decade, slipping further behind the UK in the years leading into the pandemic.

9.7 Whilst some of this is due to the structure of the local economy, much is also due to lower productivity within sectors which is influenced by factors such as lower than average levels of high skills; low levels of innovation, including the take-up of new technology; and issues with connectivity, both physical and digital which impact on efficiency and therefore profitability.

9.8 The economic and labour market challenges faced by parts of Cumbria mean that the ability to move people and goods over larger distances is increasingly important if the county is to make progress in levelling up. The Project will contribute to addressing these challenges by facilitating the movement of people and goods more reliably and quickly which in turn will provide:

9.8.1 better access to work opportunities for local people and access to a wider labour market for businesses;

9.8.2 better access for tourism visitors and the potential to open up new opportunities for visitors in places outside the established tourism hot spots;

9.8.3 direct cost reductions for businesses dependent on east-west connectivity, an improved environment for contact with customers and suppliers, and the ability to access different and larger geographical markets domestically and overseas; and

9.8.4 a more accessible environment for inward investment.

## Eden's Labour Market

9.9 Eden has particularly low unemployment rates and a minimal spare labour supply, making recruitment a major challenge for businesses . Increasingly, larger firms have had to rely on workers travelling in from outside the area. The following provides a snapshot of Eden's labour market and some of the challenges faced by the district which are likely to be exacerbated if socio-economic matters are not regarded by NH as part of the delivery ambitions of this Project.

9.9.1 There are 30,000 people working in Eden with the highest proportions in Accommodation and Food Services (20%), in Agriculture, Forestry and Fishing (13%) and in Wholesale and Retail (13%) (Census, 2021)

9.9.2 The ONS UK Business: Size, Activity & Location reports that there are 3,685 registered enterprises in Eden (4,180 local units), 91% of which are micro businesses and 35% of which are in Agriculture, Forestry & Fishing.

9.9.3 Using business intelligence gathered through Cumbria LEP's Business & Economy Advisory Group and the Labour Supply Working Group, businesses consistently report that one of the biggest challenges they face is labour availability which has tightened significantly since the Covid 19 pandemic with Eden mirroring the national trend of more residents being economically inactive. Unlike the national picture however, this is taking place alongside demographic changes in Cumbria which has seen the overall working age population decline.

9.9.4 Lightcast™ Analyst reports that the tight labour market is evidenced by active job postings in Eden being 72% higher than before the pandemic.

9.9.5 The ONS Annual Survey of Hours & Earnings 2022 finds that median hourly earnings at workplaces in Eden are only 87% of the UK.

9.9.6 The ONS Claimant Count via Nomis states that there are 555 claimants actively seeking work in Eden, a claimant rate of 1.8% which is among the lowest in England.

## Accommodation

9.10 Eden has a relatively small housing market. Total dwelling stock in 2021/22 was 27,777 and on average over the previous five years there were 298 net additional

dwellings per annum. On average, 72 affordable houses per annum have been delivered in Eden since April 2017. The Project could have a significant impact on the availability of housing, particularly in the rented sector and tourist accommodation.

9.11 According to Cumbria Tourism's visitor model, in 2021 there were an estimated 4.21 million tourist visitors to Eden in 2021 equating to 7.01 million tourist days, generating revenue of £352.4m and supporting 4,200 full time equivalent jobs. With tourism being a central aspect of Cumbria and Eden's economy, the proper consideration and management of any impacts on accommodation during the construction period is of real importance.

**Assessment of Impacts**

9.12 The absence of a robust Socio-economic Assessment and Health Impact Assessment within the ES is a concern. The assessment should identify the impacts of the Project, proposals for mitigation of negative impacts and the approach to maximising and sustaining socio-economic and health benefits.

9.13 In parallel, the Councils and Cumbria LEP are working proactively to further define essential interventions that ensure potential harm is mitigated and economic opportunity is felt by the host communities.

**Maximising Socio-economic Benefits of the Project**

9.14 The Councils welcome NH's intention to prepare the following:

9.14.1 Construction Worker Travel and Accommodation Plan;

9.14.2 Community Engagement Plan; and

9.14.3 Skills and Employment Strategy.

9.15 However, these documents currently only exist as templates and are insufficiently detailed for the Councils to be able to comment on their adequacy and whether impacts that the Project will have upon the economy of the Cumbria area are appropriately mitigated.

9.16 To maximise the opportunities for legacy benefits to the community from the Project, the Councils require that the following strategies should be either prepared or

developed further by NH in consultation with the Councils and Cumbria Local Enterprise Partnership:

- **Skills and Employment Strategy:** to facilitate and support training opportunities ensuring that the Project's contractors can make the best use of the local workforce and enable those who wish to access employment on the Project to acquire the relevant skills. Support for local schools and colleges to increase and extend the range of courses available to ensure young people have the right skills and qualifications to secure apprenticeships and employment opportunities generated directly and indirectly by the Project needs to be provided. It is of note that Eden has a very low unemployment rate and very small spare labour supply. Larger employers are increasingly, therefore, dependent upon labour coming in from outside the area. Consideration needs to be given to the number of employees, their skills requirements, the period they will be employed, what proportion will be local, and when and how they will be trained.

- **Supply Chain Support Strategy:** to include quantifiable and deliverable measures which enable local businesses to take full advantage of the supply chain opportunities which this £1bn+ investment will generate. Such measures should include (but not be limited to):

  - contractors having clear KPIs which encourage the utilisation of local sub-contractors and suppliers. These KPIs should be easily monitored and evaluated;

  - ensuring that procurement opportunities are advertised locally with advanced training opportunities and accreditation Project; and

  - providing local sub-contractors and suppliers with guidance and support in tendering opportunities.

- **Accommodation Strategy:** to ensure that the workforce accommodation is suitable and accessible by sustainable transport modes and to provide a legacy benefit for the area. As stated previously in this response, NH must work closely with the Councils to identify appropriate locations for worker accommodation. The Councils shared some principles for an accommodation strategy with NH in January 2022.

- **Benefits Realisation Plan:** to ensure the potential legacy benefits from this Project are realised. This Plan should be set out clearly by NH in the Project's Benefits Realisation Plan and should not be left to the contractors to determine. This could include the reuse of EV charging points delivered through the Project, the reuse of compounds and worker accommodation provided to support the creation of local housing and employment sites identified in the Local Plan, support for local community projects and the provision of a long-term community benefits package to acknowledge the communities who have hosted the new development.

## 10 ENVIRONMENTAL MITIGATION

### Key Headlines

- The construction of the Project has impacts upon a range of environmental issues including climate change, biodiversity, landscape, air quality, rivers and drainage, etc. which must be mitigated.

- Some assessments presented within the ES are not sufficiently progressed to the extent that the significant effects, that are predicted to be experienced by sensitive receptors within the statutory protection of the Councils, are not adequately and appropriately mitigated. This is due to an absence of survey information or an absence of design information that would remove or reduce any uncertainty as to the eventual effect.

- The Project will require significant temporary and permanent land take within the rural landscape impacting the area's sensitive biodiversity, including the River Eden SAC. NH's adoption of a 'no net loss' rather than 'net gain' strategy is inconsistent with the Government's objectives on biodiversity and particularly for a Project of this scale. The Councils would like to see the Government's target of 105 biodiversity net gain included within the Project requirements.

- The Project will have a significant carbon footprint resulting from embodied carbon with the highway infrastructure and emissions associated with significant volume of additional traffic using the A66 when complete. The construction of this road will render the Government and Council's commitments to achieving net zero by 2030-2050 impossible without more detailed emissions calculations and firm proposals for mitigation.

- The Project sits within an area of national significance for its landscape and the tourism is attracts. The Councils are concerned at the limited detail in many aspects of NH's Landscape and Visual Assessment with insufficient information provided on key sensitive receptors and how impacts will be mitigated. The Councils want to see greater detail on how the loss of extensive areas of trees and hedegrows will mitigated and/or replaced in line with the Project's stated objective of planting two trees for every one lost.

- Natural Flood Management is a key aspect for reducing the risk of flooding and the Councils would like to see a joined up approach to landowners affected by the new road network so that biodiversity is maximised for existing and potential new Department for Environment, Food and Rural Affairs agriculture farming projects soon to be replaced by Environment Land Management proposals.

10.1 The Project must provide mitigation to minimise environmental harm and provide benefits, including nature recovery. There must be opportunities for carbon offsetting across the Project and biodiversity net gain.

10.2 The Councils have concerns about the drainage proposals for the Project and the potential impact on the water environment. There are matters that need resolving in terms of drainage design principles and details, which have impacts on the extent of land needed for drainage systems, particularly regarding flood risk and future maintenance liabilities. They also have an impact on nutrient loading from surface water run-off. The Councils require evidence to be provided that the drainage proposals will not add nutrients, primarily nitrogen and phosphorus, to watercourses.

**Air Quality**

10.3 The air quality assessment that has been undertaken for the Project is broadly in accordance with the methodology detailed within DMRB LA105: Air Quality which is the standard approach for the assessment of air quality impacts from highway infrastructure projects.

10.4 The modelling data indicates that the Project will have a range of impacts on air quality, both permanent (due to altered traffic flows in the local area) and temporary (due to construction activity). Based on the results of the air quality modelling that has been undertaken, the Councils consider that the primary impacts of the Project on the local area would be:

- on individual properties and areas that would experience a deterioration in nitrogen dioxide ("NO2") concentrations because of the Project. This would result in a number of additional exceedances of the annual NO2 Air Quality Objective or would worsen the situation where exceedances are already present;

- the impacts on the prospective Castlegate Air Quality Management Area ("AQMA") in Penrith and mitigating the consequences of this; and

- the impacts from construction activity and how they can be mitigated.

**Castlegate AQMA**

10.5 EDC have considered and taken steps to declare an AQMA on Castlegate in Penrith due to monitored exceedances of the nitrogen dioxide objective level. EDC is statutorily obliged to put measures in place to remove exceedances. It is the intention that an AQMA will be declared on Castlegate in 2023.

10.6 Whether a Project is: 'within or adjacent to an AQMA' or 'where changes are sufficient to bring about the need for a new AQMA or change the size of an existing AQMA' is a particularly relevant consideration, as identified in Paragraph 5.12 of the NN NPS.

**Construction Activity**

10.7 A Project AQMA, in accordance with guidance within LA105, has not been submitted with the application and should be required as part of the examination process. Without this document, the Councils cannot identify and ensure that mitigation measures that will be adopted are appropriate and suitable.

10.8 The Councils are concerned that construction compound locations lie adjacent to receptors that would be sensitive to emissions of dust that may arise during the construction phase of the Project. NH has provided very limited information on the nature of operations that are proposed at these construction compounds and as a consequence the Councils cannot appraise whether the mitigation that is proposed will be sufficient to ensure that impacts are minimised as required by Paragraph 5.83 of the NPS NN.

Operational Impacts

10.9 NH has responded to the Councils' request at the S42 stage to undertake additional monitoring on Ullswater Road. This is welcomed by the Councils but as only four months' worth of monitoring was presented in the ES, it would be beneficial for the Councils to understand if further monitoring was undertaken to provide a more robust annualised average.

10.10 The Councils require a copy of the Combined Modelling and Appraisal Report for comment.

10.11 The ES does not provide any information on the NH's in-house method used to assess the contribution of ammonia emissions to nitrogen deposition; the Councils therefore do not have any information that allows them to consider the methodology used to appraise the impacts of the Project upon designated sites and sensitive ecological habitats within their ownership and protection.

10.12 The Councils are concerned that the redistribution of traffic during both the construction and operational phases of the Project, could compromise the ability of EDC to achieve its statutory obligations with regard to maintaining air quality within the objective levels defined by the Air Quality Standards (Amendment) Regulations (2016). As the ExA and NH are aware, EDC are likely to declare an AQMA) for nitrogen dioxide on Castlegate in Penrith in 2023. The Councils raised this in their S42 consultation and it is therefore of concern that the verification adjustment factor used is only derived from sites on Victoria Road (sites EB15, EB18, EB20, V1 and V3) because the monitors Castlegate (C1, GAF04, C30 and GAF05) were all excluded.

10.13 EDC want to agree the location of these monitors in dialogue with NH so that they can be located and included within the verification accordingly. Without this information, the Councils are concerned that the verification factor may have been underestimated and could be under reporting the magnitude of impact and significance of the effect in Penrith.

10.14 The Councils require that human exposures at the Cromwell Road and Castlegate areas in Penrith (that are subject to a likely AQMA declaration) should have been included within the assessment of human exposure to nitrogen dioxide as this will inform the declaration of an AQMA and possibly affect EDC's ability to achieve their legal responsibilities.

**Biodiversity**

10.15 NH has not provided adequate survey information that would ordinarily accompany an application such as the Project. NH has undertaken a number of surveys across the Order Limits and provided mitigation proposals, which are calculated and proposed on the basis of assumed worst case eventual findings. The Councils have concerns that the assumed worst-case may not be sufficiently robust to effectively mitigate for the eventual effects. Such an approach is of particular concern given the likely impacts to the River Eden SAC. A mechanism that allows NH to identify other mitigation measures that the Order Limits may not be able to accommodate should therefore be provided within the DCO.

10.16 The following are of interest and concern to the Councils and all points raised are underpinned by the requirement for NH in the Infrastructure Planning (Environmental Impact Assessment Regulations) 2017 to describe the measures envisaged to avoid, prevent, reduce or, if possible, offset any identified significant adverse effects on the environment. The measures raised by the Councils are also consistent with the requirements of Paragraph 5.36 of the NN NPS which requires applicants to demonstrate how impacts have been minimised and present how habitats and biodiversity can be enhanced:

**Habitats**

- Impacts on watercourses (for example: shading beneath new viaducts, or temporary bridges as needed for construction) is not clear at present and further detail should be provided.

- Concerns over the potential effects of attenuation ponds collecting run-off from road salts and discharging into watercourses affected by the Project. The Councils wish to see further detail so that a full assessment of impacts can be completed.

- There appear to be limited links to the data / information that exists in relation to threats, enhancement and restoration of the River Eden SAC, for example (not exhaustive): conservation objectives supplementary advice. Site Improvement Plan). Further reference is required as to how the mitigation and enhancement would directly link to the SAC restoration / enhancement objectives.

- The Councils would encourage the findings and conclusions of the Habitat Regulations Assessment and Water Framework Directive assessment to lead and inform the development of the EMP and Landscape and Ecological Management Plan ("LEMP").

- The Project will need to demonstrate 'nutrient neutrality'. This is of particular concern to the Councils as development within the catchment of the River Eden is particularly constrained by this requirement. The Project must similarly be required to ensure no increase in nutrients enter the watercourse and further risk EDC's ability to deliver upon its statutory targets for housing developments.

- The results of all National Vegetation Classification surveys completed should be provided in order to ensure adequacy of the proposed mitigation.

- The Councils note that that Skirsgill Wood County Wildlife Site ("CWS"), Chapel Wood CWS and Ancient Semi-natural Woodland and Graham's Gill / Jack Wood Planation on Ancient Woodland, are directly impacted by the Project. These designated sites are the responsibility of CCC to maintain and safeguard and in order to demonstrate that the mitigation hierarchy has been considered, greater detail is required on what habitat (and associated condition) is expected to be lost and reasoning on why it cannot be avoided.

- Tree, scrub and hedgerow species mixes for planting appear to be appropriate for mitigation (and enhancement), but the Councils would expect to see details of other measures (e.g., grassland seed mixes) at a later stage in the DCO process to ensure mitigation measures are appropriate throughout.

- Species-rich marsh / rush grassland (for example: around unnamed tributary of Mire Sike 6.12), as recorded in detail in the River Corridor Survey are high priority/high value communities. The Councils are concerned about these impacts and request justification as to why these areas cannot be fully retained and maintained as part of the design.

- It is welcomed that efforts will be made to identify existing areas of species-rich grassland from which seed banks can be taken for re-use and that a range of seed mixes will be required due to varied conditions recorded. Additionally, translocation of existing trees and shrubs to bring forward establishment of mature woodland is

welcomed and encouraged. The Councils would wish to see these proposals developed in future iterations of the LEMP prepared during the Examination.

- The Councils would like to avoid non-targeted use of herbicides rather than "where possible", to avoid effects on pollinators in the long term.

**Species**

- The Application documents do not include detailed survey results for many of the species / species groups in the appended reports, including (not exhaustive) bats, amphibians, badgers, birds, barn owls, reptiles, and invertebrates. Therefore, the Councils have not been able to fully assess the limitations, adequacy and findings to ensure that the proposed mitigation is proportionate. This may also affect licensing requirements for certain species, e.g., bats, as the Councils require reassurance that the three licensing tests can be achieved and that Natural England a likely to grant a mitigation licence based on the assessments completed. More information is needed on the surveys completed to date to determine their adequacy.

- The existing proposed mitigation should be reviewed when the detailed Project design is available and future iterations of the LEMP should state this commitment to ensure that it is appropriate and consistent. In particular, proposed mitigation relating to reptiles, bats and otters will need to be reviewed.

- Amphibians: it is understood that Natural England have agreed to mitigate for great crested newts under a District Level Licence, which can reduce the survey requirement. It is therefore assumed this is the case and that Natural England has this mechanism available. However, the Councils would wish to understand which areas of land are proposed to be used for compensation and enhancement.

- Red squirrels: there are concerns over the time lag between loss of existing habitat during construction and new planting establishment to offset the effects. The Councils will wish to see advance planting and habitat creation proposals included to avoid or at least minimise the lag.

10.17 In liaison with NH in the pre-application phase, the Councils identified two areas of environmental mitigation that they would support and encourage during the development of the final details for the Project. This is a continuation of the Get Cumbria Buzzing project and the provision of a wildlife officer to protect the red squirrel population from the invasive non-native grey squirrel. This is because the

Councils have a preference towards such an alternative mitigation measure rather than one that focuses on connectivity. Grey squirrel control needs to be part of the solution and greater information on how these will be provided is required from NH in line with the policy requirements of paragraph 5.23 of the NN NPS.

**Provision of Biodiversity Net Gain**

10.18 The principle of a minimum requirement for 10% biodiversity net gain is included within the Environment Act . The requirement for biodiversity net gain in relation to NSIPs was introduced via the amendment of Section 103 to 105 and the insertion of a new Schedule 2A to the Planning Act (PA) 2008.

10.19 The amendments to the PA 2008 provide that if a project is subject to a NPS and that NPS includes a "biodiversity gain statement" or if such a "biodiversity gain statement" otherwise applies to the project, the Secretary of State (SoS) must decide the application in accordance with the biodiversity gain statement. The minimum biodiversity net gain to be required is 10%.

10.20 The Councils request that the delivery of 10% biodiversity net gain is included in the Project proposals in line with the Government's objectives. The construction phase of the A66 dualling improvement is forecast to commence in 2024, at which point such biodiversity requirements will be mandatory. The intent of the Environment Act will be undermined in Eden if in the five years following its enactment the largest Project taking place in Eden for the foreseeable future does not comply.

10.21 The Councils further note in NH's response to the PADSS AS-001that the principle of No Net Loss has been applied but is inconsistent with the relevant provisions of the Environment Act 2021. The Councils require further work to be undertaken to deliver meaningful biodiversity net gain.

**Climate Change**

10.22 The Councils have concerns about the Greenhouse Gas ("GHG") impacts of the Project. In July 2019 EDC declared both a climate emergency and an ecological emergency, and the Council shares the Government's commitment to the reduction of GHGs. EDC's policy is for emissions in the district to reach net zero carbon dioxide emissions by 2030, in line with the Government's commitment to reach zero or net zero by 2050. The construction of this road will render those commitments impossible unless

serious calculations of the disbenefits, and plans to mitigate them, are undertaken by NH and submitted for scrutiny.

10.23 NH's assessment does not make use of the multi-sector wide industry standard guidance document for the assessment of GHG emissions published by the Institute of Environmental Management and Assessment) the 'EIA Guide to Assessing Greenhouse Gas Emissions and Evaluating their Significance'. The Councils would like to see this method used.

10.24 NH should consider opportunities for further reduction in carbon emissions associated with the construction of the Project but to do this it is necessary to provide a breakdown of the approximately half a million tonnes of CO2e that the construction phase of the Project will emit. The information presented to date identifies that embodied carbon in construction materials and land use changes account for 44% and 43% of the construction phase carbon emissions. These figures require further breakdown by NH in order to target where further carbon minimisation can be considered.

10.25 The Councils require suitable mitigation opportunities that are available in the Cumbria area that could be supported by NH to mitigate the carbon emissions associated with the construction phase of the Project.

**Cultural Heritage**

10.26 While appropriate intrusive surveys have been undertaken with the results included in the application documents, there is no holistic assessment of the results to allow real understanding and focus of the nature, depth and importance of the archaeology that is likely to be present within the Order Limits.

10.27 The mitigation strategy is light on detail and therefore it is difficult to provide qualified consideration on its adequacy. For example, it is not clear what mitigation techniques will be employed in which locations, or why the categories for proposed intervention have been chosen.

10.28 Related to this, it is not clear as to why the strategy for each type of site (high, medium and low) has been chosen, or the extent of mitigation within those areas.

10.29 Without detailed and appropriate mitigation in place, archaeological assets could be destroyed without appropriate record, which would be contrary to the approach required of NH in Paragraph 5.140 of the NN NPS.

### Geology and Soils

10.30 It is noted that the loss of agricultural land (including some Best and Most Versatile) land is to be lost to the Project. The Councils would expect this valuable resource to be reused either within the Project or on remediation projects. The Councils would like to work with NH to identify suitable receptor sites in their control or influence that could receive excess fill material. The Councils require a commitment from NH in the EMP that they will engage with them to ensure that disposal of fill material is only permissible once all opportunities for re-use have been exhausted. Please refer also to comments raised below in response to Chapter 11 of the ES (Materials Assets and Waste) regarding which landfill sites will be used for any disposal of fill material.

10.31 The Councils note and agree that the risks to human health and groundwater from the Project are not significant but that suitable management of the risks still needs to be secured through the EMP.

10.32 The Councils require further proposals from NH as to how they are to offer enhancement measures that allow safe access to features of geological interest within the UNESCO Global Geopark. This would be both an educational and tourist resource that would align with the Council's aspirations for enhancement and would be consistent with Paragraph 5.23 of the NN NPS.

### Landscape and Visual

10.33 The Councils are unsure as to the extent to which vegetation clearance is permanent and what is proposed as mitigation planting. The Councils therefore have to assume that all vegetation within the site clearance area shown on Figure 2.2 of the ES Indicative Site Clearance Boundary [APP-062] that accompanies the Application will be removed as part of the construction phase of the Project. This makes it difficult for the Councils to identify whether the mitigation planting and hard landscaping, such as dry-stone wall reinstatement, is adequate. Paragraph 5.36 of the NN NPS requires Applicants to minimise habitat fragmentation and if it is assumed that all vegetation within the clearance area is to be lost, then it is difficult to identify how this requirement has been met. Strong visual features that are present within the Order Limits, such as distinctive vegetation and mature tree belts, that are to be lost, should

be clearly identified. They are readily seen within the existing landscape, and their removal will be apparent.

10.34 Consequently, there is no information within the Application documents that detail how vegetation out with the Order Limits will be protected. Should the DCO be granted to allow clearance within the vegetation clearance area, there should be safeguards and proposals that secure the health of retained vegetation. This is of particular note at Skirsgill and at Wetheriggs Park and in the area of Tree Preservation Orders to the north of the alignment of the A66 as shown on Application Document 5.24

10.35 The assessment within the ES refers to 'important views' (10.9.7) but there is no definition of what constitutes an important view. Similarly, there is no definition of what constitutes a 'specific' viewpoint.

10.36 The ES does not provide clarity on what specific proposals are to be included. For example, Paragraph 10.9.15 states "some areas would benefit from the planting of mixed species woodland blocks that break the linearity of this environment". The Councils would benefit from clarification from NH as to whether this is the rationale for the development of the mitigation planting proposals (in which case further detail would be encouraged) or whether NH is alluding that this planting being required in addition to the existing proposals.

10.37 Viewpoint descriptions lack references to existing distinctive landscape features and structures. The assessment, and the impact upon sensitive visual receptors, would benefit from an explanation of how these features would be lost, replaced or retained.

10.38 Viewpoint descriptions are not provided in relation to the assessed receptor. For example, in relation to residential receptors, it is not described how the properties are associated with the view, or how they are accessed and orientated. In relation to PRoW descriptions, their extent and their traversing the landscape has been excluded, along with information on how they connect to other routes and how they are utilised. The assessment would benefit from this understanding so that the exact nature of the impacts of the Project can be understood.

10.39 It is uncertain as to whether there is sufficient room at the boundaries of the Order Limits to provide replacement planting. For example, the proposed road profile of Ullswater Road within the section closer to its junction with Clifford Road has steep slopes and therefore the proposed mitigation planting does not appear feasible.

(General Arrangement Drawings Sheet 1 shows the proposed earthworks (cutting) in relation to A592 next to Gillan Way). Additional section drawings would aid clarification of the impacts and mitigation proposals in the Ullswater Road and Wetheriggs Country Park area.

10.40 LEMP Figure 1 shows that the Order Limits cut into the existing path of Wetheriggs Park. The grounds of the park slope towards its southern boundary which is defined by the existing A66. The road has an elevated position in relation to the park's southern boundary and therefore its widening will require extra filling. The Councils are therefore uncertain as to whether the proposed replacement planting will provide sufficient mitigation from the elevated road.

10.41 Drystone walls form a distinctive character feature along the access road to Lane Ends properties. The restoration and incorporation of these valuable features into the Project must be secured through the mitigation proposals. The assessment should also describe in greater detail the relationship of properties on Lane End with the Project as they are surrounded by the Order Limits' boundary. A photomontage at Viewpoint 3.6 would also aid understanding of the Project.

**Photomontage 4.7A appears to be missing from the documentation.**

10.42 Overbridge structures will be prominent features in the landscape in the Temple Sowerby to Appleby Project. The Councils request that an illustrative drawing of their appearance along with a material palette should be provided and secured through the LEMP so that their appearance can be clearly understood.

**Materials and Waste**

10.43 The Councils note that the Material Assets and Waste assessment does not reference the 2021 Local Aggregates Assessment and references instead the 2019 joint assessment between CCC and the Lake District National Park Authority. Any consequential changes to the assessment should be identified by NH.

10.44 The Project will adversely impact upon material resources in Mineral Safeguarding Areas. NH should therefore demonstrate that they are making maximum use of site-won materials rather than importing materials from alternative sources.

10.45 The Site Waste Management Plan ("SWMP") (that will be developed by the Principal Contractor) will investigate the reuse of excess material on restoration sites; the total

arisings for use in restoration should be identified where possible, in which sections of the Project it arises and at when during construction.

10.46 The landfills that will be used for disposal of material must be identified within a future iteration of the SWMP for the Councils to identify and ensure that capacity for other uses is not compromised.

**Noise and Vibration**

10.47 The ES identifies that construction noise levels will be significant and above the significant observed adverse effect level in a number of locations that are of concern to the Councils, including residential properties the primary school in Kirkby Thore. The Councils are concerned about this impact as the assessment does not adequately identify how the impact will be mitigated. The Councils cannot therefore comment further until the assessment has been updated to identify what these noise impacts will be with mitigation applied.

10.48 The Councils welcome the significant reduction in road traffic noise that will be experienced at a number of noise sensitive receptors. However, the Councils are concerned that there will be an impact upon residents' health and wellbeing due to the significant increases in road traffic noise that will be experienced.

10.49 The NN NPS requires any assessment to consider the aims of the Noise Policy Statement for England ("NPSE"); the first of which is to avoid significant adverse impacts upon health and quality of life, and the second of which is to mitigate and minimise adverse impacts on health and quality of life. The NPSE requires all reasonable steps to be followed and the Councils do not consider that NH has demonstrated this. The Councils would particularly note that no noise barrier is proposed in the Kirkby Thore area "due to engineering constraints" and Table 12-45 states that "additional mitigation measures assessed as not sustainable". The Councils request that these engineering constraints and unsustainable measures are clearly identified as, at the present time the absence of noise barriers could result in significant adverse effects upon human health.

10.50 The Councils are concerned that future iterations of the Noise and Vibration Management Plan will be approved by NH. As noise levels could have significant effects upon human health during the construction phase of the Project, the Councils require future iterations to be subject to external approval and consultation with them to ensure that mitigation measures are appropriately provided.

**Population and Human Health**

10.51 It is acknowledged that not all diversions and closures for affected PRoW are known at this stage, but the PRoW Management Plan (Annex B6 of the EMP Application Document 2.7) does not detail how a "reasonable alternative distance" for a diversion would be determined for a temporary or permanent PRoW diversion. The Councils cannot therefore identify the extent to which PRoW, which are under their control and management, will be adversely affected.

10.52 The Councils would request that this information is provided within a future iteration of the PRoW Management Plan during the examination where the maximum length of a diversion is provided if a precise figure is not available.

**Road Drainage and the Water Environment**

10.53 The mitigation detail for Road Drainage and the Water Environment within the ES, supporting appendices and EMP is lacking, with NH stating that it will become available at detailed design stage. The Councils have raised concerns that future iterations of the EMP may not be subject to the approval of the Councils, and this is of particular concern given the extent to which mitigation detail is deferred.

10.54 Sustainable drainage solutions (SuDs) are critical for the new road construction to ensure that surface water from the existing and new network parts are treated to at least two stages before discharge to local mains and ordinary watercourses. Agreement on pond rationalisation is also required to ensure there is less land take and duplication of maintenance for each road authority.

10.55 Reduction in flood risk must also be a main concern especially with changes to main rivers and ordinary watercourses close to Warcop. Liaison with other risk management authorities and non-government agencies already working in the area looking to reduce the impact of flooding to the local community is essential.

10.56 Further detail is required on anticipated culvert design and for the mitigation of flooding, the loss of habitat and the loss of lengths of watercourse and associated banks.

10.57 The ES states that the de-trunked sections of the existing A66 will be used for local access to surrounding villages and properties however, no further detail about any

improvements to the detrunked sections are provided within the ES chapter or supporting appendices.

10.58 There is limited information regarding any enhancements proposed and the Councils would expect to see greater information provided during the examination phase that is consistent with the requirements of Paragraph 5.220 of the NN NPS. With the information that is available at present it is difficult for the Councils to advise the ExA whether the mitigation measures are acceptable or not.

## Appendices

- Appendix A: The Councils Assessment of Departures from Standards
- Appendix B: Technical Assessment of Project Impact on Appleby Horse Fair
- Appendix C: Assessment of Potential Diversions Routes

# A66 NORTHERN TRANS-PENNINE PROJECT ASSESSMENT OF DEPARTURES FOR LOCAL ROADS

| | | | |
|---|---|---|---|
| **DATE:** | 30 May 2022 | **CONFIDENTIALITY:** | Restricted |
| **SUBJECT:** | WP – Assessment of Departures for Local Roads | | |
| **PROJECT:** | A66 Northern Trans-Pennine Project | **AUTHOR:** | Darren Powell |
| **CHECKED:** | Dave Morrow | **APPROVED:** | Pete Henson |

## INTRODUCTION

1 WSP has been appointed by Cumbria County Council (CCC) to provide highways, environmental and transportation input into the potential significant impacts from the A66 Northern Trans-Pennine Project (NTP) which aims to dual the single carriageway sections between the M6 and A1(M).

2 This technical note sets out the departure review process to assess the deliverability of the critical departures from standard (DfS) on the local road network, generated as part of the A66NTP scheme. Critical departures were deemed those with a relatively high safety risk and potential to affect the Red Line Boundary as part of proposed mitigation works.

3 The assessment was against the CCC service procedure through liaison with relevant officers.

## DEPARTURE REVIEW PROCESS

4 The A66 team identified 133nr departures in work sections 1-6 affecting the CCC road network. The departure details were provided by AmeyArup in two spreadsheets; Work sections 1-5 – Reference *HE565627-AMY-HGN-SOO-SH-CH-000002 Departure Checklist 11thFeb2022 and* Work Section 6 - Reference *HE565627-AMY-HGN-SOO-SH-CH-000002 Departure Checklist 4thApr2022 FINISHED S6*

5 The departures per work section were split as follows :-

- a WS1 – 1nr
- b WS2 – 1nr
- c WS3 – 3nr
- d WS4/5 – 108nr
- e WS6 – 20nr

6 WSP completed a high-level review of the departures using the data provided in the spreadsheets, the departure location plans and CrashMap. The high level review identified 3nr critical departures in WS4/5 and 5nr critical departures in WS6. The identification of the critical departures was based on a qualitative safety assessment using speed and visibility as the major factors.

7 All departures were assessed as high, medium or low risk. The critical departures were ligh risk and potentially requiring extensive mitigation works that could affect the RLB and/or require extensive safety and operational justification. Departures where a solution appeared achievable through detailed design development within the RLB and/or where speeds would be relatively low were assessed as low risk. Medium risk departures either required more information eg a departure location plan to assess the safety risk and/or based on the detail provided would require robust substantiation through the departures process. It should be noted that all identified departures should ideally be designed out by the D&B Contractor in conjunction with CCC during detailed design or robust departures from standard developed to ensure safety risks are mitigated as far as reasonably practicable.

8 The critical departure details are as follows :-

a Departure Ref : TSL/S0405/DEP 16 – Caravan park junction visibility along the de-trunked A66 below desirable minimum. Proposed 60mph speed limit.

b Departure Ref : PHJ/S0405/DEP 01 – Junction visibility along de-trunked A66 below desirable minimum. Proposed 60mph speed limit.

c Departure Ref : NMU/S0405/DEP 51 – Crossing visibility along de-trunked A66 below desirable minimum. Proposed 60mph speed limit. Exisitng 40mph speed limit.

d Departure Ref : A66/S06/DEP 15 – Forward visibility along new S2AP below desirable minimum in vicinity of new junction. Proposed 60mph speed limit.

e Departure Ref : A66/S06/DEP 16 – Forward visibility along new S2AP below desirable minimum in vicinity of new junction. Proposed 60mph speed limit.

f Departure Ref : A66/S06/DEP 17 – Forward visibility along new S2AP below desirable minimum in vicinity of new junction. Proposed 60mph speed limit.

g Departure Ref : A66/S06/DEP 26 – Forward visibility along new S2AP below desirable minimum in vicinity of new junction. Proposed 60mph speed limit.

h Departure Ref : A66/S06/DEP 28 – Forward visibility along new S2AP below desirable minimum in vicinity of new junction. Proposed 60mph speed limit.

9 Following the high-level review WSP met CCC's Dan Chalmers and John Banks on 11th March & 13th April to review and sense check the assessment, feeding in the local knowledge/understanding of the network. The assessed number of critical departures remained the same following this meeting.

10 WSP provided the high level review feedback to the A66 team on 14th March & 13th April and requested that the CCC departure assessment template (as per the CSRR example, shared 4th April) be completed by AmeyArup for each of the 8nr identified critical departures for further review. No completed templates have to date been received from the A66 team.

11 The high-level assessment is included within *HE565627-AMY-HGN-SOO-SH-CH-000002 Departure Checklist 11thFeb2022*

# SUMMARY

- WSP completed a high-level review of the 133nr departures identified by the A66 team on the CCC network in WS1-6.
- From the high-level review, WSP identified and agreed with CCC area specialists that 8nr were High risk departures; 3nr located in WS4/5 and 5nr located in WS6.
- These departures require a CCC departure assessment template to be completed for further review.
- All identified departures need to be assessed during detailed design in conjunction with CCC and preferably designed out or mitigated as far as reasonably practicable to minimise safety risk.

# A66 NORTHERN TRANS-PENNINE PROJECT ASSESSMENT OF A66 PROJECT ON APPLEBY HORSE FAIR

| | | | |
|---|---|---|---|
| **DATE:** | 29 October 2021 | **CONFIDENTIALITY:** | Restricted |
| **SUBJECT:** | A66 DCO – WP17 – Appleby Horse Fair | | |
| **PROJECT:** | 70081489 | **AUTHOR:** | C Staples |
| **CHECKED:** | T Randall | **APPROVED:** | V Holden |

## INTRODUCTION

The Appleby Horse Fair is the largest Horse Fair in Europe, attracting up to 10,000 Gypsy and Travellers and over 20,000 visitors from the settled community. It takes place in early June every year and lasts for one week, the main days being the 1st day, Thursday to the Sunday. In 2021, as a result of the COVID 19 pandemic, the start of the fair was postponed, to start on Thursday 12th August. The event has an impact beyond the town during and outside of the Fair week which is a cause of concern for the local community.

In 2008 the key agencies formed a Multi-Agency Strategic Coordination Group (MASCG) to develop an operational plan to provide coordinated community leadership. Representatives of the MASCG include County Council, Local Council and Town Council elected members, emergency services, the RSPCA, a representative of the Gypsy and Traveller Community, and officers from a variety of agencies within the local authorities.

The MASCG have developed a Traffic Management Plan (TMP), which is updated annually. The TMP is designed to minimise the impact on the highway network during the various phases of the Fair and to maintain safety for those visiting the Fair and using the impacted highway network.

This note reviews the Appleby Horse Fair Traffic Management Plan and considers where there is potential to alter the Plan. The note also considers the operation of the Fair against the proposals to upgrade the A66 to dual carriageway standard and the associated highway works that will compliment the proposals, identifying any risks or opportunities associated with access and connectivity.

## TRAFFIC MANAGEMENT PLAN

The TMP seeks to manage the movement of vehicles migrating towards the Fair and to prevent inappropriate parking and encampment within the highway during the Fair. The TMP is structured around the concept of directing visiting vehicles from each of the three approach routes to designated permitted car parks and then to exit via the same routes while avoiding the town centre. The lack of entry and exit opportunities for the A66 in both directions at both ends of the town also prevents the use of the A66 to circumvent the town's congestion.

The plan outlines what legal powers and physical infrastructure are used or are available for use by the Multi Agency Strategic Coordination Group (MASCG) to manage the use of the highway. Since 2011 a permanent Traffic Regulation Order has been in place to impose restrictions on traffic in Eden and South Lakeland to maintain road safety in the lead up to and throughout the duration of the Fair. Although

permanent the TRO is active between the 1st April and 30th June and is only enforceable when appropriate signage is displayed.

The TMP considers the Fair to occur in three phases:

- Phase 1 – Migration by the Traveller and Gypsy community to and encampment within Eden District;
- Phase 2 – Fair activity within Appleby town and the close surrounding area;
- Phase 3 – Departure from Eden District.

Phase 1 and 3 is primarily concerned with the movement of Gypsies and Travellers to and from Appleby and mainly relates to the periods preceding and following the Fair week, although measures remain in place for the duration of the Fair as well. Gypsies and Travellers attend the Fair in both horse drawn and motor vehicles. Designated stopping places are identified on the approaches to the Fair to account for the variation in travel times, distances and arrival times. The permitted stopping places are shown in Figure 1 below.

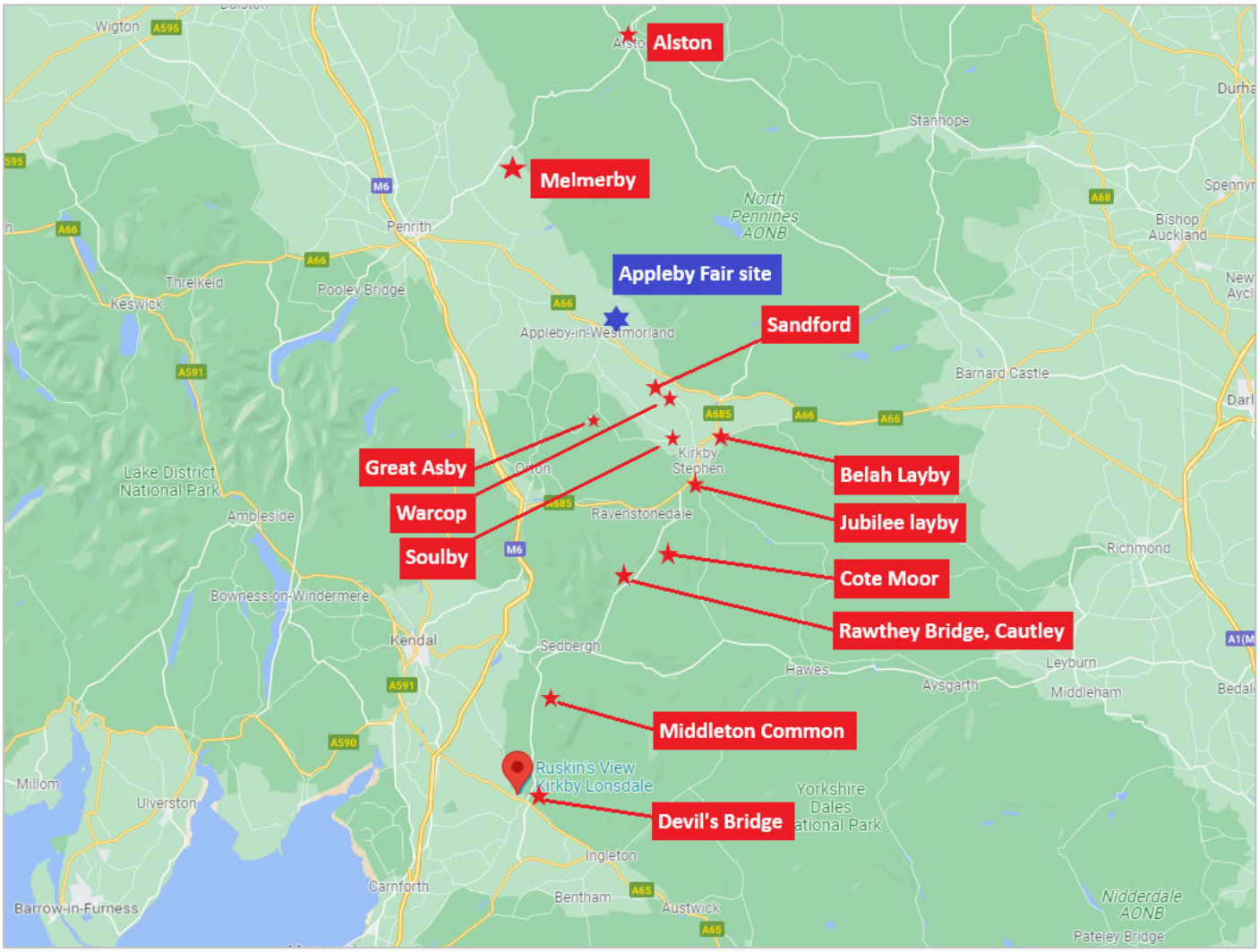



*Figure 1 - Designated Stopping Places*

As can be seen from the locations of the stopping places, the main approach routes towards and from Appleby are along the A683 from Kirkby Lonsdale to Kirkby Stephen and Brough, and along the A686 from

Alston towards Penrith. The routes to the Fair from most of these stopping places can be made on minor roads avoiding the use of the A66. The stopping place at Sandford may encourage approach to the Fair using the A66 as there are no alternatives to cross the River Eden between this location and Appleby.

The TMP makes provision for these designated stopping places but also places restrictions on unauthorised stopping to maintain highway safety, prevent damage to carriageways and associated highway infrastructure, and to mitigate the impact on the biodiversity, natural and historic fabric of the County. The TMP makes use of Traffic Regulation Orders in the form of:

- Prohibition of Waiting orders;
- Prohibition of Motor Vehicles orders;
- Prohibition of Horse Drawn Vehicles and Ridden or Accompanied Horses orders;
- One-Way Traffic restriction orders; and
- Prohibition of Pedestrians orders.

In many locations temporary posts are used to prevent access to verges and inappropriate temporary stopping and encampments. These posts are installed over an extended period leading up to the Fair and removed afterwards. A summary of the locations where posts are used is shown in Figure 2.

Much of the A685 between Kirkby Stephen and Brough is treated with post installations, reflecting the demand for stopping places along this carriageway. There are also a series of speed restrictions to 40mph placed along the carriageway, typically where post installations are made.


*Figure 2 - Summary of Post Installation Locations*

There are a number of road closures that are installed at the time of the Fair in and around Appleby. The sections of highway affected by road closures is shown in Figure 3.

- The closure of the road through the village of Brampton to the north of Appleby limits access to the village to Access Only. The diversion route is using the C3065 to the south of the village.
- Flashing Lane is closed between the C3065 and Salt Tip Corner. The diversion route is using the C3065, C3063 Long Marton Road and A66 to Salt Tip Corner.
- In the centre of Appleby the B6542 The Sands is closed between Station Road and Bridge Street. The diversion route is using Station Road, Roman Road and Cross Croft in an anticlockwise direction, or Station Road and Garth Heads road in a clockwise direction.

- On the south side of Appleby, Castle Bank and Mill Hill are closed between Bongate and Parkin Hill. The diversion route is using the B6260 Shaw's Wiend, Bridge Street and Bongate.

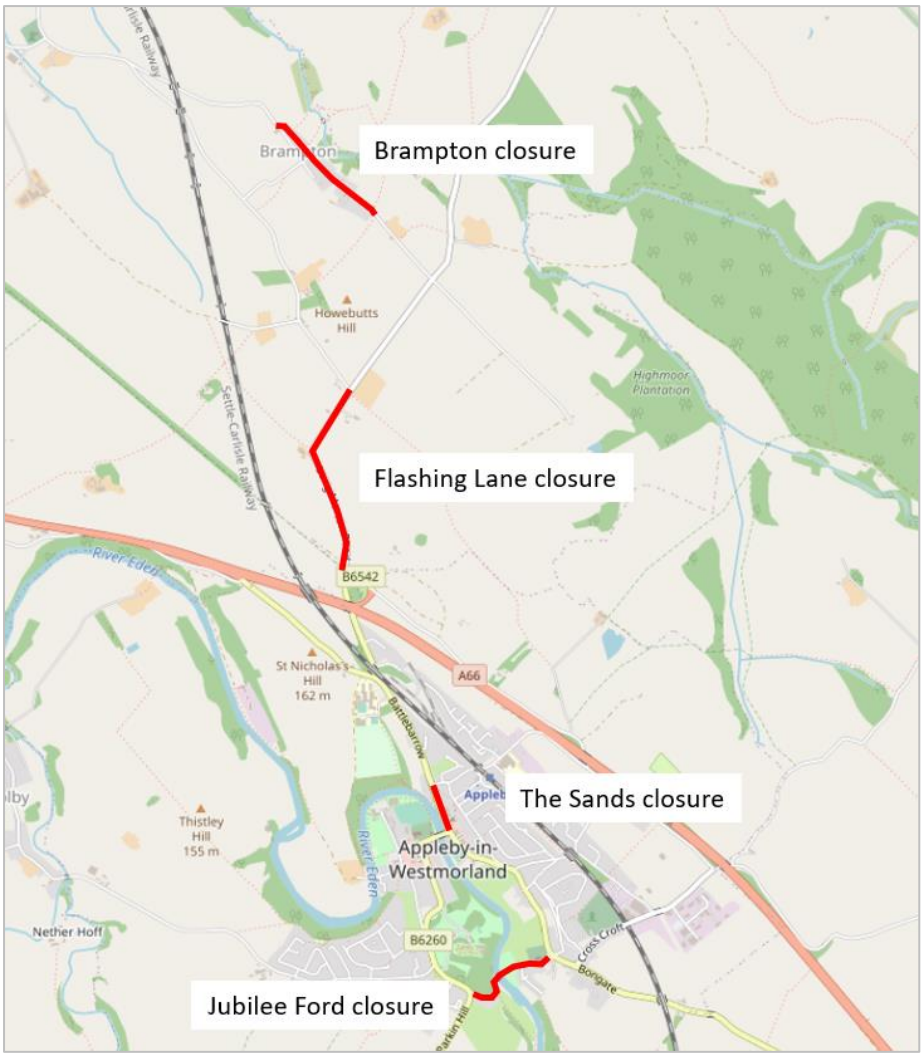



*Figure 3 - Appleby Fair Road closures*

The only road closure that potentially affects the A66 is the closure of Flashing Lane, where diverted traffic from the C3065 is required to divert to the north and access the C3063 Long Marton Road at its junction with the A66. The amount of diverted traffic is likely to be low and considered to be most likely local in nature and therefore more familiar with the event.

The measures within the TMP appear to be effective in managing the traffic associated with the Fair

# EVENT HIGHWAY OPERATION

Observations of traffic conditions were made at the 2021 Appleby Horse Fair during the first day of the horse fair, Thursday 12th August 2021. The observations noted in this assessment are based on these observations and from discussions with a senior police officer at the site who has considerable experience in managing traffic at the Fair over many years.

There are three designated routes to car parks for the Horse Fair, approaching Appleby from the east, the west and the south. Car parks are designated to each approach route to minimise the effects of traffic through Appleby and on the A66. The car parks and access routes are shown in Figure 4 below.

There is extensive temporary signage on the approaches to and through Appleby directing visitors to the appropriate car parks. The details of the signage regime and placement is given in the TMP for the event.

There are three sections of road which are closed to traffic during the event. These are:

- B6542 Long Marton Road, also known as Flashing Lane, between the Salt Tip Corner junction and the C3065 to Long Marton;
- B6542 The Sands, between Station Road and the B6260 Bridge Street; and
- U3337 Castle Bank at Jubilee Ford, between the B6260 Parkin Hill and B6542 Bongate.

In addition to road closures there are one-way restrictions placed on the following roads within Appleby:

- Garth Heads Road becomes one-way southbound only, between Station Road and Drawbriggs Lane;
- Roman Road becomes one-way northbound only, between the C3066 Cross Croft and Garbridge Lane;
- Garbridge Lane becomes one-way southbound only, between Roman Road and the C3066 Drawbriggs Lane;
- Chapel Street becomes one-way northbound only, between Holme Street and Low Wiend;
- Station Road becomes one-way northbound only, between Roman Road and Appleby Primary School.

The road closures and one-way restrictions are shown in Figure 5.

Flashing Lane is closed to all traffic for extended periods during Friday, Saturday and Sunday of the event to allow the showing of horses. This is the area where the main event takes place. On the Thursday when observations were made, Flashing Lane was open to traffic and was congested with arrivals to the Fair and horse drawn traffic. This congestion extended northwards on the B6542 beyond the Rising Sun and southwards beyond the A66 underpass to the junction with Romany Way. The slip road from the A66 to the Salt Tip junction was also congested, typically back to the junction with Roman Road.

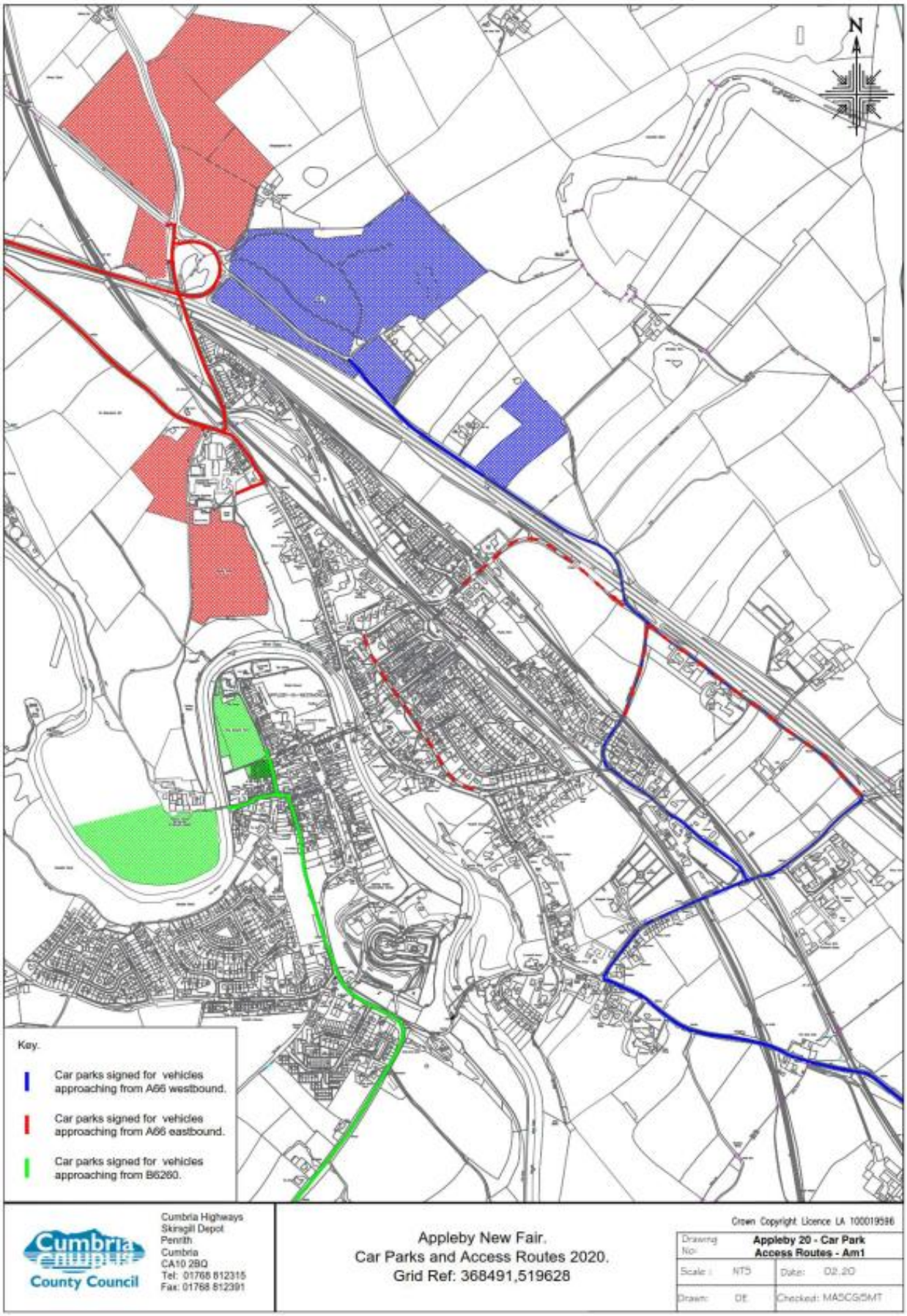



*Figure 4 - Car Parks and access Routes*


*Figure 5 - Road closures and restrictions*

The main point of congestion during the onset of the Fair is the junction between Long Marton Road, Flashing Lane and the B6542 exit slip road from the A66 eastbound carriageway, known as the Salt Tip junction. Much of the congestion is caused by long queues to access campgrounds and the use of Flashing Lane to the north of the junction.

Two of the main campgrounds (Winter's – Park A and the Market Field) on either side of Flashing Lane are accessed through gates to the north of this junction. There is also a further day car park (Bradley's – Car Park B) accessed from Long Marton Road approximately 40m south of the junction. At the time of the site visit, many vehicles were accessing these fields, with extended periods for each vehicle to pay the fees for using the fields. This caused traffic to back-up across the junction, affecting egress from the A66 to the junction and the possibility of queuing traffic backing-up onto the A66 eastbound carriageway.

*Figure 6 - Congestion on B6542 at access to campgrounds*

At times when Police Officers consider it necessary, a series of traffic cones are placed across the left turn slip road leading to the Salt Tip junction, directing all traffic to the right, leading onto Roman Road. This traffic is then directed along Roman Road, to pass under the A66 and then directed through the western side of Appleby via Station Road and the B6542 Battlebarrow and Long Marton Road to approach the junction from the south. This intervention results in shorter queues on the slip road and relocation of the queues onto Long Marton Road, away from the A66. The intervention is intended to prevent blocking back onto the A66. The diversion route is illustrated in Figure 7 below.

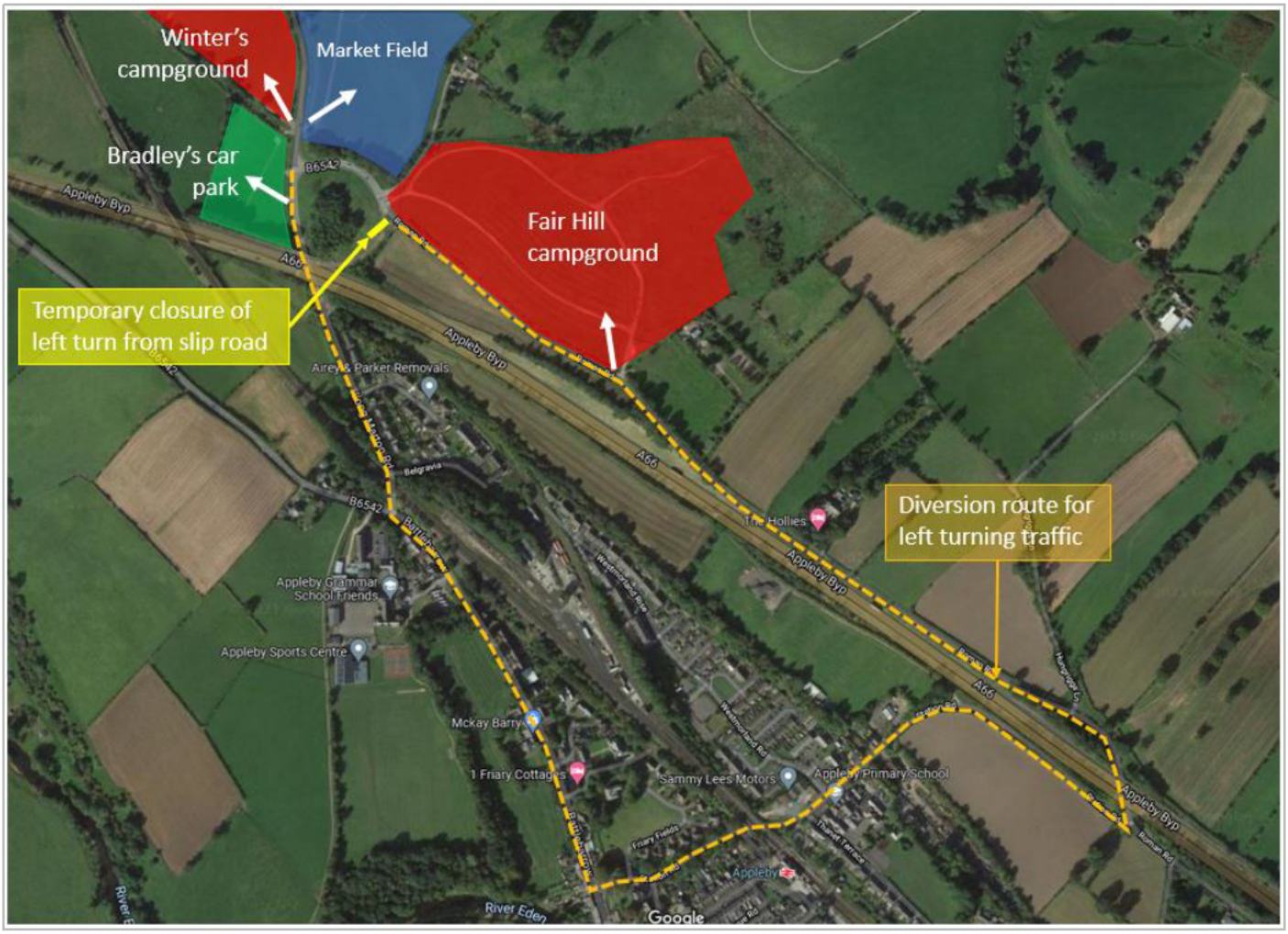



*Figure 7 - Diversion route when slip road closed*

*Figure 8 - Congestion at Salt Tip junction*

The centre of Appleby is also used extensively for horse trotting, with the slipway into the river used to wash horses prior to showing. Although The Sands and Flashing Lane are closed to traffic, the section of the B6542 between Salt Tip corner and Station Road junction remains open to all traffic.

There is a safety concern along this section in particular, as horses are ridden or driven fast along the carriageway and there is no protection for pedestrians. The footways are busy and form the main access between Flashing Lane and the town centre, with a constant flow of pedestrians along both sides of the road.

## EFFECT OF A66 PROPOSALS ON HORSE FAIR

The proposals to upgrade the A66 to dual carriageway standard near Appleby will have an impact on the Horse Fair. However, as the Appleby Bypass is already dual carriageway, the impact is liable to be limited. The main impact will be to the west of Appleby, where the section of the A66 between Appleby and Kirkby Thore will be a new alignment of the carriageway and upgrade to dual carriageway standard, and proposed changes to the junction arrangement at the west of Appleby to allow movements on and off the eastbound carriageway rather than the existing off-slip only.

Although use of the A66 by horse-drawn vehicles to access and egress the Fair is discouraged, travellers to and from the Fair continue to use the road. This can cause delay and congestion to other road users, especially on the existing single carriageway sections due to limited opportunities to overtake, and the perceived hazards in doing so. With the upgrade to dual carriageway standard, the opportunity to overtake a horse-drawn vehicle increases, and thus delay may be reduced to other road users. However, the difference in travelling speed between motor and horse-drawn vehicles will cause an increased hazard to all road users.

As the A66 between Appleby and Kirkby Thore will be on a new alignment the existing A66 alignment which will be de-trunked and downgraded to a local distributor road will become an attractive alternative for equine traffic to using the dual carriageway when approaching or leaving Appleby to the west. Connections to existing routes used by travellers and designated stopping places will need to be maintained across the proposed dual carriageway to enable their continued use.

It should also be borne in mind that the de-trunking of the existing A66 carriageway to a local distributor road will create the opportunity for further stopping places in the vicinity of the Fair, which may either require an extension of the Traffic Management Plan to prevent this from happening, or provide an opportunity to manage parking in the run up to and during the Fair.

The proposal shown in Drawing No. HE565627-AMY-HGN-S0405-DR-CH-000211-P01 to include an on-slip road from Roman Road to the A66 eastbound carriageway will have impacts on the operation of the highway during the Fair, and the associated junction provision to allow this on-slip will also impact on the Fair Hill Show Ground. An extract from the drawing is shown in Figure 9 below.

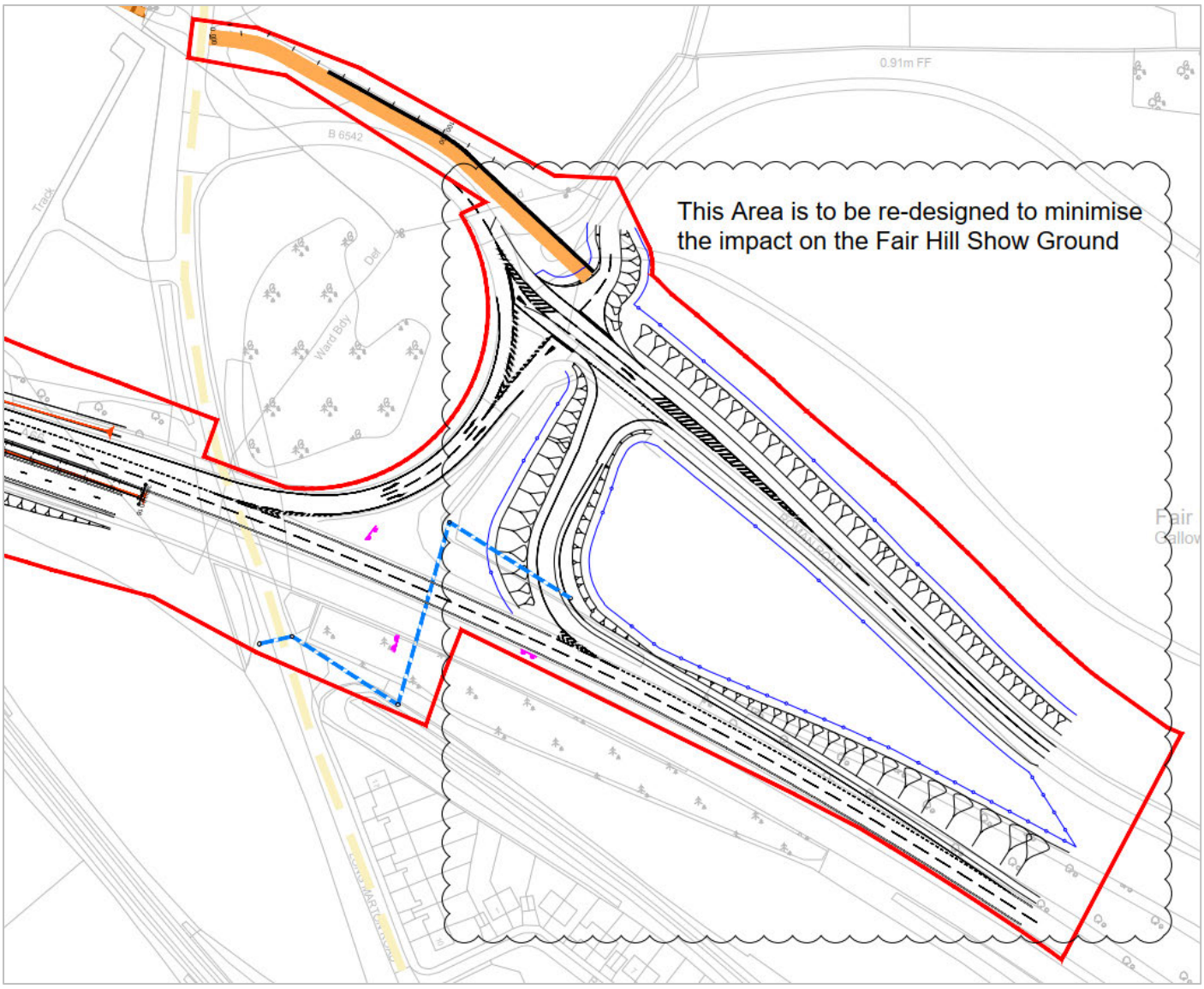



*Figure 9 - Extract from HE565627-AMY-HGN-S0405-DR-CH-000211-P01 - Appleby West Junction*

The proposed junction arrangement will allow access to the eastbound carriageway for A66 users from communities to the north and west of Appleby without the need to pass through Appleby to access the Appleby eastern junction at Coupland.

The proposed junction arrangement with Roman Road may not affect the existing temporary traffic management employed on the off-slip road at times when demand is high for access to campgrounds and parking, as the off-slip is unaffected. However, the inclusion of a right turn ghost island lane to the on-slip may affect right turning traffic to Roman Road when the temporary traffic management is employed and result in queues on the slip road dispersing slower than with the existing junction arrangement. This is likely to be exacerbated with the access to the Fair Hill Show Ground moved to be directly opposite the right turn lane. It should be noted that during the period when most traffic is arriving for the Fair, there appears to be little traffic movement towards Roman Road from Long Marton Road to oppose traffic turning right from the off-slip road.

The provision of the widened junction and the on-slip will result in widening Roman Road into the Fair Hill Show Ground. This may affect the capacity of the Show Ground and the operation of the traffic management related to access and egress.

The inclusion of the on-slip road at the junction is likely to have more of an impact at times of departure from the Fair. As mentioned previously, traffic travelling east will no longer have to pass through Appleby to access the eastbound carriageway. At the departure from the Fair, this is likely to be an attractive route for Travellers, and will result in an increase of horse-drawn traffic onto the A66 dual carriageway. Temporary traffic management could be used at departure times to close the on-slip road to avoid this traffic using the A66.

At the eastern end of the Appleby Bypass the A66 will be upgraded to dual carriageway standard. Between Coupland and Warcop the proposal is to upgrade the road on its existing alignment, leaving no alternative route to using the A66. Between Warcop and Brough a new dual carriageway is proposed alongside the existing A66 single carriageway, with the existing A66 de-trunked and serving as a local distributor road. The existing A66 has potential to provide a safer route for horse-drawn vehicles to travel to the Fair, but with no alternative than to use the dual carriageway from Warcop to Appleby.

## RISKS AND OPPORTUNITIES

- Extension of temporary speed restrictions to 40mph between Kirkby Stephen and Brough to the whole length of carriageway between the two locations to provide consistent speed management during the TRO period.
- Provide permanent flap type road closure signs relating to the closure of Flashing Lane and the road through Brampton.
- Risk to pedestrians along B6542 Battlebarrow between Salt Tip Corner and Station Road from fast moving horses. Possible use of temporary barriers alongside each footway may prevent collisions. Temporary crossing points would need to be considered to provide accessibility across the carriageway.
- An assessment is required of the potential need for mitigation related to the de-trunked sections of the A66 and the likelihood of unauthorised stopping occurring by travellers attending the Fair. This may result in permanent or temporary infrastructure or TROs to be put in place to prevent issues occurring with the Project in place.
- Considering the provision of a new eastbound slip road onto the A66 at Appleby West, there is a need for further information related to how this will be safely managed when travellers are leaving the Fair, given the speed of traffic on the dual carriageway and the speed of horse-drawn vehicles.
- Horse-drawn vehicles attending the Fair should be provided with an alternative safe route along the Local Road network, which has dedicated facilities for the travelling community and visitors to the event.
- Furthermore, Flashing Lane is a focal point of the Fair and is the main showcasing ‘run’ for horses being traded. It is near the tie-in of the A66 NTP, and therefore the designs must not negatively impact on this part of the local road network or encroach on the event field itself.
- Enhanced provision on local roads in Cumbria would help to reduce the number of horse-drawn vehicles on the A66, and National Highways should work with Cumbria County Council to explore additional infrastructure which would support this, such as advanced warning signs, increasing capacity and quality of routes parallel to the A66, and layby/parking management. A number of

annual interventions are required to manage the Fair traffic and this is identified in the Traffic Management Plan for the Fair. Consideration of how National Highways can positively contribute to this plan during the construction and operation of the A66 NTP is needed to support the operation of the Fair.

- Construction of the A66 NTP will occur during the Fair which is held annually, potentially over a number of years. There are other sections of the A66 NTP which horse-drawn vehicles will use to access the Fair. Therefore, it is expected that a Construction Traffic Management Plan, including the Traffic Management Plan will need to be produced by National Highways to set out how the Fair traffic will be coordinated and managed over both the construction and operation of the A66 NTP.
- Consideration of how National Highways can positively contribute to Appleby Horse Fair Traffic Management Plan during the construction and operation of the A66 NTP is needed to support the project.
- One of the main objectives of the A66 NTP is improved road safety across the corridor, therefore a reduction in the number of horse-drawn carriages on the A66 would support this objective. National Highways should support and fund improvements on the local highway network to help achieve the reduction of horse-drawn carriages using the A66.

Cumbria County Council

# A66 NTP – Assessment of Potential Diversion routes

cumbria.gov.uk

# Introduction

1 This report reviews the planned diversion routes that may be used during the construction of the A66 scheme through Cumbria. This will be used by the National Highways project team to inform their construction temporary traffic managament plan. The plan of potential routes that was provided by National Highways is included in Appendix D, alongside other potential routes considered worthy of assessment by Cumbria CC.

2 A detailed on-site assessment of the diversion routes and risks have been carried out by Cumbria CC officers in Oct-21 and Feb-22.

3 This report will highlight the viability of, and any recommended improvements to, the potential routes or other affected roads (also known as rat runs).

4 This report covers the following topics:

i. Introduction and background
ii. Planned diversion routes for offline and offline works
iii. Feedback communicated through statutory consultation related to diversions
iv. Emergency diversion routes
v. Diversion route assessments and next steps
vi. Diversion assessment tables

Appendix A – Possible Solutions at Brougham Castle
Appendix B – Penrith Diversion Scenarios
Appendix C – Accident Data for Kirkby Stephen
Appendix D – Route Maps

5 A summary of Cumbria CC's assessment of the potential diversion routes and rat runs is set out in the table below:

| Diversion route options | Mitigation risk categories |
|---|---|
| Route 1 | Not suitable without significant mitigation |
| Route 2 | Suitable if reasonable mitigation measures applied (minor/moderate improvements) |
| Route 3 | Suitable if reasonable mitigation measures applied (minor/moderate improvements) |
| Route 4 | Not suitable without significant mitigation. |
| Route 5 | Not suitable without significant mitigation. |
| Route 6 | Not suitable without significant mitigation |
| Route 7 | Not suitable without significant mitigation |
| Route 8 | Not suitable without significant mitigation |
| Route 9 | Suitable if reasonable mitigation measures applied (minor/moderate improvements) |
| Route 10 | Suitable if reasonable mitigation measures applied (minor/moderate improvements) |
| Route 11 | Suitable if reasonable mitigation measures applied (minor/moderate improvements) |
| Route 12 | Suitable if reasonable mitigation measures applied (minor/moderate improvements) |

| Rat run options | Mitigation risk categories |
|---|---|
| Route 13 | Not suitable without significant mitigation |
| Route 14 | Not suitable without significant mitigation |
| Route 15 | Not suitable without significant mitigation |

# Background

6 The A66 NTP scheme links up existing dual carriageway sections of the A66 between M6 Junction 40 and Scotch Corner. There are sections of online as well as offline construction for the new dual sections, with each form of buildability impacting on the road accessibility during the different phases of construction.

7 As part of the DCO application, the applicant will be required to submit their outline plans for traffic management (TM). During the recent Statutory Consultation in October 2021, the Draft Construction Method and Management Statement set out the high level principles for construction traffic management.

8 Currently there are about 20% HGVs utilising the A66 and it is Cumbria CC's opinion that it will be these vehicles that will cause the most problems on the diversion routes as regards noise/ vibrations and road/verge damage. However, the high volume of additional cars will also be significant to the disruption, nuisence and potential increase in safety concerns.

9 During construction of the A66 schemes there will likely be reduced lane capacity and width/weight/speed restrictions at points along the route. This may make known alternative routes attractive to traffic, thereby putting extra pressure on the local road system. This may also effect bus services and local commerical interests. Although official diversions will be advertised and sign-posted in accordance with the TM plan, some drivers will use local knowledge when feeling frustrated on these routes to rat-run along unofficial routes. This will further exaserbate the impact for local residents and other forms of road users without additional restrictions (parking and weight), which would also require enforcement by the police.

10 The National Highways statutory consultation materials set out two phases of works; the first will see the undertaking of mainline diversion routes, carriageway remediation to take traffic management layout changes (including demolition, utility diversions or ground remediation). The second phase is for the main construction with the traffic management in place, with online and offline works.

11 It is understood that with the recent appointment of the Delivery Integration Partners (DIPs) that their challenge will be to deliver the schemes quicker and cheaper. It would therefore be expected that greater lengths of TM installed for longer time will allow the construction teams to progress more efficiently. Unfortunately this startegy would put greater pressure on the local road network and increases issues for local residents and the travelling public.

# Planned Diversion Routes for Offline Works

12 The list below is inferred from the General Arrangement Plans for the construction phases of the A66 carried out off line within Cumbria (no specific plans have been shared with the Councils to date). The effect on both through and local traffic will be minimal and it is understood that the proposals are to carry out the necessary work of linking the new roads to the existing A66 primarily using overnight closures.

a Kirkby Thore MP72/6 to MP76/5
b Crackenthorpe MP76/5 to MP79/8
c Warcop MP88/6 to MP89/3
d Langrigg MP91/7 to MP92/7

13 If the DIPs plans tie-in works for the minimum disruption, westbound and eastbound traffic would be moved around overnight during the tie-in operations thereby keeping the through route open. There are therefore no alternative diversions routes considered at this time. However, the DIPs will need to confirm the scale and mitigation measures they are developing.

# Planned Diversion Routes for Online Works

14 Carrying out works on the remaining online sections is more complicated and, in some instances where the works require it, traffic may have to use the prescribed diversion routes; which could possibly be over a long weekend. The DIPs will need to confirm if their strategy is likely to change.

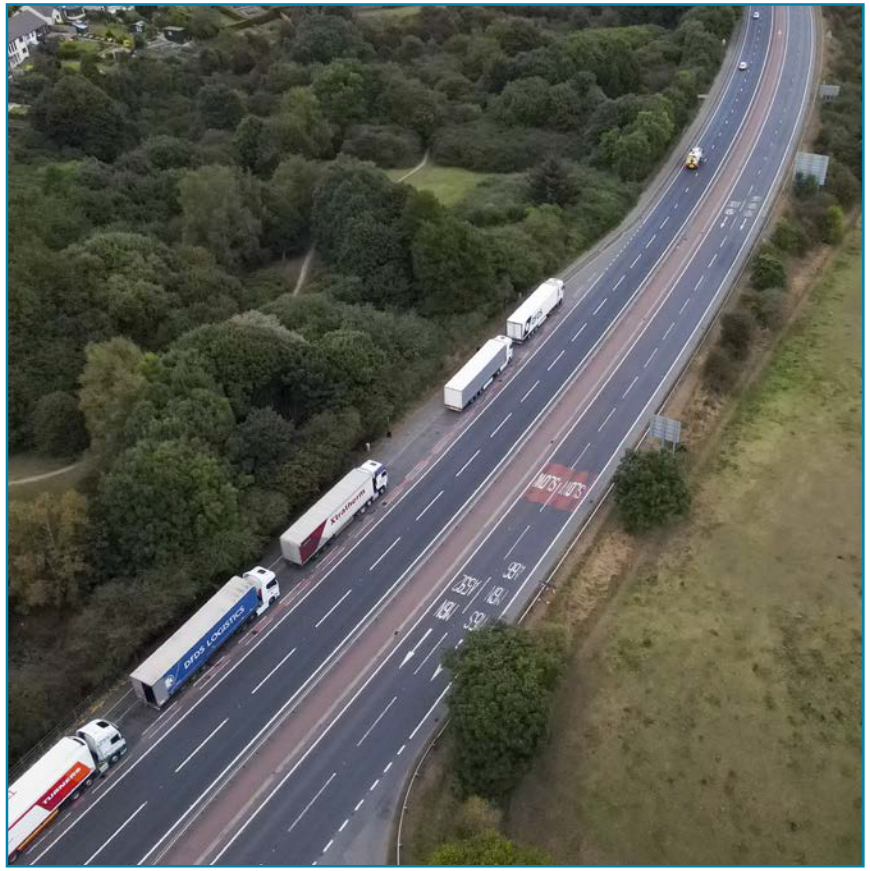
15 Assessment of individual schemes and associated diversions can be made. However, it is understood that until the DIPs are fully embedded in the project and have decided on the phasing of all of the sections of the A66 scheme, the impacts of cumulative effects of online works and precribed diversion routes and alternative 'rat runs' will be difficult to truly assess.

16 National Highways, should liaise with the Environment Agency and undertake a flood assessment. Rivers Eamont, Lowther, Eden and Trout Beck have flood zones which, if impacted under the same event, would impact more than one diversion option. An alternative TM strategy will be required to deal with flooding along the scheme corridor.

17 The centre of Penrith is subject to a 7.5t weight restriction. The NH project team will need to work with Cumbria CC to agree the impact of diversions that will require routes within Penrith that would be restricted due to this HGV limit.

18 The underpass works at Kemplay Bank Roundabout would possibly require reducing existing lane widths, along with more frequent closures and for longer periods. Any impact on the accessibility to the blue light hub would be a significant concern to Cumbria CC.

19 Further discussion with National Highways will need to be undertaken to have an early sight on the potential phasing of the scheme overall and influence decisions to minimise the impact on the local road network weighed up against DIP's efficiency targets.



# Feedback Communicated through Statutory Consultation Related to Diversions

20 Cumbria CC have already provided feedback on potential diversion routes and the draft Construction Management Strategy (CMS) as part of the Autumn 2021 statutory consultation. Relevant extracts from the various parts of the response are listed here for ease of reference. It is anticipated that future discussions will be held with National Highways to acknowledge these comments and these will formally be addressed in the Construction Traffic Management Plan and Consultation Report. Outstanding issues will be recorded in the Council's Statement of Common Ground :

21 5.1.4. The acknowledgement in sections 2.3 and 2.4 of the Draft CMS to minimise disruption and optimise the phasing of the works is welcomed. The Draft CMS highlights the online challenge at M6 Junction 40 to Kemplay Bank. However, no mention is made of the blue light facility that is unique and whose continuous access and uninterrupted service is deemed critical both the Councils and emergency services. Such considerations should be set out within any future iteration of the CMS submitted as part of the DCO application.

22 5.1.7. Paragraph 2.9.4 of the Draft CMS acknowledges that a number of lane closures may be required. Of the examples given, resurfacing of the local road network in the ownership of the Council is not mentioned. The local highway authority will need to be consulted on the detailed phasing of this element of the 'concluding phase of works'.

23 5.1.13. The preparation of traffic management plans is welcomed, and it is recommended that information on the extent to which the local road network, maintained by the Councils, is to be used during the construction phase for the import of materials and the movement of fill between schemes is included within a Construction Traffic Management Plan (CTMP) that would be covered through a requirement to the DCO. A draft version of this CTMP should be submitted in support of the DCO application.

24 5.1.15. There is no indication of the timescales for the confirmation of the rolling programme of Temporary Traffic Management (TTM) lane and road closures. NH's own customer commitment is for planned TTM to have a 3-month notification period. In order for the local highway authority and bus providers to coordinate around these alterations, a longer notification period would be required with a commitment stated in the CTMP.

25 5.1.16. NH acknowledges that traffic will be guided along lengths of the A66 using the existing carriageway or new temporary relief sections. For online working and large activity road closures, the Construction Method and Management Plan does not include details of any proposed diversion routes. NH should be made aware of the serious concerns about the unsuitability of most of the local road network to accommodate the volume and types of vehicles that will be directed off the A66. NH must work with the Councils to ensure that the limited routes have considered health and safety implications on their change of use and mitigated these as far as reasonably practicable.

26 5.1.17.There are particular concerns on the impact to the blue light hub and the on-call fire fighters to have uninterrupted access to the station at Kemplay Bank. The Councils will inform NH of the rat-run routes that will be generated as the TTM plan is implemented so that deterrents to these alternative routes are also included in the CTMP. Any mitigations for parking or weight restrictions would need the support of police for enforcement.

8.7.11. The Councils' Position - NH must develop a clear strategy for traffic management and the establishment of viable alternative/diversion routes to support the construction of the upgraded A66. There are clear challenges with the suitability of the rural road network to accommodate the types and volumes of vehicles to be diverted.

# Diversion Route Assessments

27 The following section assesses each potential diversion route in turn. The assessment is formed of a series of observed hazards on road safety for the current routes, combined with an appraisal of the hazard with the diversion in place.

28 The assessment tables capture the key issues, those who may be impacted, what controls/mitigation measures would be required and how these may be progressed.

29 The RAG status is a qualitative guide for each of the issues encountered based on the severity of the issue, the scale of potential solution and the likelihood of it being successfully implemented.

30 Routes 5 and 7 use the main road networks and routes 2,3,4 and 6 are secondary or local access roads. Routes 8 to 12 include some built up areas, with 9 in Penrith. Routes 13, 14 & 15 are are potential rat runs.

31 In assessing the routes, it has been assumed that the diversion usage will be overnight or possibly over a weekend and as such the physical robustness of the routes have been on the basis of a relatively short-term usage by cars and HGVs and the usage categorised into three separate categories. If the DIP stategy for minimising the use of diversions changes, then these assessments will need to be recalibrated.

32 Of all the routes assessed as part of this revision there are no routes suitable with no mitigation apart from condition surveys nearer the time of usage. This was expected given the nature of the rural local road network across this region and should be a key risk for the overall project.

33 For routes suitable if mitigation measures applied consisting of minor to moderate improvements, the assessment has concluded that Route 2,3, 9, 10, 11 and 12 fall under this category. Routes 2 and 3 are being proposed as one way due to the width of the existing road.

34 Route 1 is only partially satisfactory since this will also be utilised to get to routes 2 and 3, however there is a 12ft 3in bridge at Brougham Hall, therefore the narrow roadway and headroow issue results in Route 1 not suitable without significant mitigation to address what would be high risk usage.

35 Routes 4 and 6 could only be proposed as one way due to the width of the existing road therefore are assessed as not suitable without significant mitigation, again to address what would be high risk usage. Routes 5 and 7 are well documented here and not suitable without significant mitigation. There are concerns with the railway, river and Callender-Hamilton army bridges, along with other issues along these routes.

36 Route 8 is assessed as not suitable without significant mitigation, again to address what would be high risk usage. There will be other smaller scale rat runs in the area of Route 10 which have not been assessed at this time but will have a cumulative negative effect. Routes 13, 14 & 15 are potential rat runs and therefore are assessed as not suitable without significant mitigation.

37 For the potential mitigation measures set out in the tables below, associated with each route, it is expected that any follow up actions would be funded through National Highways. Mitigation measures are expected to be in place by the start of works on the scheme expected in Q1 2024.

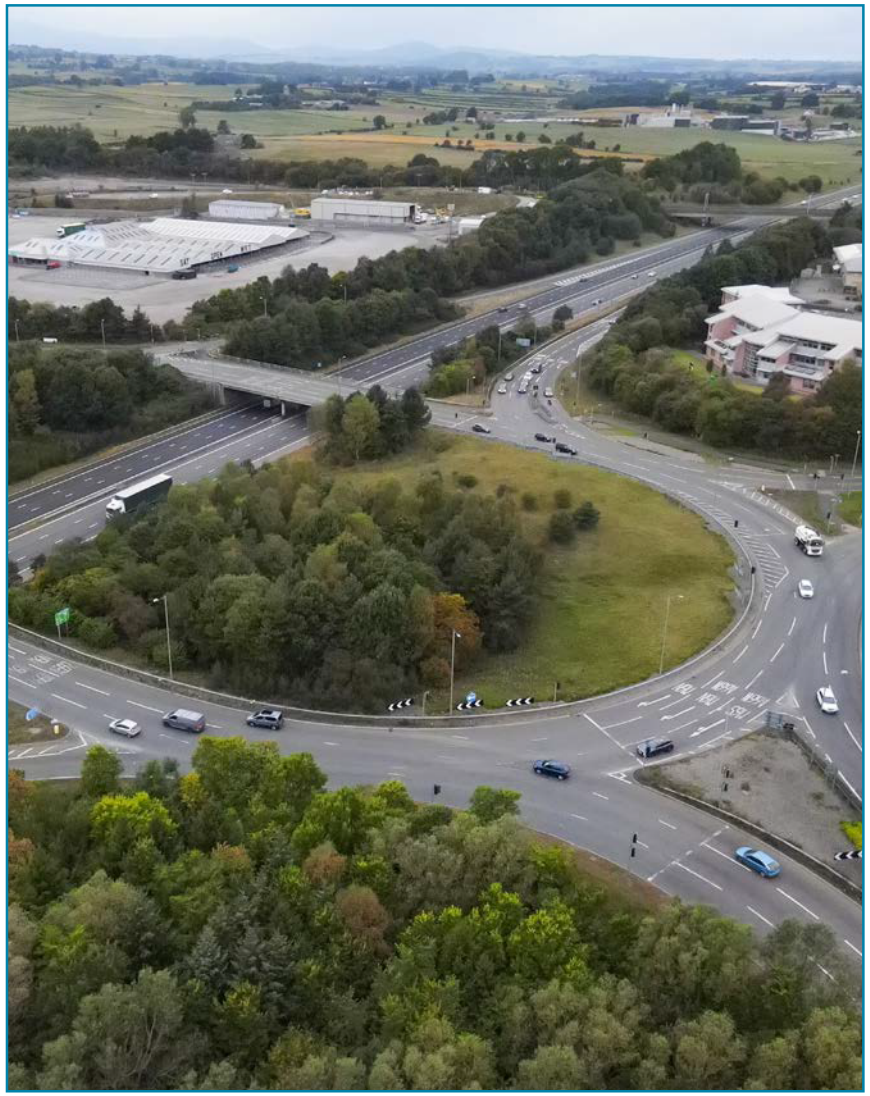
# Next Steps

38 Several unsuitable routes and rat runs will require restrictions applied. Those routes requiring measures to ensure the safety for the extra use e.g. parking restrictions/weight restrictions may also require support from the Police for enforcement if the mitigation is to be assumed as effective.

39 Once the combination of diversion routes is better understood from National Highways and the DIPs then the viable routes can be re-assessed in combination. This would also include the confirmation of the strategy to minimise the use of diversions and deter rat runs.

40 The Construction Traffic Management Plan has not been shared with the Council at the time of writing. This will need to set out the methodology of determining the extents of the project's liability of the identified local roads for monitoring, incident, winter and general maintenance management.

41 The CTMP would also need to set out the agreed timelines for joint site walk overs to examine the condition of the assets of the local roads. This would include the condition of the road surface, signage, drianage, road-markings, soft estate etc. These will need to be assessed prior to and post construction. Any maintenance to the assets required post-construcion with need to be to the agreement between both parties.



# Route Risk Assessment Methodology

See also **Safety at Street Works and Road Works a Code of Practice 2013**

Every traffic diversion route must have a driving surface that is suitable for its purpose. The surface of any route must not be so uneven, potholed, sloped or slippery that there could be cause of potential risk.

When planning a diversion route, your risk assessment should include answers to these questions:

- Where does the traffic route go?
- What potential hazards are on the route?
- Is the road surface suitable for the load?
- Does the route slope?

Hazards along a route may include:

- Bends;
- Restrictions
- Junctions;
- Fuel or chemical tanks or pipes;
- Gates or barriers;
- Overhead electricity cables;
- Any unprotected edge from which vehicles could fall, or where they could become unstable, such as unfenced edges of elevated weighbridges, loading bays or excavations;
- Anything that might collapse or be left in a dangerous condition if a vehicle hits it; or
- Anything that might catch on or dislodge a load.

To avoid these hazards:

- Minimise road and route junctions.
- Provide clear signed warning of any height or width restriction – both in advance and at the obstruction itself.
- Protect dangerous obstructions with goalposts, height gauge posts or barriers.
- If gates or barriers are to stay open, secure them in position.

A steep gradient can affect:

- The driver's ability to handle the vehicle (especially if the surface is slippery);
- How easily spills can be contained; and
- How easy it is to manage wheeled objects such as waste containers, roll cages or pallet handlers.

Some vehicles can become unstable on slopes. Examples include:

- Some lift trucks;
- Raised-tipper lorries;
- Raised-body tankers involved in transferring powder or bulk solids; and
- Vehicles with a trailer containing liquids (such as a bowser or a slurry tanker), but without effective baffles to stop the liquid surging around.

For road tanker loading and unloading, a maximum gradient of 1 in 30 is recommended to make sure the vehicle moves as little as possible, and help to contain any spillages.

Steep slopes can also make loads less stable, especially if the loads are stacked or if they are unstable anyway (for example, wire coils or reels, barrels).

Take care that loads moved on slopes cannot move dangerously. Even where vehicles can safely use sloping surfaces, avoid slopes steeper than 1 in 10.

# Diversion Route 1: Brougham Hall to Eamont Bridge

# Diversion route 1 considerations

| | What are the hazards? (and where?) | Who might be harmed and how? | What are you doing to control the risk? | What further action is needed to control the risk | Images |
|---|---|---|---|---|---|
| | Turning right from A66 westbound onto B6262 diversion route is a hazard.<br><br>And in reverse scenario, turning from B6262 onto A66 eastbound is a higher risk, crossing two carriageways. | HGV's, drivers. | Additional signage and enforcement. | Portable variable message signing (VMS) that has electronic messages that can be programmed to suit any conditions.<br>Consider one-way system to simplify turning movements. |  |
| | Usable for two-way traffic from the A66 to Moor Lane utilising the B6262 road, however from Moor Lane to Brougham Hall the road would need to be widened into southbound verge over substantial length to take 2-way traffic which would need to cater for local vehicles in addition to diversion traffic.<br><br>No kerbs or over the edge drainage.<br><br>No footway or NMU provision. | Pedestrians, cyclists, and horses<br>Residential properties<br>Visitors & staff at Brougham Castle & Hall<br>Farming staff | The speed limit will be reduced because the diversion route will probably be used overnight.<br><br>Building passing places, the spacing of which will need to be positioned with consideration given to environmental features.<br><br>New signing & lining. | Depending on the time of the year, localised lighting may be required at pinch points and this would need to be monitored for on-going suitability.<br><br>Verge protection and drainage of low spots may be required.<br>Ensuring recovery vehicles are available should a breakdown occur. |  |

| | What are the hazards? (and where?) | Who might be harmed and how? | What are you doing to control the risk? | What further action is needed to control the risk | Images |
|---|---|---|---|---|---|
| | From Brougham Hall to the A6 should not be used due to the 12' 3'' low bridge.<br><br>However there is no reason why locals should continue to use the route.<br><br>No verge for NMU refuge. | Pedestrians, cyclists, and horses would be endangered, and the road goes through a small community adjacent to the hall.<br>Tourists.<br>HGV's by striking the low bridge. | Signs need to be erected displaying 'No Entry Very Low Bridge; Local Access Only' at Brougham Hall. | Erect diversion signs to direct traffic that have come from the A66 along the one-way system route from Brougham Hall junction to Clifton Cross. |  |
| | Junction with the A6 to bring it onto the existing strategic emergency diversion route.<br><br>Area at risk of flooding at Eamont Lodge. | Pedestrians, cyclists, and horses. Motorists | Additional signage and enforcement. | NH are to check with EA's previous flood assessment before determining upgrade of drainage and flood defences. |  |
| | The route will ultimately go over Eamont Bridge to Kemplay Bank Roundabout to re-join the A66.<br><br>Risk of flooding on approaches to bridge and safety risk of bridge under severe flooding. | Pedestrians, cyclists, and horses The road goes through a small community adjacent to the bridge. | Additional signage and enforcement at Eamont Bridge. | Further assessment of prioritised signals controlling single file bridge crossing.<br><br>Assessment and upgrade of drainage and flood defences.<br><br>Investigate emergency route for the diversion if flooding occurs. |  <br>  |

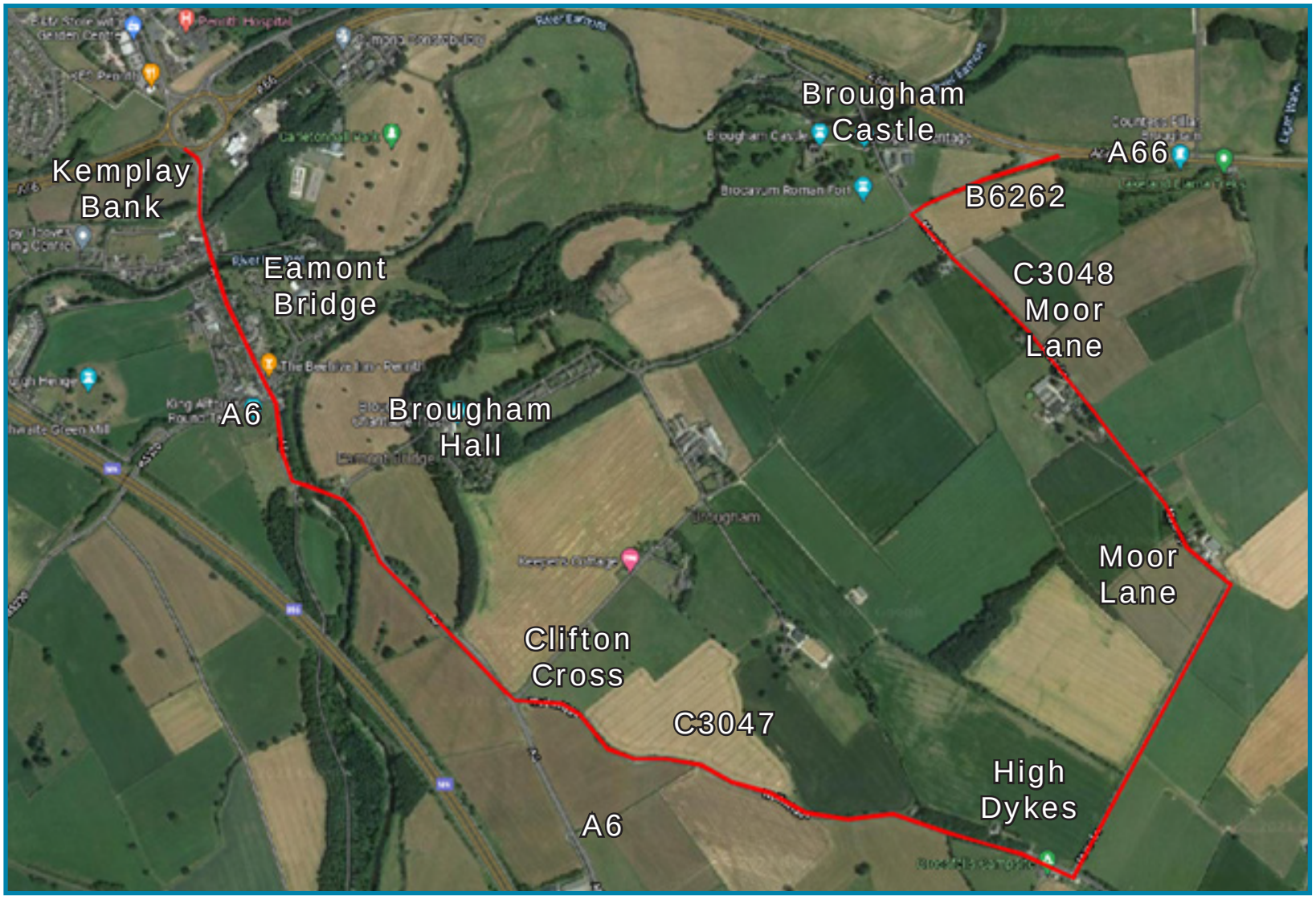
# Diversion Route 2: Brougham Castle to Eamont Bridge

# Diversion route 2 considerations

| | What are the hazards? (and where?) | Who might be harmed and how? | What are you doing to control the risk? | What further action is needed to control the risk | Images |
|---|---|---|---|---|---|
| | Brougham Hall to Clifton Cross has poor visibility in place, particularly at a sharp bend in the road, currently local traffic use the road in both directions and have become familiar with when to speed from ongoing traffic.<br><br>However, the road would not be suitable for the additional diverted traffic which may result in accidents and therefore is not suitable for a 2 way-traffic.<br><br>A one way usage with improvements to sight lines at any areas of concern would enable diverted traffic to safely use the route | Pedestrians, cyclists, and horses.<br><br>The road has properties with access.<br><br>Diversion stranded vehicles and occupants would benefit from lay-bys | Utilising the route as a one-way from Brougham Hall to Clifton Cross. | Portable variable message signing (VMS) that has electronic messages that can be programmed to suit any conditions.<br><br>Ensuring recovery vehicles are available should the need occur.<br><br>Advising any residents on the route when the one way system would be in operation. |  |
| | Turning right from A66 westbound onto B6262 diversion route is a hazard.<br><br>And in reverse scenario, turning from B6262 onto A66 eastbound is a higher risk, crossing two carriageways. | HGV's, drivers | Additional signage and enforcement. | Portable variable message signing (VMS) that has electronic messages that can be programmed to suit any conditions.<br><br>Consider one-way system to simplify turning movements. |  |

| | What are the hazards? (and where?) | Who might be harmed and how? | What are you doing to control the risk? | What further action is needed to control the risk | Images |
|---|---|---|---|---|---|
| | The A6 junction is prone to poor visibility at Clifton Cross. | Pedestrians, cyclists, and horses. | Install temporary traffic signals at the Clifton Cross junction; 4-way temporary lights at Clifton Cross may cause unnecessary queuing. Plan to monitor without lights which can be installed if required. Consider carrying out some local improvements to improve sight lines. | Investigate option of re-prioritising junction. |  |
| | Junction with the A6 to bring it onto the existing strategic emergency diversion route.<br><br>Area at risk of flooding at Eamont Lodge. | Pedestrians, cyclists, and horses. Motorists | Additional signage and enforcement. | Assessment and upgrade of drainage and flood defences |  |
| | The route will ultimately go over Eamont Bridge to Kemplay Bank Roundabout to re-join the A66.<br><br>Risk of flooding on approaches to bridge and safety risk of bridge under severe flooding. | Pedestrians, cyclists, and horses The road goes through a small community adjacent to the bridge. | Additional signage and enforcement at Eamont Bridge. | Further assessment of prioritised signals controlling single file bridge crossing.<br><br>Assessment and upgrade of drainage and flood defences.<br><br>Investigate emergency route for the diversion if flooding occurs. |  |

# Diversion Route 3: Moor Lane to Eamont Bridge



# Diversion route 3 considerations

| | What are the hazards? (and where?) | Who might be harmed and how? | What are you doing to control the risk? | What further action is needed to control the risk | Images |
|---|---|---|---|---|---|
| | Brougham Hall junction to Moor Lane High Dykes to A6 Clifton Cross. This road is currently used by local traffic in both directions, however with the increased volume of diverted traffic on this route, it is not suitable for 2-way traffic for safety reasons.<br><br>This is particularly a long diversion route and consideration should be given to improvements at the sharp bend at Moor Lane because drivers have travelled just over 1km on a reasonably straight road and may misjudge the severity of the bend. | Pedestrians, cyclists, and horses and the road has several properties with access.<br><br>Farm vehicles.<br><br>Diversion stranded vehicles and occupants would benefit from lay-bys | Utilising the route as a one-way from Brougham Hall junction to Moor Lane, High Dykes to A6 Clifton Cross and erecting one way only signs and lowering the speed limit. | For right turning traffic at High Dykes cut down bushes to improve the sight line.<br><br>Portable variable message signing (VMS) that has electronic messages that can be programmed to suit any conditions.<br><br>Ensuring recovery vehicles are available should the need occur.<br><br>Advising any residents when the one way system would be in operation. |  |

| | What are the hazards? (and where?) | Who might be harmed and how? | What are you doing to control the risk? | What further action is needed to control the risk | Images |
|---|---|---|---|---|---|
| | Junction with the A6 to bring it onto the existing strategic emergency diversion route.<br><br>Junction prone to poor visibility.<br><br>Area at risk of flooding at Eamont Lodge. | Pedestrians, cyclists, and horses. Motorists | Additional signage and enforcement<br>Erecting temporary signs or lowering the speed limit is not ideal in this instance since the location is already a designated secondary road.<br><br>Install temporary traffic signals at the junction.<br><br>Consider carrying out some local improvements to improve sight lines. | Assessment and upgrade of drainage and flood defences.<br><br>Advanced VMS warning signs for diversion traffic and temporary one-way traffic.<br><br>Investigate option of re-prioritising junction. |  |
| | The route will ultimately go over Eamont Bridge to Kemplay Bank Roundabout to re-join the A66.<br><br>Risk of flooding on approaches to bridge and safety risk of bridge under severe flooding. | Pedestrians, cyclists, and horses.<br><br>The road goes through a small community adjacent to the bridge. | Additional signage and enforcement at Eamont Bridge. | Further assessment of prioritised signals controlling single file bridge crossing.<br><br>Assessment and upgrade of drainage and flood defences.<br><br>Investigate emergency route for the diversion if flooding occurs. |  |

# Diversion Route 4: Winderwath to Cliburn to Eamont Bridge

# Diversion route 4 considerations

| | What are the hazards? (and where?) | Who might be harmed and how? | What are you doing to control the risk? | What further action is needed to control the risk | Images |
|---|---|---|---|---|---|
| | A66 East of Winderwath to Cliburn. This route is not suitable for any diversion traffic because it is very narrow with soft verges in places and has many undulations with poor sight lines. Traffic would travel downhill through forest areas with some sharp bends and because the route would be used overnight, it could result in a driver misjudging the road. | Pedestrians, cyclists and horses.<br><br>Tourists. | Erecting signs on the A66 displaying 'No through route' for A66 traffic. | Erecting signs displaying 'Police monitoring in use'. |  |
| | Environmental 7.5t weight restriction from A66 to A6 on C3047. | HGV's, Pedestrians, cyclists, and road users. | Assess and agree if temporary removal of restriction is possible<br>If not, erect temporary signs and also ensure site traffic do not use this route. | Advanced VMS warning signs for diversion traffic. |  |
| | Junction with the A6 to bring it onto the existing strategic emergency diversion route.<br>Area at risk of flooding at Eamont Lodge. | Pedestrians, cyclists, and horses.<br><br>Motorists. | Additional signage and enforcement. | Assessment and upgrade of drainage and flood defences. |  |

| | What are the hazards? (and where?) | Who might be harmed and how? | What are you doing to control the risk? | What further action is needed to control the risk | Images |
|---|---|---|---|---|---|
| | The route will ultimately go over Eamont Bridge to Kemplay Bank Roundabout to re-join the A66.<br><br>Risk of flooding on approaches to bridge and safety risk of bridge under severe flooding. | Pedestrians, cyclists, and horses The road goes through a small community adjacent to the bridge. | Additional signage and enforcement at Eamont Bridge. | Further assessment of prioritised signals controlling single file bridge crossing.<br><br>Assessment and upgrade of drainage and flood defences.<br><br>Investigate emergency route for the diversion if flooding occurs. |  <br>  |

# Diversion Route 5: Kirkby Stephen

# Diversion route 5 considerations

| | What are the hazards? (and where?) | Who might be harmed and how? | What are you doing to control the risk? | What further action is needed to control the risk | Images |
|---|---|---|---|---|---|
| | Current issue at Brough Sowerby junction of A685 and C3084. | Incidents for drivers using southbound carriageway decelerating on A685 as they turn east.<br><br>Farm vehicles<br><br>HGVs | Erect warning signs at the location. | Investigate the previous work to remove the slips when introducing the right turn ghost island.<br><br>Going westbound consider re-introducing slip road, following assessment. |  |
| | Pedestrians crossing the road indiscriminately. | Pedestrians and drivers. | Considering installing a crossing point at the busiest locations.<br><br>Additional pedestrian barriers to funnel at crossings. | Leaflets in Local shops etc to advise dangers. |  |

| | What are the hazards? (and where?) | Who might be harmed and how? | What are you doing to control the risk? | What further action is needed to control the risk | Images |
|---|---|---|---|---|---|
| | Brough to M6 Junction 38 A685. Restricted road width in Kirkby Stephen of a house (Struck previously by vehicles). | House occupants, pedestrians, vehicle drivers.<br><br>Tourists.<br><br>HGV drivers. | Erect warning signs at the location. | Potential further mitigation options need to be assessed through a feasibility study. CCC will be seeking funds through designated funds to undertake such a study.<br><br>The cumulative impact of the A66 NTP and NH's proposed Lune Gorge Project needs to be undertaken by NH at a strategic level. |  |
| | Parked cars on road through Kirkby Stephen making route quite narrow. | Pedestrians, cyclists and road users. | Signs advising of restricted width due to parked vehicles. | When a diversion route is operational, parking restrictions with compensatory parking should be provided by NH.<br><br>Or consider removing lengths of footpaths (reasonable footpath width would remain) so that vehicles are safely parked and then moving over the white line to equalise remaining usage for through traffic in both directions. |  |

| | What are the hazards? (and where?) | Who might be harmed and how? | What are you doing to control the risk? | What further action is needed to control the risk | Images |
|---|---|---|---|---|---|
| | Width of road doesn't accommodate two-way traffic on South Road for long length and no footpath modification available. | Pedestrians, HGV's, cyclists, and road users. | Local people who would not be expecting an increase road usage.<br><br>Erect warning signs at the location. | Signs advising of restricted width. |  |
| | A Low Bridge of 14' 6" at Kirkby Stephen Station. | Rail users.<br><br>HGV drivers and pedestrians and depending on severity of impact network rail users. | Erecting further enhanced warning signs of 14' 6" bridge. | Consider carrying out electronic alert signing before the bridge.<br><br>A review of the effectiveness of the existing HGV ban and how it could be improved is required. CCC will be seeking funds through designated funds to undertake such a study. |  |

# Diversion Route 6: Highbarn to Winderwath

# Diversion route 6 considerations

| | What are the hazards? (and where?) | Who might be harmed and how? | What are you doing to control the risk? | What further action is needed to control the risk | Images |
|---|---|---|---|---|---|
| | Winderwath to Highbarn very narrow single-track road - unsuitable for diversion traffic. | Pedestrians, horses, cyclists (as this is a designed cycle route). | Erecting signs on the A66 displaying 'No Through Route' for A66 vehicles or Local vehicles only (No traffic A66 vehicles). | Ensuring contractor knows this will not be used. |  |
| | Existing road in poor condition. | Pedestrians, cyclists, and horses, motorists, HGV drivers. | Erect warning signs at the location Traffic Control Devices to be adopted to control the traffic would go a long way in improving driving safety. | Road Markings: The markings on the roadway should be highly visible and understandable to motorists and HGV vehicles.<br><br>Road Surface - Road surface is another element to be considered and implemented for the existing roads condition.<br><br>Remove the existing hedge bank/wall and trees and reinstate the verge for widening the roads widths for better vision and condition. |  |

| | What are the hazards? (and where?) | Who might be harmed and how? | What are you doing to control the risk? | What further action is needed to control the risk | Images |
|---|---|---|---|---|---|
| | Restricted road width at existing farm buildings. | Pedestrians, cyclists, and horses, farmers, motorists, HGV drivers. | Erecting signs on the A66 displaying 'Restricted width ahead sign' .<br><br>Erect warning signs at the location. | Ensuring contractor knows this will not be used as this is a restricted road width for HGV vehicles.<br><br>Consider requesting National Highways to purchase and demolish farm building or consider adopting the one-way system. |  |

# Diversion Route 7: Winderwath to Langwathby to Penrith

# Diversion route 7 considerations

| | What are the hazards? (and where?) | Who might be harmed and how? | What are you doing to control the risk? | What further action is needed to control the risk | Images |
|---|---|---|---|---|---|
| | Sharp bend on B6412 at start of diversion route through Temple Sowerby. | Motorists not expecting the severe bend. | Consider local improvements to the bend. | Erecting warning signs as required. |  |
| | B6412 from Winderwath to Culgaith to Langwathby, then A686 to Penrith with narrow or no verges suitable for NMU safe zones. | Pedestrians, horses, cyclists. Pedestrians at Langwathby and motorists turning left onto the A686. Pedestrian, cyclist in build-up areas approaching Kemplay Bank Roundabout. | Erecting temporary signs at Langwathby or improving sight line for left turn traffic by carrying out local re-grading to improve sight lines. Lowering the speed limit is not ideal in this instance since the location is already a designated secondary road. | Advanced VMS warning signs for diversion traffic for the sharp bend from A66 to start diversion route through Temper Sowerby. |  |
| | Risk of alternative access to this diversion route used throughout Temple Sowerby which would suffer disruption from Heavy Good Vehicle's and noise pollution. | Local people who would not be expecting an increase road usage. | Erect temporary signs and also ensure site traffic do not use this route. | Leaflets to people affected to advise of possible changes to traffic pattern. |  |

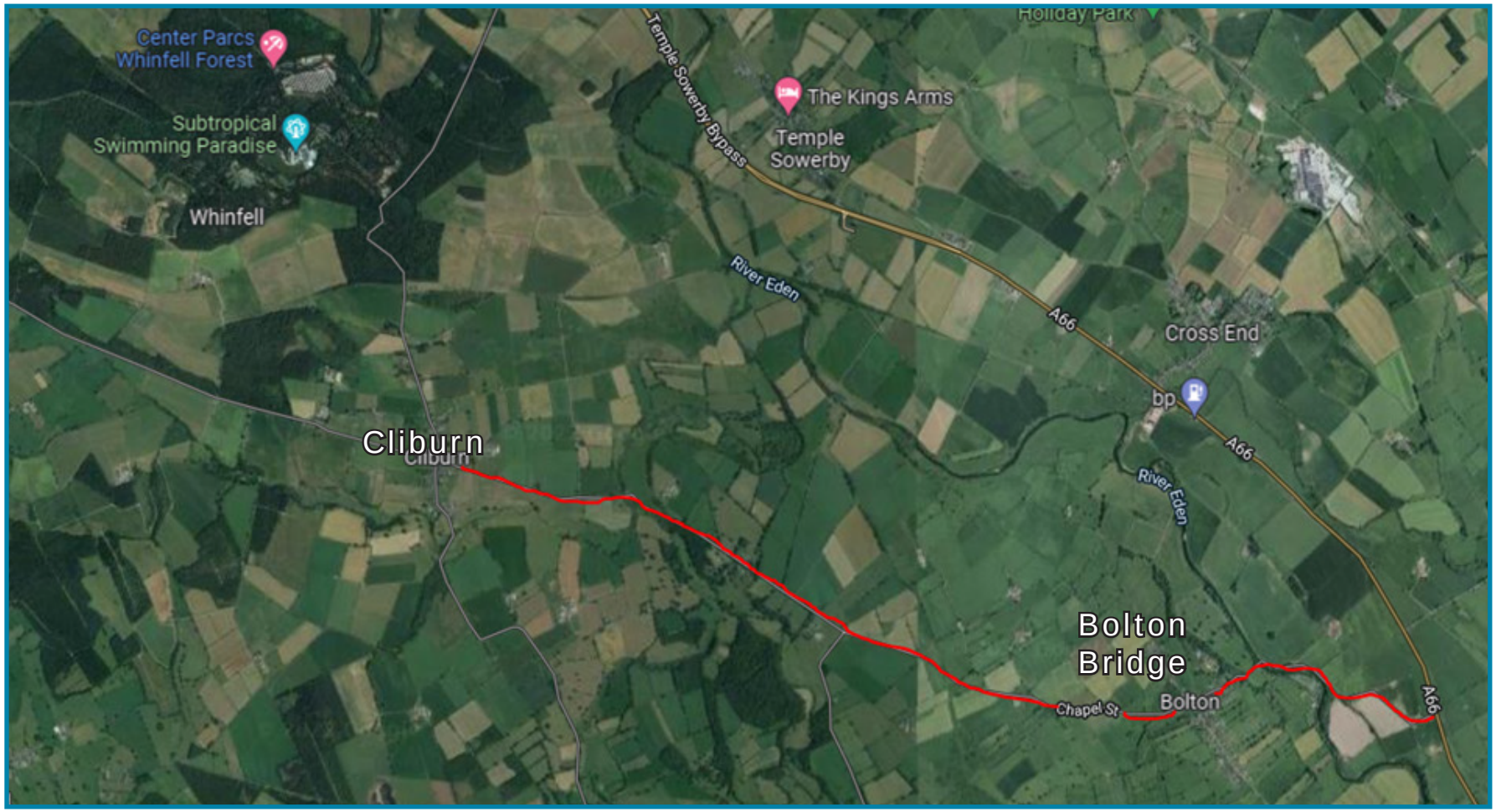
| | What are the hazards? (and where?) | Who might be harmed and how? | What are you doing to control the risk? | What further action is needed to control the risk | Images |
|---|---|---|---|---|---|
| | Potential ran run on U3195 at Otters Holt, traffic looking to cut out Culgaith on B6412.<br><br>Very narrow and not suitable for any diverted traffic. | Motorists, HGV's, Cyclists, Pedestrians. | Erect temporary closure signs and that access is for residents only.<br><br>Also ensure construction site traffic do not use this route, acknowledging residential building work ongoing. | Advanced VMS warning signs for diversion traffic.<br><br>A vehicle tracking/swept path analysis will need to be undertaken to determine if misused what mitigations are needed. |  |
| | Level crossing at Culgaith of Settle-Carlisle Railway on B6412. | Motorists, rail users and pedestrians. | Erecting temporary signs well in advance warning of the rail crossing. | Ensure Network Rail have their stop lights and barriers working properly. |  |
| | Steep gradient on B6412. | Vehicles skidding causing accidents. | Signs advising of skidding risk. | Confirm the skid resistance of the road is at an acceptable level. |  |

| | What are the hazards? (and where?) | Who might be harmed and how? | What are you doing to control the risk? | What further action is needed to control the risk | Images |
|---|---|---|---|---|---|
| | Restricted sightlines on approaches to rail bridge on bend on B6412. | Vehicles travelling too fast causing accidents.<br><br>Oncoming HGVs. | Reducing speed limit and /or signs advising of hazard.<br><br>Consider local improvements to widen the road width.<br><br>Consider carrying out some local improvements to improve sight lines.<br><br>Erecting temporary traffic signals. | Confirm skid resistance of road is at an acceptable level.<br><br>Localised lighting may be required at pinch points, and this would need to be monitored for on-going suitability.<br><br>Verge protection and drainage of low spots may be required.<br><br>Ensuring recovery vehicles are available should a breakdown occur.<br><br>Advanced VMS warning signs for diversion traffic. |  |
| | Clash of priority at junction in Langwathby between B6412 and A686. | Pedestrians and motorists. | Erecting temporary traffic signals. | Advanced warning signs prior to the junction. |  |

| | What are the hazards? (and where?) | Who might be harmed and how? | What are you doing to control the risk? | What further action is needed to control the risk | Images |
|---|---|---|---|---|---|
| | The sharp blind and narrow bend in Culgaith at the junction with U3195. | Motorists, HGV's, Cyclists, Pedestrians. | Consider local improvements to the bend. | Erecting warning signs as required. |   |
| | Poor sightlines on A686 at Langwathby. | Pedestrians and motorists. | Erect advanced warning signs. | Advise people to expect additional traffic prior to diversion route implementation. |  |

| | What are the hazards? (and where?) | Who might be harmed and how? | What are you doing to control the risk? | What further action is needed to control the risk | Images |
|---|---|---|---|---|---|
| | Callender-Hamilton Army bridge and flood plain on A686 at Edenhall & Langwathby Cricket Club. | Substantial congestion at the single file 'Temporary Army' bridge over the River Eden. | Review signal timings as required. | Erect signs explaining the restriction saying sorry for the delay. |    |
| | Local schools / nurseries Culgaith CoE, Langwathby CoE, Hunter Hall. | Diversion on B6412 & A686 will push more heavy traffic onto local roads adjacent to schools. | Visit schools and stress the dangers to the children. | Advise motorists of school approaches. Time diversions outside of school terms and avoid pick up/drop off peak activity. |  |

# Diversion Route 8: A66 to Bolton through Cliburn to A6




This route is applicable to the following potential diversion scenarios included in Appendix B:

- A66 Westbound Arm closed off
- A66 Eastbound Arm closed off

# Diversion route 8 considerations

| | What are the hazards? (and where?) | Who might be harmed and how? | What are you doing to control the risk? | What further action is needed to control the risk | Images |
|---|---|---|---|---|---|
| | Environmental 7.5t weight restriction from A66 to A6 on C3047. | HGV's, Pedestrians, cyclists, and road users. | Discuss and agree if temporary removal of restriction is possible<br>If not, erect temporary signs and also ensure site traffic do not use this route. | Advanced VMS warning signs for diversion traffic. |  |
| | Sharp bend on Chapel Street, Bolton at start of diversion route.<br><br>Low visibility and tracking issue for large vehicles. | Motorists not expecting the severe bend.<br><br>HGV's. | Consider local improvements to the bend. | Erecting warning signs as required.<br><br>Swept path assessment for restricted vehicle identification. |  |

| | What are the hazards? (and where?) | Who might be harmed and how? | What are you doing to control the risk? | What further action is needed to control the risk | Images |
|---|---|---|---|---|---|
| | Sharp bend at narrow bridge.<br><br>Low visibility of vehicles already on the single track bridge and tracking issue for large vehicles at eastern end. | HGV's Pedestrians, horses, cyclists. | Utilising the route as a one-way system. | Portable variable message signing (VMS) that has electronic messages that can be programmed to suit any conditions.<br><br>Ensuring recovery vehicles are available should the need occur and turnaround facility to redirect restricted vehicles.<br><br>Advising any residents on the route when the one way system would be in operation.<br><br>Confirm bridge capacity and flood risk. |  <br>  |

| | What are the hazards? (and where?) | Who might be harmed and how? | What are you doing to control the risk? | What further action is needed to control the risk | Images |
|---|---|---|---|---|---|
| | Weight restriction on Cliburn Mill Bridge. | HGV's, drivers Pedestrians, horses, cyclists. | This was environmental before Apr-22 and could have been waivered under temporary conditions. Since Apr-22 it is not feasible as diversion following recent abnormal load assessment. | CCC are applying for a 17T temporary weight restriction for this structure until structural issues are resolved. |  |
| | Flood zone 3 on eastern approach of C3047 eastern approach. | All motorists. | Consider alternative routes to avoid this road in severe weather. | Portable variable message signing (VMS) that has electronic messages that can be updated to reflect flooding conditions. |  |

# Diversion Route 9: A592 to Carleton Road


This route is applicable to the following potential diversion scenarios included in Appendix B:

- A6 Bridge Lane Arm closed off
- A686 Westbound Arm closed
- A592 Arm closed off route
- A66 Eastbound Arm closed off - diversion for small vehicles only

# Diversion route 9 considerations

| | What are the hazards? (and where?) | Who might be harmed and how? | What are you doing to control the risk? | What further action is needed to control the risk | Images |
|---|---|---|---|---|---|
| | Parked cars on road through Carleton Road & Roper Street making the route narrow for two-way traffic. | Pedestrians, cyclists, and road users.<br><br>Local people who would not be expecting an increase road usage and the different types of vehicles using this route. | Considering programming traffic lights to enable a safer passage for motorists.<br><br>Parking restrictions.<br><br>Alternative route for HGV's. | Signs advising of restricted width due to parked vehicles.<br><br>Parking restrictions with compensation parking. |  |
| | Local schools / nurseries in Brunswick Road and A592 Ullswater Road, Penrith. | Diversion on the A592 will push more heavy traffic onto local roads adjacent to schools. | Visit schools and stress the dangers to the children.<br><br>Programme of diversion usage to be outside school hours. | Advise motorists of the schools.<br><br>Restrict pick up and drop off parking close to the school. |  |

| What are the hazards? (and where?) | Who might be harmed and how? | What are you doing to control the risk? | What further action is needed to control the risk | Images |
|---|---|---|---|---|
| Narrow road width on the A592 – this is unsuitable for HGV's.<br><br>Congestion adding to driver frustration and risk taking.<br><br>Risk of alternative access to this diversion route would suffer disruption from Heavy Good Vehicle's and noise pollution. | HGV's, Pedestrians, cyclists, and road users.<br><br>Local people who would not be expecting an increase road usage. | Erect temporary signs and also ensure site traffic do not use this route. | Advanced VMS warning signs for diversion traffic.<br><br>A vehicle tracking/swept path analysis will need to be undertaken to determine if this could still be an option |  |
| Narrow road width continues on the A6 – this is unsuitable for HGV's.<br><br>Risk of alternative access to this diversion route would suffer disruption from Heavy Good Vehicle's and noise pollution, adding further to current congestion and risk of rat-running.<br><br>Similar congestion also identified on the A592, poor AQ exacerbated by additional HGV traffic. | HGV's, Pedestrians, cyclists, and road users.<br><br>Local people who would not be expecting an increase road usage. | Erect temporary signs and also ensure site traffic do not use this route. | Advanced VMS warning signs for diversion traffic.<br><br>A vehicle tracking/swept path analysis will need to be undertaken to determine if this could still be an option. |  <br>  |

| | What are the hazards? (and where?) | Who might be harmed and how? | What are you doing to control the risk? | What further action is needed to control the risk | Images |
|---|---|---|---|---|---|
| | Narrow road width continues on the A6 – this is unsuitable for HGV's.<br><br>Risk of alternative access to this diversion route would suffer disruption from Heavy Good Vehicle's and noise pollution. | HGV's, Pedestrians, cyclists, and road users.<br><br>Local people who would not be expecting an increase road usage. | Erect temporary signs and also ensure site traffic do not use this route. | Advanced VMS warning signs for diversion traffic A vehicle tracking/swept path analysis will need to be undertaken to determine if this could still be an option. |  |
| | Pedestrians crossing the road indiscriminately. | Pedestrians, HGV's & drivers. | Considering installing a crossing point at the busiest locations.<br><br>Additional pedestrian barriers to funnel at crossings. | Leaflets in local shops etc to advise dangers. |  |

| | What are the hazards? (and where?) | Who might be harmed and how? | What are you doing to control the risk? | What further action is needed to control the risk | Images |
|---|---|---|---|---|---|
| | 7.5t town weight restriction applied | HGV's, Pedestrians, cyclists, and road users. | Erect temporary signs and also ensure site traffic do not use this route. | Advanced VMS warning signs for diversion traffic<br><br>A vehicle tracking/swept path analysis will need to be undertaken to determine if this could still be an option. |  |
| | Backing up of queuing traffic across junctions on A592 and other areas in the town made worse by the volume, experience and types of vehicles using diversion route. | HGV's, Pedestrians, cyclists, and road users. | Enhanced signs need to be erected on keeping junctions clear.<br>The speed limit will be reduced because the diversion route will probably be used overnight. | Portable variable message signing (VMS) that has electronic messages that can be programmed to suit any conditions.<br><br>Adopting traffic to flow one way at a time. |  |

# Diversion Route 10: Newbiggin to A592 Ullswater Road


This route is applicable to the following potential diversion scenarios included in Appendix B:

- A66 Eastbound Arm closed off
- A66 Westbound Arm closed off

# Diversion route 10 considerations

| | What are the hazards? (and where?) | Who might be harmed and how? | What are you doing to control the risk? | What further action is needed to control the risk | Images |
|---|---|---|---|---|---|
| | U3484 Mile Lane unsuitable for diversions but may be subject to “rat-running” | Pedestrians, cyclists, and road users.<br>HGV’s<br>Local people who would not be expecting an increase road usage. | Erecting temporary signs of restrictions for closure and local access only. | Advanced VMS warning signs for diversion traffic. |  |
| | Environmental 7.5t weight restriction on C3019 Newbiggin. | HGV’s, Pedestrians, cyclists, and road users. | Assess and agree if temporary removal of restriction is possible<br>If not, erect temporary signs and also ensure site traffic do not use this route. | Advanced VMS warning signs for diversion traffic |  |
| | Narrow Road width – concern for two-way traffic. | HGV’s, drivers, cyclists, and Motorists. | Limited benefit from a reduction in the speed limit from the current 40mph.<br>Consider carrying out some local improvements to improve sight lines.<br>Erecting temporary traffic signals. | Localised lighting may be required at pinch points, and this would need to be monitored for on-going suitability.<br>Verge protection and drainage of low spots may be required.<br>Ensuring recovery vehicles are available should a breakdown occur. |  |

| | What are the hazards? (and where?) | Who might be harmed and how? | What are you doing to control the risk? | What further action is needed to control the risk | Images |
|---|---|---|---|---|---|
| | | | | |  |
| | Junction prone to a hazard as vehicle approach the junction to join the A66. | HGV's, drivers, cyclists, and Motorists. | Install temporary traffic signals at the junction.<br><br>Consider carrying out some local improvements to improve sight lines.<br><br>Option to remove right turn across traffic and keep left turn only and orientate around the roundabout. | Investigate option of re-prioritising junction.<br><br>Advanced warning signs prior to the junction. |  |
| | Blind crests on B5288, including Pallet Hill. | HGV's, drivers, cyclists, and Motorists. | Enhanced signs need to be erected displaying 'Blind Hump Ahead'.<br><br>The speed limit will be reduced because the diversion route will probably be used overnight. | Portable variable message signing (VMS) that has electronic messages that can be programmed to suit any conditions. |  |

| | What are the hazards? (and where?) | Who might be harmed and how? | What are you doing to control the risk? | What further action is needed to control the risk | Images |
|---|---|---|---|---|---|
| | Clash of priority at junction in Mile Lane B5288. | Pedestrians and motorists. | Erecting temporary traffic signals. | Advanced warning signs prior to the junction. |  |
| | Haweswater Road is an industrial estate, with no double yellow lines; HGVs are parked on the side of the road making route narrow. | Pedestrians, cyclists, and road users. | Considering programming traffic lights to enable a safer passage for motorists. | Signs advising of restricted width due to parked vehicles.<br><br>Increase enforcement of current parking restrictions for HGVs. |  |
| | Junction prone to a hazard as vehicle approach the junction to join the A66. | HGV's, drivers, cyclists, and Motorists. | Install temporary traffic signals at the junction.<br><br>Consider carrying out some local improvements to improve sight lines.<br><br>Option to remove right turn across traffic and keep left turn only and orientate around the roundabout. | Investigate option of re-prioritising junction.<br><br>Advanced warning signs prior to the junction. |  |

| | What are the hazards? (and where?) | Who might be harmed and how? | What are you doing to control the risk? | What further action is needed to control the risk | Images |
|---|---|---|---|---|---|
| | Back up of traffic on Haweswater Road from mini roundabout junction. | HGV's, drivers, cyclists, and Motorists.<br><br>Drivers' frustration | Enhanced signs need to be erected to keep junction clear.<br><br>The speed limit will be reduced because the diversion route will probably be used overnight. | Portable variable message signing (VMS) that has electronic messages that can be programmed to suit any conditions.<br><br>Adopting traffic to flow one way at a time. |  |

# Diversion Route 11: B5288 Motherby to A592 Ullswater Road


This is not the preferred route as assessed

This route is applicable to the following potential diversion scenarios included in Appendix B:

- A66 Eastbound Arm closed off

# Diversion route 11 considerations

| | What are the hazards? (and where?) | Who might be harmed and how? | What are you doing to control the risk? | What further action is needed to control the risk | Images |
|---|---|---|---|---|---|
| | U3484 Mile Lane unsuitable for diversions but may be subject to “rat-running” | Pedestrians, cyclists, and road users.<br>HGV’s<br>Local people who would not be expecting an increase road usage. | Erecting temporary signs of restrictions for closure and local access only. | Advanced VMS warning signs for diversion traffic. |  |
| | B5288 is a single carriageway usable for two-way traffic from Motherby to Penrith however as additional HGV’s will utilise the route, the traffic could increase as there are no additional lanes for overtaking vehicles. The road would need to be widened over substantial length to take 2-way traffic which would need to cater for local vehicles in addition to diversion traffic.<br><br>No laybys along the route should a breakdown occur.<br><br>No kerbs or over the edge drainage.<br><br>No footway or NMU provision. | Pedestrians, cyclists, and horses Residential properties. | The speed limit will be reduced because the diversion route will probably be used overnight.<br><br>New signing & lining. | Depending on the time of the year, localised lighting may be required at pinch points, and this would need to be monitored for on-going suitability.<br><br>Verge protection and drainage of low spots may be required.<br><br>Ensuring recovery vehicles are available should a breakdown occur. |  |

| | What are the hazards? (and where?) | Who might be harmed and how? | What are you doing to control the risk? | What further action is needed to control the risk | Images |
|---|---|---|---|---|---|
| | Blind Humps on B5288, including Pallet Hill. | HGV's, drivers, cyclists, and Motorists. | Enhanced signs need to be erected displaying 'Blind Hump Ahead'<br><br>The speed limit will be reduced because the diversion route will probably be used overnight. | Portable variable message signing (VMS) that has electronic messages that can be programmed to suit any conditions. |  |
| | B5288 junctions are prone to poor visibility. | HGV's, cyclists, and Motorists. | Install temporary traffic signals at the junction.<br><br>Consider carrying out some local improvements to improve sight lines.<br><br>Erecting temporary traffic signals. | Investigate option of re-prioritising junction Advanced warning signs prior to the junction. |  |
| | Clash of priority at junction in Mile Lane B5288. | Pedestrians and motorists. | Erecting temporary traffic signals. | Advanced warning signs prior to the junction. |  |

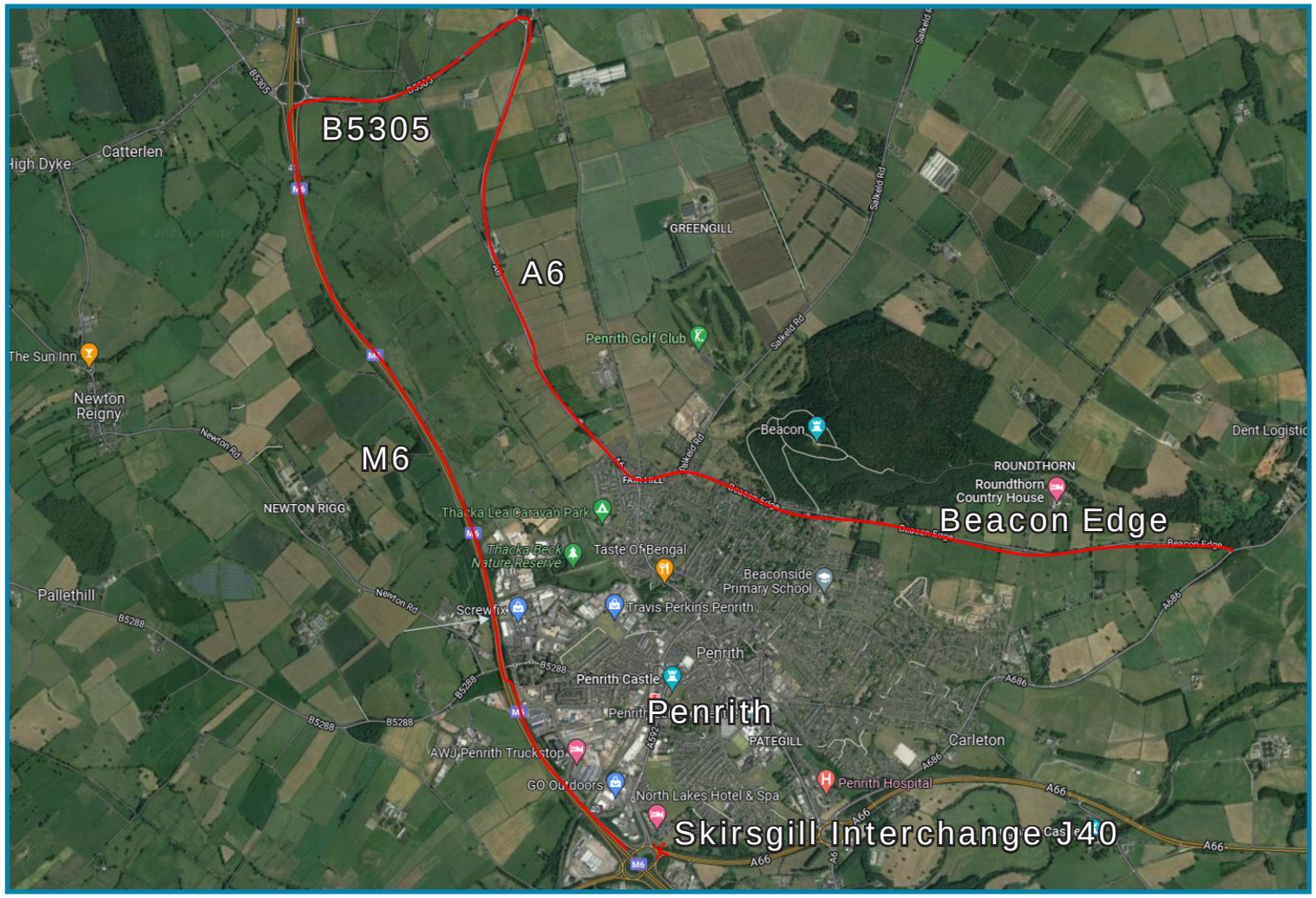
| | What are the hazards? (and where?) | Who might be harmed and how? | What are you doing to control the risk? | What further action is needed to control the risk | Images |
|---|---|---|---|---|---|
| | Adjacent properties within the B5288 route - restricted road width.<br><br>Risk of alternative access to this diversion route used from Motherby through Penrith which would suffer disruption from Heavy Good Vehicle's and noise pollution. | HGV's, cyclists, and Motorists.<br><br>Local people who would not be expecting an increase road usage. | Erect temporary signs and also ensure site traffic do not use this route. | Leaflets to people affected to advise of possible changes to traffic pattern. |  |
| | B5288 route to Penrith with narrow or no verges suitable for NMU safe zones. | Horses, HGV's, road users, pedestrian, cyclist in build-up areas approaching Pallet Hill. | Erecting temporary signs at Motherby or improving sight line for left turn traffic by carrying out local regarding to improve sight lines. Lowering the speed limit is not ideal in this instance since the location is already a designated secondary road. | Advanced VMS warning signs for diversion traffic. |  |

| | What are the hazards? (and where?) | Who might be harmed and how? | What are you doing to control the risk? | What further action is needed to control the risk | Images |
|---|---|---|---|---|---|
| | Residential parked cars on road approaching Greystoke making route quite narrow. | Pedestrians, cyclists, and road users. | Considering programming traffic lights to enable a safer passage for motorists. | Signs advising of restricted width due to parked vehicles. Parking restrictions with compensation parking on suitable plot close by. |   |
| | Local schools / nurseries on the B5288, Greystoke. | Diversion on B5288 will push more heavy traffic onto local roads adjacent to schools. | Visit schools and stress the dangers to the children.<br><br>Programme of diversion usage to be outside school hours. | Advise motorists of the schools.<br><br>Restrict pick up and drop off parking close to the school. |  |

| | What are the hazards? (and where?) | Who might be harmed and how? | What are you doing to control the risk? | What further action is needed to control the risk | Images |
|---|---|---|---|---|---|
| | Sharp bend on B5288, Greystoke. | Motorists not expecting the severe bend. | Consider local improvements to the bend.<br><br>Lowering the speed limit is not ideal in this instance since the location is already a designated secondary road. | Erecting warning signs as required. |  |
| | Haweswater Road is an industrial estate, with no double yellow lines; HGVs are parked on the side of the road making route narrow. | Pedestrians, cyclists, and road users. | Considering programming traffic lights to enable a safer passage for motorists. | Signs advising of restricted width due to parked vehicles.<br><br>Increase enforcement of current parking restrictions for HGVs. |  |

| | What are the hazards? (and where?) | Who might be harmed and how? | What are you doing to control the risk? | What further action is needed to control the risk | Images |
|---|---|---|---|---|---|
| | Junction prone to a hazard as vehicle approach the junction to join the A66. | HGV's, drivers, cyclists, and Motorists. | Install temporary traffic signals at the junction.<br><br>Consider carrying out some local improvements to improve sight lines.<br><br>Option to remove right turn across traffic and keep left turn only and orientate around the roundabout | Investigate option of re-prioritising junction.<br><br>Advanced warning signs prior to the junction. |  |
| | Back up of traffic on Haweswater Road from mini roundabout junction. | HGV's, drivers, cyclists, and Motorists.<br><br>Drivers' frustration | Enhanced signs need to be erected to keep junction clear.<br><br>The speed limit will be reduced because the diversion route will probably be used overnight. | Portable variable message signing (VMS) that has electronic messages that can be programmed to suit any conditions.<br><br>Adopting traffic to flow one way at a time. |  |

# Diversion Route 12: M6 J40 to Beacon Edge




This route is applicable to the following potential diversion scenarios included in Appendix B:

- A66 Eastbound Arm closed off – diversion for HGV's
- A66 Westbound Arm closed off

# Diversion route 12 considerations

| | What are the hazards? (and where?) | Who might be harmed and how? | What are you doing to control the risk? | What further action is needed to control the risk | Images |
|---|---|---|---|---|---|
| | Restricted road width as cyclists use the A6. | Roads users, cyclists, HGV's drivers. | Signs need to be erected displaying cyclists will utilise the route.<br><br>Erect warning signs at key location.<br><br>The speed limit will be reduced because the diversion route will probably be used overnight. | Propose a cycle way – soft verges along to the route could benefit for a cycle way for future connectivity. |  |
| | No hard strips on the mainline road. There are some laybys, however the route could benefit for additional width for any vehicle breakdowns. | Roads users, HGV's, local drivers. | Signs need to be erected displaying locations for emergency stops. | Ensuring recovery vehicles are available should a breakdown occur. |  |

| | What are the hazards? (and where?) | Who might be harmed and how? | What are you doing to control the risk? | What further action is needed to control the risk | Images |
|---|---|---|---|---|---|
| | The A6 is a single carriageway suitable for two-way traffic from Fair Hill to Catterlen Interchange roundabout including the B5305, however as additional HGV's will cause overtaking frustration.<br><br>This traffic increase will exacerbate the accident black spot at Milestone House (small industrial complex).<br><br>No kerbs or over the edge drainage.<br><br>No footway or NMU provision. | Pedestrians, cyclists, and horses.<br><br>Residential properties.<br><br>Farming staff. | The speed limit will be reduced because the diversion route will probably be used overnight.<br><br>New signing & lining. | Depending on the time of the year, localised lighting may be required at pinch points, and this would need to be monitored for on-going suitability.<br><br>Verge protection and drainage of low spots may be required. Ensuring recovery vehicles are available should a breakdown occur. |  |
| | Narrow Road width – unsuitable for two-way traffic on Beacon Edge.<br><br>Risk of alternative access to this diversion route would suffer disruption from Heavy Good Vehicle's and noise pollution. | HGV's, drivers, cyclists, and Motorists.<br><br>Local people who would not be expecting an increase road usage. | Lowering the speed limit.<br><br>Consider carrying out some local improvements to improve sight lines.<br><br>Erecting temporary traffic signals. | Localised lighting may be required at pinch points, and this would need to be monitored for on-going suitability Verge protection and drainage of low spots may be required. Ensuring recovery vehicles are available should a breakdown occur.<br><br>Advanced VMS warning signs for diversion traffic. |  |

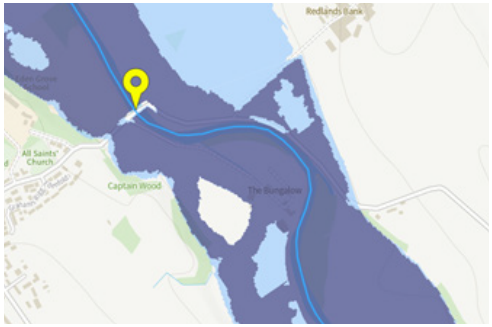
| What are the hazards? (and where?) | Who might be harmed and how? | What are you doing to control the risk? | What further action is needed to control the risk | Images |
|---|---|---|---|---|
| Risk turning out onto A686 from Beacon Edge. | HGV's, drivers, cyclists, and Motorists. | Consider carrying out some local improvements to improve sight lines. Erecting temporary traffic signals. | |   |
| Carleton Hill Road has poor visibility in place, and with a narrow road width which is unsuitable for diversion traffic. Poor vertical alignment and sightlines by may be tempted to cut the corner onto Beacon Edge as a "rat-run" | HGV'S/Drivers, cyclists, and horses.<br><br>Tourists. | Erecting signs displaying 'No Through Route' or local vehicles only. | Ensuring contractor to not utilise this route.<br><br>Check route for emergency turnaround if mis-used. |  |
| Parked cars on road through Beacon Edge making the route narrow for two-way traffic. | Pedestrians, cyclists, and road users.<br><br>Local people who would not be expecting an increase road usage and the different types of vehicles using this route. | Considering programming traffic lights to enable a safer passage for motorists.<br><br>Parking restrictions.<br><br>Alternative route for HGV's. | Signs advising of restricted width due to parked vehicles.<br><br>Parking restrictions with compensation parking. |  |

| | What are the hazards? (and where?) | Who might be harmed and how? | What are you doing to control the risk? | What further action is needed to control the risk | Images |
|---|---|---|---|---|---|
| | Mini roundabout not suitable for HGVs at Salked Road on Beacon Edge. | HGV's. | Erect temporary signs and also ensure site traffic do not use this route. | Advanced VMS warning signs for diversion traffic.<br><br>A vehicle tracking/swept path analysis will need to be undertaken to determine if this could still be an option. |  |
| | The route is prone to frequent congestion at J40 leading to driver frustration and safety concerns on the M6 southbound diverge deteriorating. | Pedestrians, cyclists, and road users.<br><br>Local people who use the junction regularly will see increase in congestion frequency. | Advanced VMS warning signs for diversion traffic. | Signs advising of increased congestion due to diversions.<br><br>Leaflets in Local shops etc to advise impacts |  <br>  |

# Route 13: Rat Run Temple Sowerby to Bolton

# Route 13

| What are the hazards? (and where?) | Who might be harmed and how? | What are you doing to control the risk? | What further action is needed to control the risk | Images |
|---|---|---|---|---|
| 2292<br>Narrow Ousentend Bridge with 17t weight restriction planned. Very narrow road with soft verges single-track road - unsuitable for diversion traffic. | HGV's, Pedestrians, horses, cyclists. | Erecting temporary signs or lowering the speed limit is not ideal in this instance since the location is already a designated secondary road.<br>Erecting signs on the A66 displaying 'No Through Route' for A66 vehicles or Local vehicles only (No traffic A66 vehicles). | Advanced VMS warning signs for diversion traffic and temporary one-way traffic prior vehicles entering the bridge for one way system. |  |
| 2287, 2289, 2290<br>Sharp bend at Bolton Bridge giving poor visibility of oncoming vehicles on the single carriageway bridge. | HGV's Pedestrians, horses, cyclists. | Utilising the route as a one-way system only when not conflicting with combination of other routes in opposite direction. | Portable variable message signing (VMS) that has electronic messages that can be programmed to suit any conditions.<br><br>Ensuring recovery vehicles are available should the need occur and turnaround facility to redirect restricted vehicles. |  |

| | What are the hazards? (and where?) | Who might be harmed and how? | What are you doing to control the risk? | What further action is needed to control the risk | Images |
|---|---|---|---|---|---|
| | | | | Advising any residents on the route when the one way system would be in operation.<br><br>Confirm bridge capacity and flood risk. |  <br>  |
| | Flood zone 3 on eastern approach of C3047 eastern approach. | All motorists. | Consider alternative routes to avoid this road in severe weather. | Portable variable message signing (VMS) that has electronic messages that can be updated to reflect flooding conditions. |  |

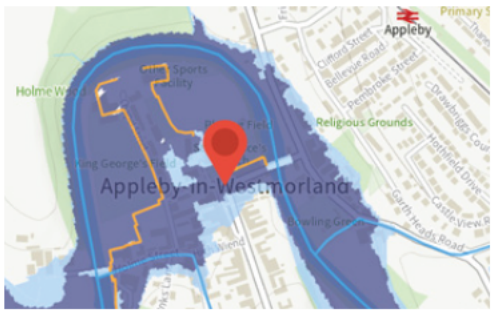
| | What are the hazards? (and where?) | Who might be harmed and how? | What are you doing to control the risk? | What further action is needed to control the risk | Images |
|---|---|---|---|---|---|
| | 2288<br>Existing road in poor condition. | Pedestrians, cyclists, and horses, motorists, HGV drivers. | Erect warning signs at the location.<br><br>Traffic Control Devices to be adopted to control the traffic would go a long way in improving driving safety | Road Markings: The markings on the roadway should be highly visible and understandable to motorists and HGV vehicles.<br><br>Road Surface - Road surface is another element to be considered and implemented for the existing roads condition.<br><br>Remove discrete lengths of existing hedge bank/wall and trees and reinstate the verge for widening the roads widths for better vision and condition. |  |

# Route 14: Rat Run Long Marton to Brampton via Appleby

# Route 14

| What are the hazards? (and where?) | Who might be harmed and how? | What are you doing to control the risk? | What further action is needed to control the risk | Images |
|---|---|---|---|---|
| Tight radii and line of sight at junction off A66 onto B6542 Appleby.<br><br>Vehicles travelling too fast causing accidents. | Tourists, motorists & HGV drivers not expecting the bends at the junction. | Consider local improvements to the bends for those using this rat run. | Erecting warning signs as required.<br><br>Assess the speed limit on the approaches. |  |
| Poor vertical alignment and restricted overtaking on B6542 at Bank End. | HGV's, drivers, cyclists, and motorcyclists. | Enhanced signs need to be erected displaying 'Blind Crest Ahead'.<br><br>The speed limit will be reduced because the diversion route will probably be used overnight. | Portable variable message signing (VMS) that has electronic messages that can be programmed to suit any conditions. |  |
| Narrow road widths on B6542, on eastern approach to Appleby.<br><br>Poor verges. | Pedestrians, cyclists, and horses Tourists. | Consider carrying out some local improvements to improve sight lines. Erecting signs on the A66 displaying 'No Through Route' for A66 vehicles or Local vehicles only (No traffic A66 vehicles). | Verge protection and drainage of low spots may be required.<br><br>Ensuring recovery vehicles are available should a breakdown occur on this rat run. |  |

| | What are the hazards? (and where?) | Who might be harmed and how? | What are you doing to control the risk? | What further action is needed to control the risk | Images |
|---|---|---|---|---|---|
| | Blind corner on bridge over disused railway giving poor visibility of oncoming vehicles. | HGV's Pedestrians, horses, cyclists. | Additional signage and enforcement. | Further assessment of swept path for new traffic at bridge crossing. |  |
| | Rail overbridge of Settle-Carlisle line. | Pedestrians, cyclists, and motorists.<br><br>Tourists.<br><br>HGV's by striking the bridge. | Additional signage and enforcement. | Further assessment of risk of bridge strikes.<br><br>Additional restriction or mitigation measures as appropriate to change in risk. |  |
| | Parked cars and weight restriction on B6542 through Appleby making the route narrow for two-way traffic.<br><br>Limited footway widths for discrete lengths.<br><br>17t weight restriction on St. Lawrence's Bridge in village. | Pedestrians, cyclists, and road users.<br><br>Local people who would not be expecting an increase road usage and the different types of vehicles using this route.<br><br>Ran run traffic misusing routes over bridges. | Considering programming traffic management to enable a safer passage for motorists.<br><br>Parking restrictions.<br><br>Restrictions for HGV's specific to this rat run. | Signs advising of restricted width due to parked vehicles.<br><br>Parking restrictions with compensation parking. |  |

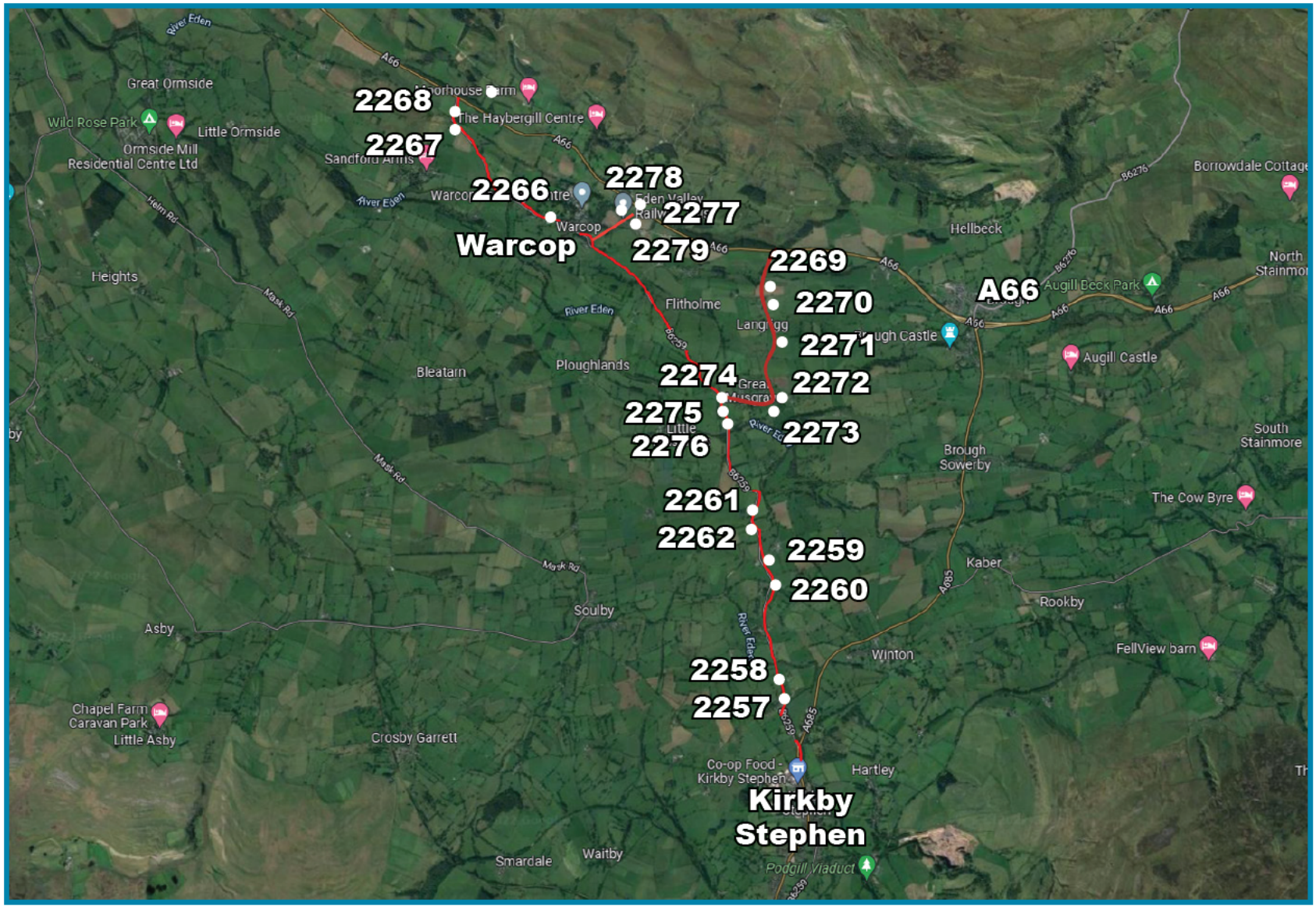
| | What are the hazards? (and where?) | Who might be harmed and how? | What are you doing to control the risk? | What further action is needed to control the risk | Images |
|---|---|---|---|---|---|
| | Crossing Points.<br><br>Pedestrians crossing the road indiscriminately. | Pedestrians, HGV's & drivers. | Additional pedestrian barriers to funnel at crossings. | Leaflets in local shops etc to advise dangers. |  |
| | Carriageway length subject to risk of flooding in village. | Pedestrians, cyclists, and horses.<br><br>Motorists. | Additional signage and enforcement.<br><br>Erecting signs on the A66 displaying 'No Through Route' for A66 vehicles or Local vehicles only (No traffic A66 vehicles). | Strategic plan to deal with official diversion and rat run routes subject to the same flooding incident. |  |
| | Schools (nursery, primary and grammar). | Pedestrians, cyclists, and motorists. | Visit schools and stress the dangers to the children. | Erecting signs on the A66 displaying 'No Through Route'. |  |

| | What are the hazards? (and where?) | Who might be harmed and how? | What are you doing to control the risk? | What further action is needed to control the risk | Images |
|---|---|---|---|---|---|
| | Skewed access through stone underbridge of Settle-Carlisle railway line on Long Marton Road. | HGV's Pedestrians, horses, cyclists. | Additional signage and enforcement. | Further assessment of swept path for new traffic at bridge crossing. |  |
| | Appleby Horse Fair attracting 40k visitors to town centre.<br><br>Increased horse WCHR use during annual window of fair. | Horses, cyclists and pedestrians.<br><br>Motorists and HGV drivers. | Erecting signs on the A66 displaying 'No Through Route' for A66 vehicles or Local vehicles only (No traffic A66 vehicles). | Coordination of construction phased TM plans with fair's own TM plan. |  |
| | 2284<br>Junction prone to poor visibility to join the diverted route to Penrith. Narrow road width. Unsuitable for two-way traffic. | HGV's Pedestrians, horses, cyclists. | Erecting temporary signs or lowering the speed limit is not ideal in this instance since the location is already a designated secondary road.<br><br>Install temporary traffic signals at the junction. Consider carrying out some local improvements to improve sight lines. | Advanced VMS warning signs for diversion traffic and temporary one-way traffic.<br><br>Investigate option of re-prioritising junction. |  |

| | What are the hazards? (and where?) | Who might be harmed and how? | What are you doing to control the risk? | What further action is needed to control the risk | Images |
|---|---|---|---|---|---|
| | 2286<br>This route has a poor visibility, particularly at a sharp bend in the road. Currently local traffic use the road in both directions and have become familiar with oncoming traffic.<br><br>However, the road would not be suitable for the additional diverted traffic which may result in accidents and therefore is not suitable for a 2 way-traffic. | Pedestrians, cyclists, and horses.<br><br>The road has properties with access.<br><br>Diversion stranded vehicles and occupants would benefit from lay-bys. | Utilising the route as a one-way system.<br><br>A one-way usage with improvements to sight lines at any areas of concern would enable diverted traffic to safely use the route. | Portable variable message signing (VMS) that has electronic messages that can be programmed to suit any conditions.<br><br>Ensuring recovery vehicles are available should the need occur. Advising any residents on the route when the one way system would be in operation. |  |
| | 2283/2282<br>Low bridge 14' 9" at the location and a sharp bend on approach with narrow road width.<br><br>No verge for NMU refuge. | Pedestrians, cyclists, and horses would be endangered, and the road goes through a small community adjacent to the hall.<br><br>Tourists.<br><br>HGV's by striking the low bridge. | Signs need to be erected displaying 'No Entry Very Low Bridge' at Brampton. | Erect diversion signs to direct traffic that have come from the A66 along the one-way system route to Bramton. |  <br>  |

| | What are the hazards? (and where?) | Who might be harmed and how? | What are you doing to control the risk? | What further action is needed to control the risk | Images |
|---|---|---|---|---|---|
| | 2281<br>The route continues to the A66 with road width restrictions unsuitable for two-way traffic. | Pedestrians, cyclists, and horses, farmers, motorists, HGV drivers. | Erecting signs on the A66 displaying 'Restricted width ahead sign'.<br><br>Erect warning signs at the location. | Road Markings: The markings on the roadway should be highly visible and understandable to motorists and HGV vehicles. |  |
| | 2280<br>Restricted residential property adjacent to the area. | Pedestrians, cyclists, and horses, farmers, motorists, HGV drivers. | Erect warning signs at the location. | Contact homeowners and advise advise of possible changes to traffic pattern. |  |

# Route 15: Rat Run B6542 through Warcop, via Great Musgrave to Kirkby Stephen



# Route 15

| What are the hazards? (and where?) | Who might be harmed and how? | What are you doing to control the risk? | What further action is needed to control the risk | Images |
|---|---|---|---|---|
| 2268<br>Narrow road restricted width – unsuitable for a two-way traffic with poor line sighting.<br><br>Existing road in poor condition. | HGV's Pedestrians, horses, cyclists. | Erecting temporary signs or lowering the speed limit.<br><br>Advanced VMS warning signs for diversion traffic and temporary one-way traffic prior to vehicles entering the bridge for one way system. | Road Markings: The markings on the roadway should be highly visible and understandable to motorists and HGV vehicles.<br><br>Road surfacing the existing condition and reinstating the verge for widening the roads widths for better vision and condition. |  |
| 2267<br>From Warcop to Kirkby Stephens should not be used due to the 12' 3" low bridge.<br><br>However, there is no reason why locals should continue to use the route.<br><br>No verge for NMU refuge. | HGV's Pedestrians, horses, cyclists. | Signs need to be erected displaying 'No Entry Very Low Bridge'. | Erect diversion signs to direct traffic that have come from the A66 along the two-way system route from Warcop junction Kirkby Stephen. |  |

| | What are the hazards? (and where?) | Who might be harmed and how? | What are you doing to control the risk? | What further action is needed to control the risk | Images |
|---|---|---|---|---|---|
| | 2266<br>Local schools / nurseries in the area.<br><br>Flooding in Warcop village.<br><br>No footway available. | HGV's Pedestrians, cyclists. | Reducing speed limit and /or signs advising of hazard.<br><br>Visit schools and stress the dangers to the children.<br><br>Temporary signs warning of flood events. | Advise motorists of school approaches.<br><br>Time diversions outside of school terms and avoid pick up/drop off peak activity or contractor to not utilise this route.<br><br>Advance warning of flood events and alternative routes pre-planned. |  <br>  |
| | 2277<br>From Warcop to Kirkby Stephens should not be used due to the 13' 4'' low bridge.<br><br>However, there is no reason why locals should continue to use the route.<br><br>No verge for NMU refuge. | HGV's Pedestrians, cyclists. | Signs need to be erected displaying 'No Entry Very Low Bridge'. | Erect diversion signs to direct traffic that have come from the A66 along the two-way system route from Warcop junction Kirkby Stephens. |  |

| | What are the hazards? (and where?) | Who might be harmed and how? | What are you doing to control the risk? | What further action is needed to control the risk | Images |
|---|---|---|---|---|---|
| | 2278<br>The junction is prone to poor visibility at Warcop (Eden Warcop Rail station). | HGV'S Pedestrians, cyclists, and horses. | Install temporary traffic signals at the Eden Valley Railway Trust junction.<br><br>Consider carrying out some local improvements to improve sight lines. | Investigate option of re-prioritising junction. |  <br>  |
| | 2269/2270<br>This is a very narrow single-track road – Unsuitable for diversion traffic. | HGV'S Pedestrians, cyclists, and horses. | Erecting signs on the A66 displaying 'No Through Route' for A66 vehicles or Local vehicles only (No traffic A66 vehicles). | Ensuring contractor knows this will not be used. |  <br>  |

| | What are the hazards? (and where?) | Who might be harmed and how? | What are you doing to control the risk? | What further action is needed to control the risk | Images |
|---|---|---|---|---|---|
| | 2271<br>Narrow sing-track road – Unsuitable for one two-way traffic. | HGV's, Pedestrians, cyclists, and horses. | Erecting temporary signs or carrying out local regarding to improve sight lines.<br><br>Lowering the speed limit. | Advanced VMS warning signs for diversion traffic for the sharp bend from A66 to start diversion route. |  |
| | 2272/2273<br>This route is not suitable for any diversion traffic because it is very narrow with soft verges in places and has many undulations with poor sight lines. | Pedestrians, horses, cyclists (as this is a designed cycle route). | Erecting signs on the A66 displaying 'No Through Route' for A66 vehicles or Local vehicles only (No traffic A66 vehicles). | Ensuring contractor knows this will not be used. |  <br>  |

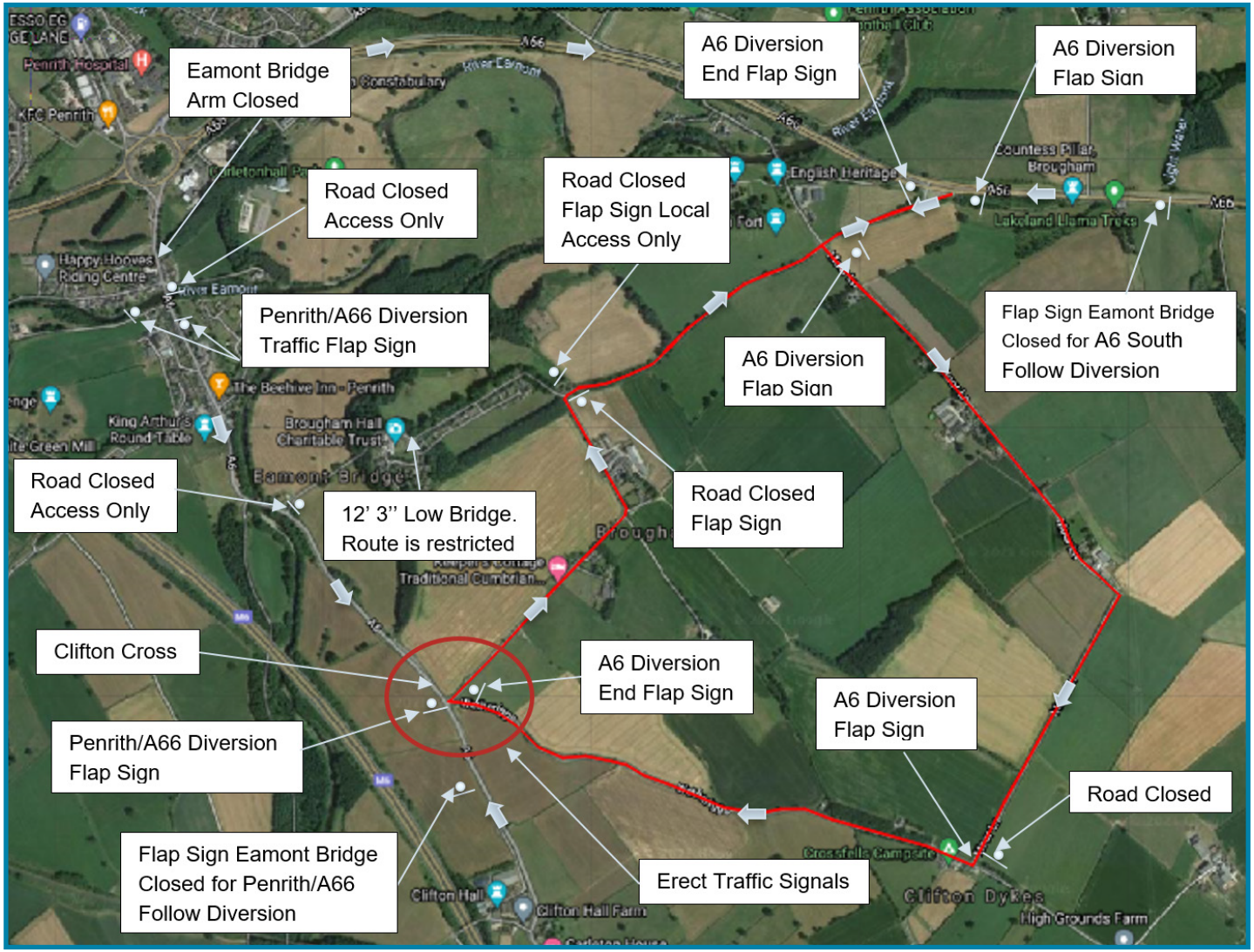
| | What are the hazards? (and where?) | Who might be harmed and how? | What are you doing to control the risk? | What further action is needed to control the risk | Images |
|---|---|---|---|---|---|
| | 2274<br>This route is not appropriate for any diversion traffic and for a two-way system because it is very narrow with no verges in places. | HGV'S/Drivers, cyclists, and horses.<br><br>Tourists. | Erecting signs on the A66 displaying 'No Through Route' for A66 vehicles or Local vehicles only (No traffic A66 vehicles). | Ensuring contractor knows this will not be used. |  |
| | 2275/2276<br>The junction is prone to poor visibility on B6259 joining Musgrave Lane junction. | HGV'S/Drivers, cyclists, and horses.<br><br>Tourists. | Install temporary traffic signals at the Musgrave Lane junction<br>Consider carrying out some local improvements to improve sight lines. | Investigate option of re-prioritising junction. |  |
| | 2264/2263<br>There is a narrow width which is unsuitable for two-way traffic with soft or no verges in place, and on Eastfield Bridge. | HGV'S/Drivers, cyclists, and horses.<br><br>Tourists. | Lowering the speed limit<br>Utilising the route as a one-way system, only when not conflicting with other combination of TM scenarios in opposite direction. | Portable variable message signing (VMS) that has electronic messages that can be programmed to suit any conditions.<br><br>Ensuring recovery vehicles are available should the need occur. Advising any residents on the route when the one way system would be in operation. |  <br>  |

| | What are the hazards? (and where?) | Who might be harmed and how? | What are you doing to control the risk? | What further action is needed to control the risk | Images |
|---|---|---|---|---|---|
| | 2262/2261<br>Warcop to Kirkby Stephen has poor visibility in place, particularly at a sharp bend on Appleby Road at Great Musgrave bridge. Currently local traffic use the road in both directions and have become familiar with oncoming traffic.<br><br>However, the road would not be suitable for the additional diverted traffic which may result in accidents and therefore is not suitable for a 2 way-traffic. | HGV's, Pedestrians, cyclists, and horses. | Utilising the route as a one-way system/ Lowering the speed limit. | Portable variable message signing (VMS) that has electronic messages that can be programmed to suit any conditions.<br><br>Ensuring recovery vehicles are available should the need occur. Advising any residents on the route when the one way system would be in operation. |  <br>  |
| | 2260/2259<br>Warcop to Kirkby Stephens has poor visibility in place, and with a narrow road width which is unsuitable for one two-way traffic. Poor vertical alignment and sightlines. | HGV'S/Drivers, cyclists, and horses.<br><br>Tourists. | Erecting signs on the A66 displaying 'No Through Route' for A66 vehicles or Local vehicles only (No traffic A66 vehicles). | Ensuring contractor to not utilise this route. |  |

| | What are the hazards? (and where?) | Who might be harmed and how? | What are you doing to control the risk? | What further action is needed to control the risk | Images |
|---|---|---|---|---|---|
| | 2258/2257<br>Narrow width – This is unsuitable for a two-way traffic. Poor visibility with soft verges/hedge bank in place.<br><br>Poor vertical alignment and sightlines. | HGV'S/Drivers, cyclists, and horses.<br><br>Tourists. | Erect warning signs at the location.<br><br>Traffic Control Devices to be adopted to control the traffic would go a long way in improving driving safety. | Road Markings: The markings on the roadway should be highly visible and understandable to motorists and HGV vehicles.<br><br>Road surfacing the existing condition and reinstating the verge/hedge bank for widening the roads widths for better vision and condition. |  |

# Appendix A – Possible Solution at Brougham Castle

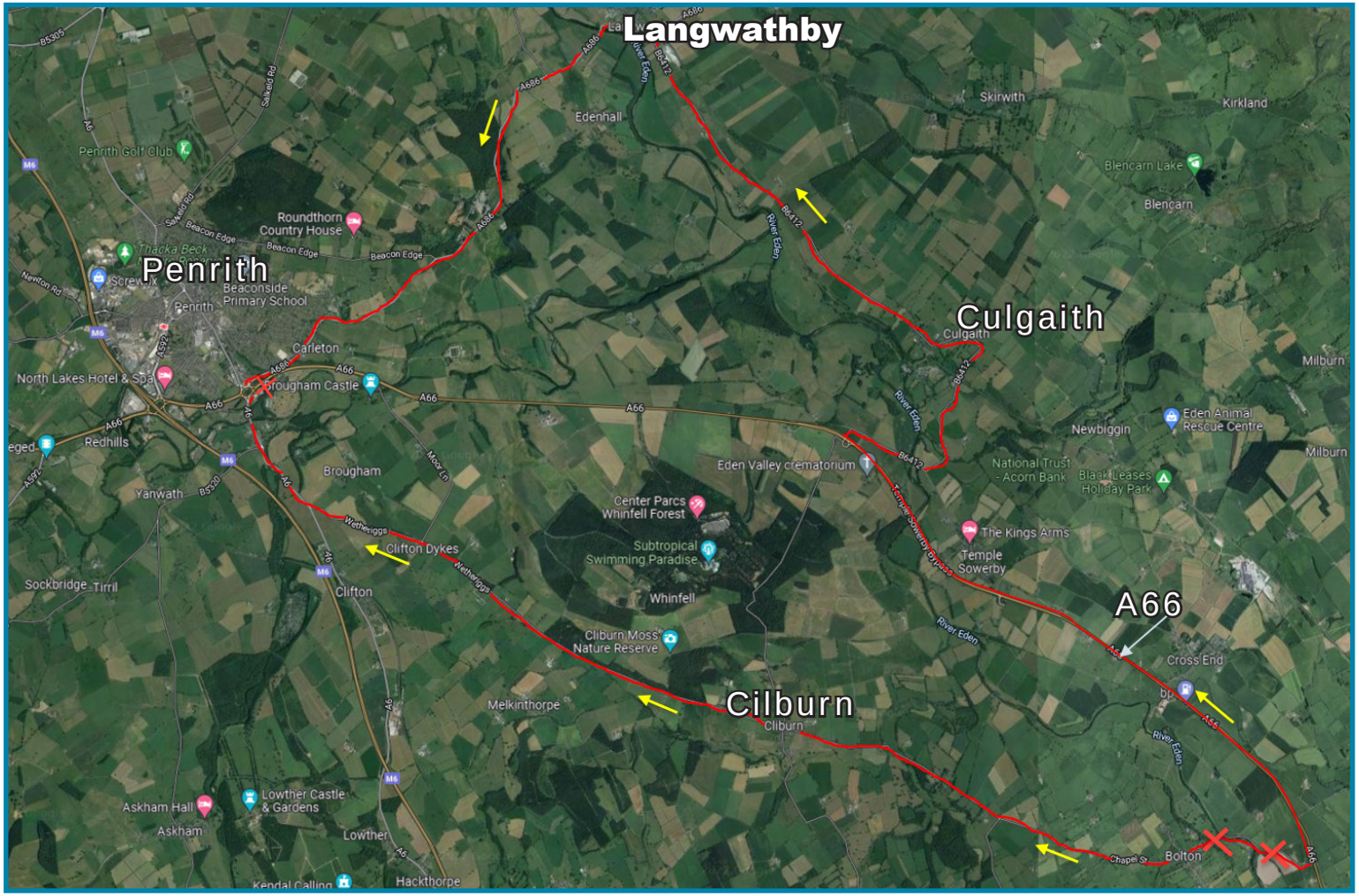
42 A combination of the roads used by Route 2 and Route 3 is shown below. This route was used during Storm Desmond when Eamont Bridge was closed.




43 With the direction of traffic as shown has the benefit of being use if access between Kemplay Bank and Eamont Bridge is closed during the works or due to flooding and provides a link between the A6 and A66. By installing the flap signs as shown and also signalising the Clifton Cross Junction, it could be used by the A66 roadworks diversion traffic as Route 3. 4-way signalised junction would increase queuing, therefore plan to monitor operation of junction without signals and plan to implement only if required. In addition to signalising the junction it is recommended that minor improvements are made to the road layout to assist turning vehicles.

# Appendix B – Penrith Diversion Scenarios

## A66 Westbound Approach to Kemplay Bank closed off




See Diversion Route 7 & 4
See Cliburn to A66 via Bolton utilising Chapel Street Route 8

## Kemplay Bank Roundabout - A6 Bridge Lane Arm closed off


See A592 to Carleton Road Route 9 – at peak periods alternatives to deal with Jct 40 issues

# Kemplay Bank Roundabout - A686 Westbound Arm closed off


See A592 to Carleton Road Route 9

## Skirsgill Interchange J40 - A66 Eastbound Arm closed off


See B5288 Motherby to A592 Ullswater Road Route 11
This is not the preferred route as assessed above

# Skirsgill Interchange J40 - A66 Westbound / Eastbound Arms closed


See Diversion Route 10: Newbiggin to A592 Ullswater Road

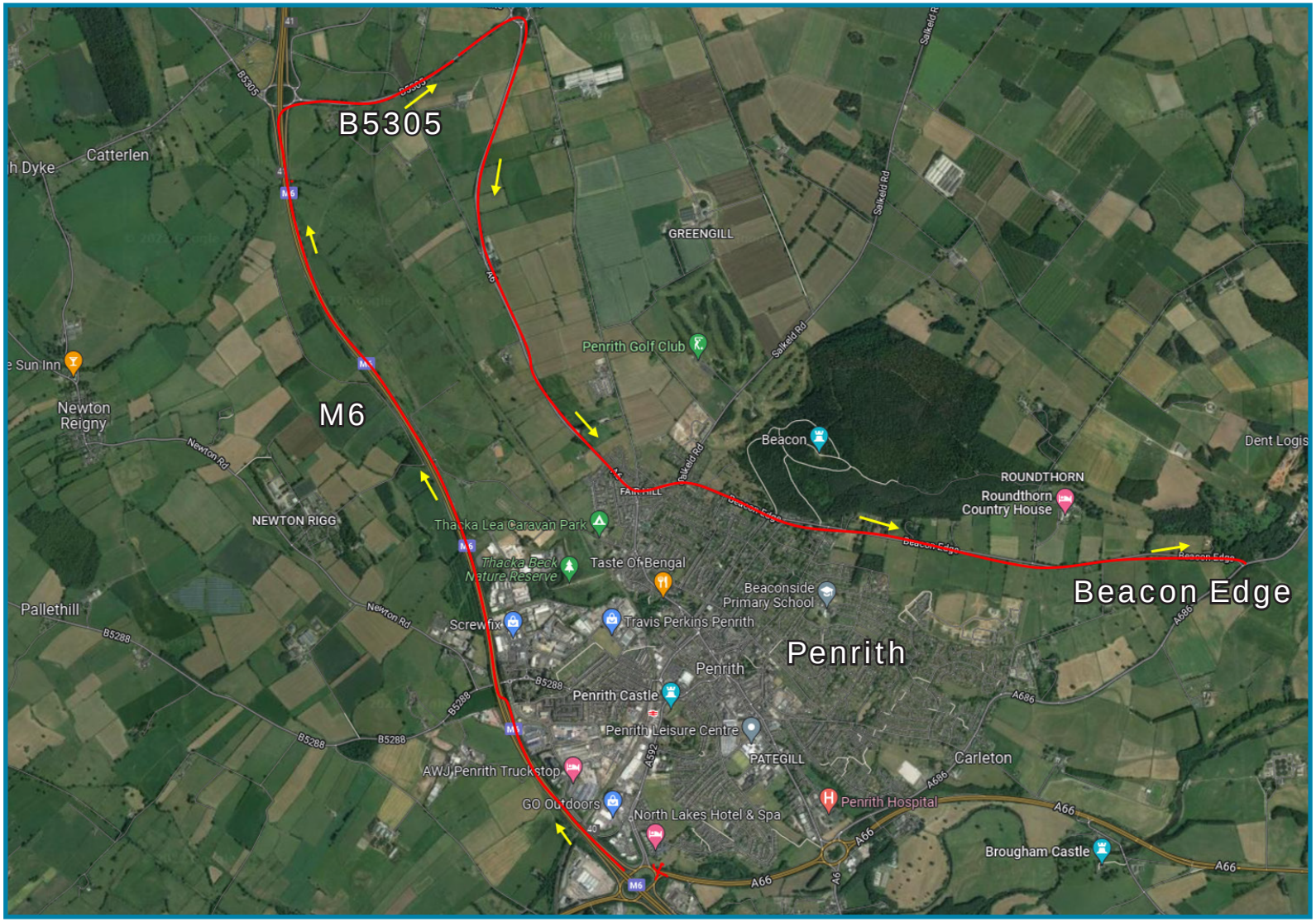
## Skirsgill Interchange J40 - A592 Arm closed off


See A592 to Carleton Road Route 9

# Skirsgill Interchange J40 - A66 Eastbound Arm closed off - Diversion for small vehicles


See A592 to Carleton Road Route 9

## Skirsgill Interchange J40 - A66 Eastbound Arm closed off - Diversion for HGV's

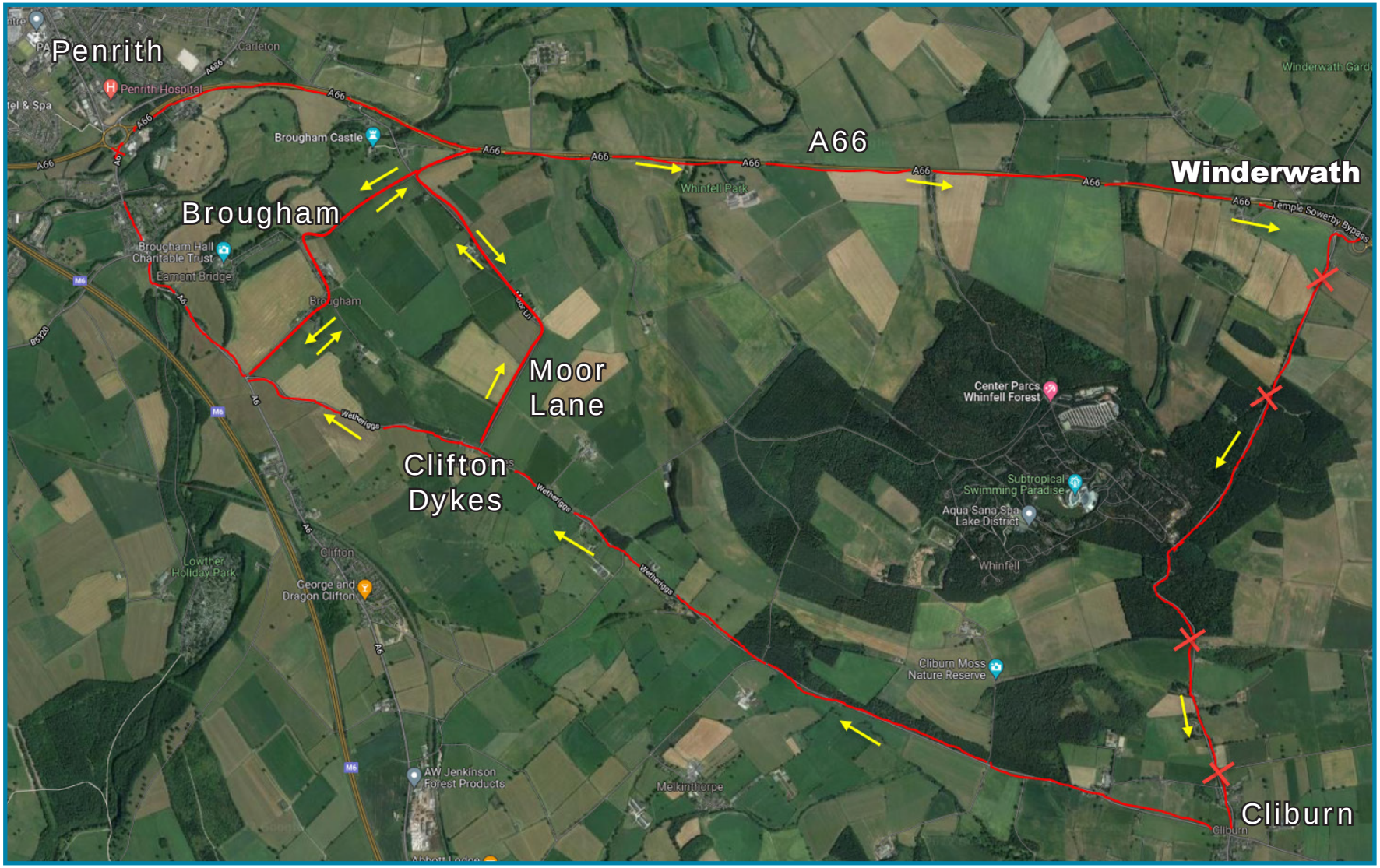



See M6 J40 to Beacon Edge Route 12

# Kemplay Bank Roundabout - A686 Arm closed off


See Diversion Route 7

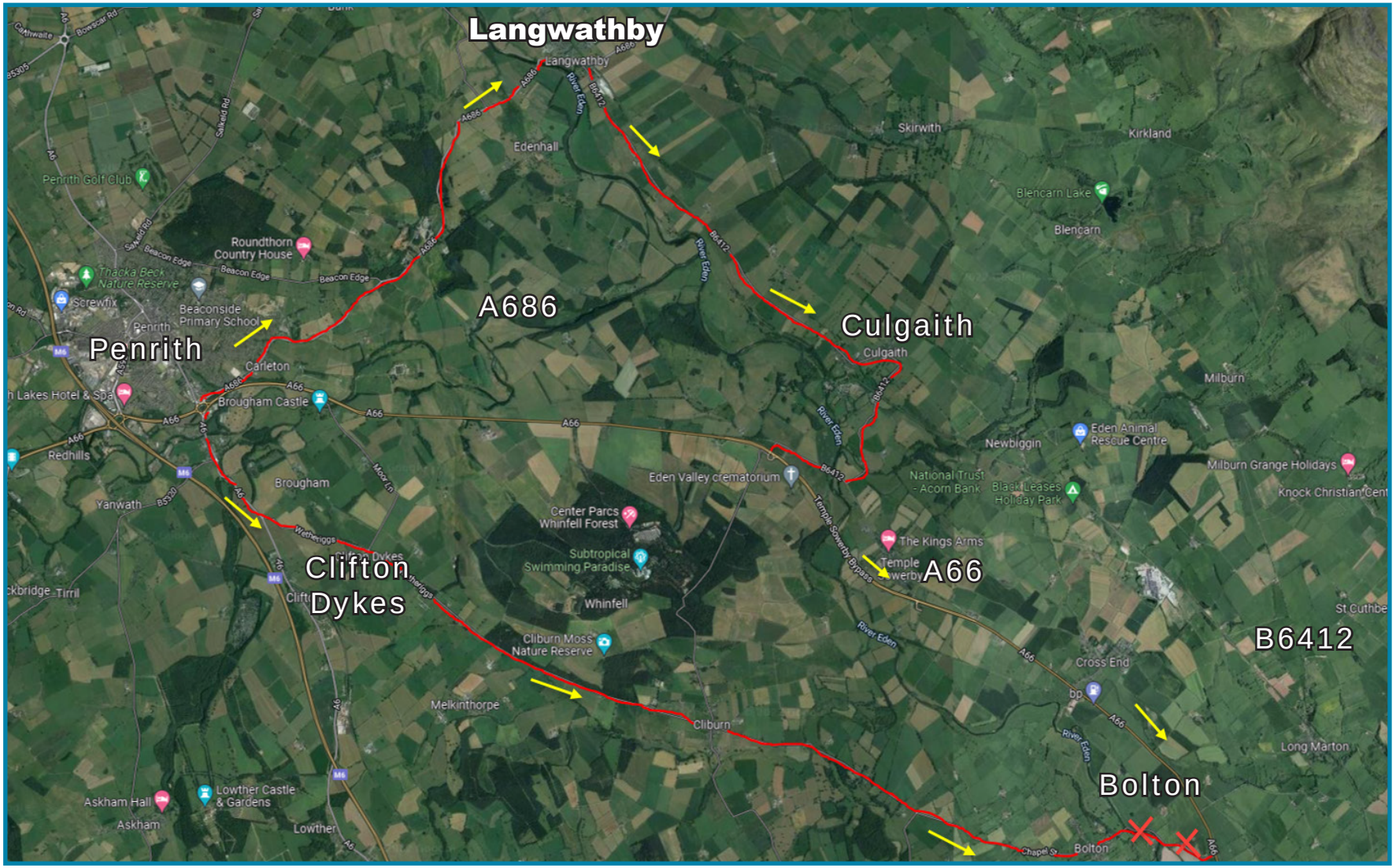
## Kemplay Bank Roundabout - A6 Arm closed off




See Diversion Route 7 & 4

See Diversion Route 2 & 3

# Kemplay Bank Roundabout - A66 Eastbound Arm closed off




See Diversion Route 7 & 4
See Cliburn to A66 via Bolton utilising Chapel Street Route 8

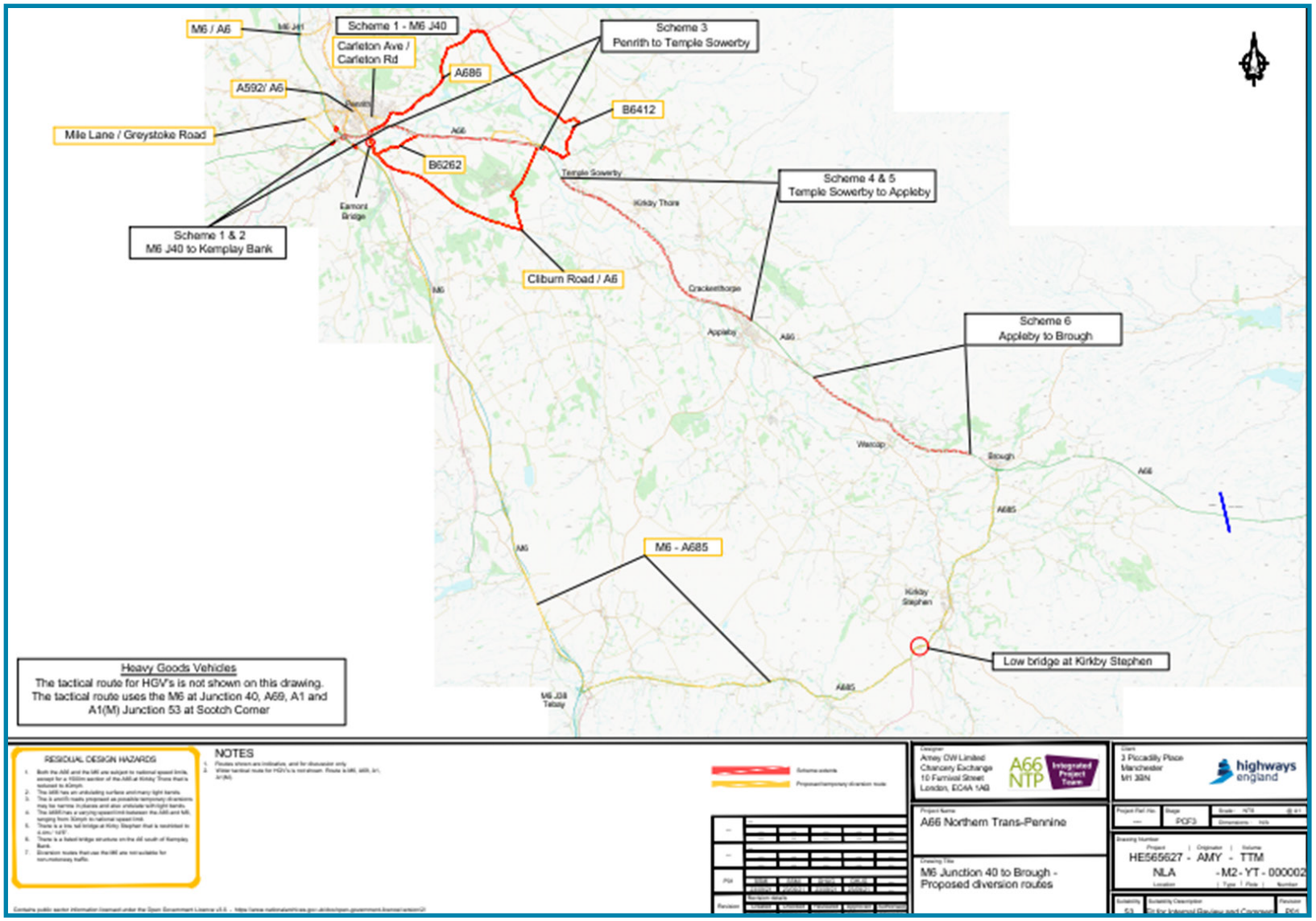
# Appendix C – Accident Data for Kirkby Stephen

Accidents data for Kirkby Stephen has been reviewed to better understand the cause of the accidents. Information has been considered over the last 3 yrs. and locations of accidents are shown on the plan below. There have been six incidents, none of which resulted in any fatalities.

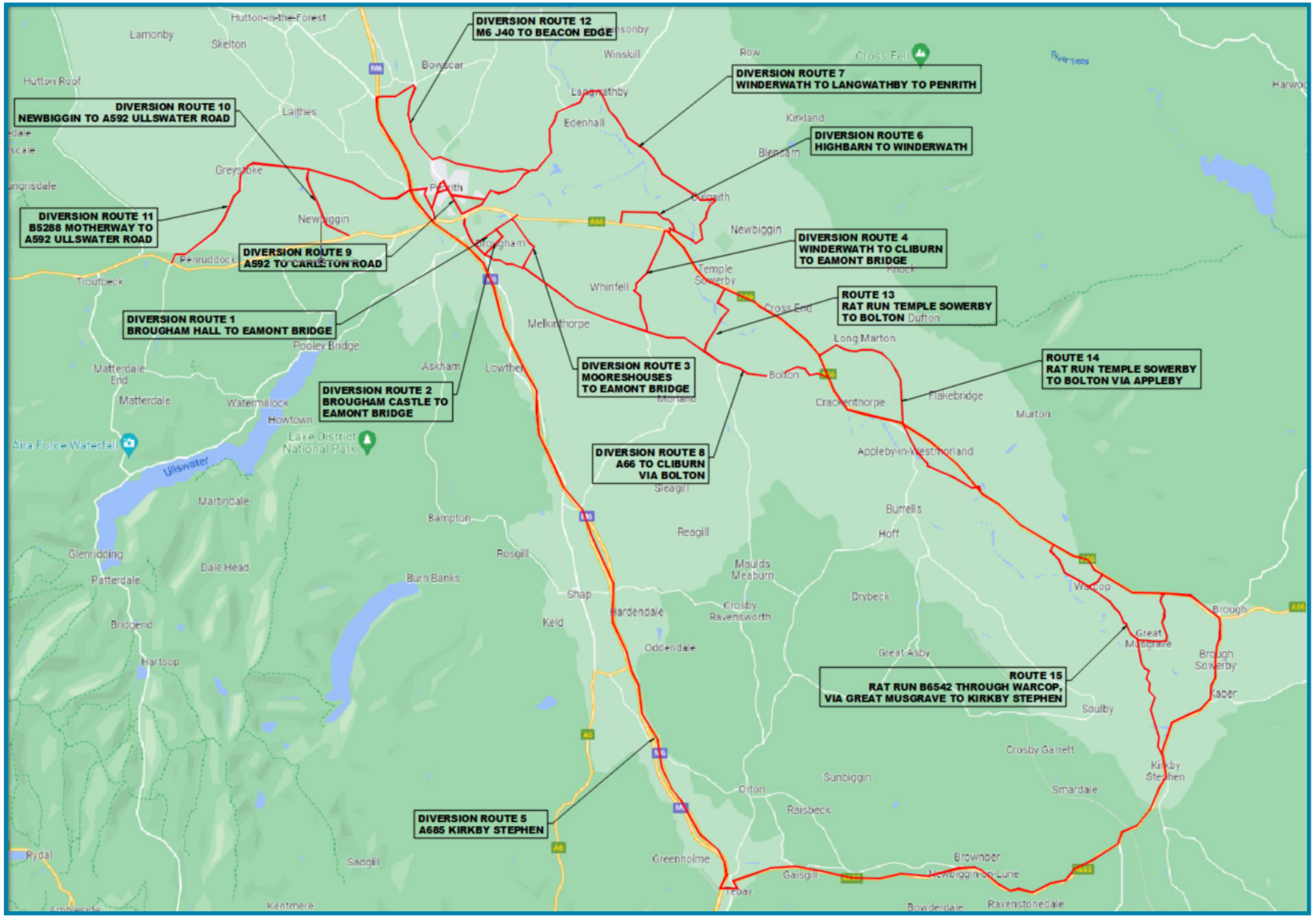
| Grid Ref | Location | Ref. No | Date | Surf | Light | Fatal | Serious | Slight |
|---|---|---|---|---|---|---|---|---|
| E:377489 N:508748 | North Road | 278274 | 11-Feb-18 | Dry | Daylight | 0 | 0 | 1 |
| V001 was pulling off the forecourt of Johnston's garage – V002 has been travelling from the right – V001 has collided with the side of V2 at low speed.<br>Factor: Failed to look properly. | | | | | | | | |
| E:377499 N:508705 | Market Street (A685) near Junction with Market Square. | 855960 | 6-Jul-19 | Dry | Darkness | 0 | 1 | 1 |
| Two pedestrians have walked out into the road at the point vehicle one was passing<br>Factor: Impaired by alcohol<br>Factor: Wrong use of pedestrian crossing facility<br>Factor: Failed to judge other person's path or speed | | | | | | | | |
| E:377504 N:508651 | Market Street (A685) – 26 metres from Junction with Market Square | 898932 | 4-Nov-19 | Dry | Daylight | 0 | 0 | 1 |
| V1 has driven onto Market Square whilst C001 has tidying up his market stall and run over his foot.<br>Factor: Failed to look properly. | | | | | | | | |
| E:377504 N:508612 | Market Street (A685) – 38 metres from Junction with Market Square | 1061417 | 6-May-21 | Dry | Daylight | 0 | 0 | 1 |
| Veh 1 reversed into parking space and collided with pedestrian sat at table.<br>Factor: Loss of control | | | | | | | | |
| E:377380 N:508391 | Brougham Lane unspecified road or location Faraday Road | 131133 | 19-Nov-16 | Wet/ Damp | Daylight | 0 | 1 | 0 |
| Vehicle 1 travelling south on Faraday Road, has veered left into unction of Brougham Lane and collided with Vehicle 2 which was travelling up Brougham Lane and approaching the junction of Faraday Road. Vehicle 1 has collided head on with the offside of Vehicle 2. Certain airbags deployed in Vehicle 2 - no injury to driver - significant damage caused to body work. No air bag deployed in Vehicle 1 minor head injury caused to elderly female driver. Significant front-end damage.<br>Factor: Poor turn or manoeuvre<br>Factor: Loss of control | | | | | | | | |
| N:377377 E:508330 | 63 High Street A685 | 302777 | 5-Jun-18 | Dry | Daylight | 0 | 0 | 1 |
| V002 parked outside Jolly Farmer Guest House, in live lane due to parked vehicles. Driver is loading with luggage. As driver leaning into N/S side door V001 collides with rear O/S corner of V002. V001 then collides with V003 which is parked unattended on N/S.<br>Factor: Failed to look properly. | | | | | | | | |

# Appendix D – Route Maps

## Plan of National Highways Proposed Routes



# Plan of Assessed Routes



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