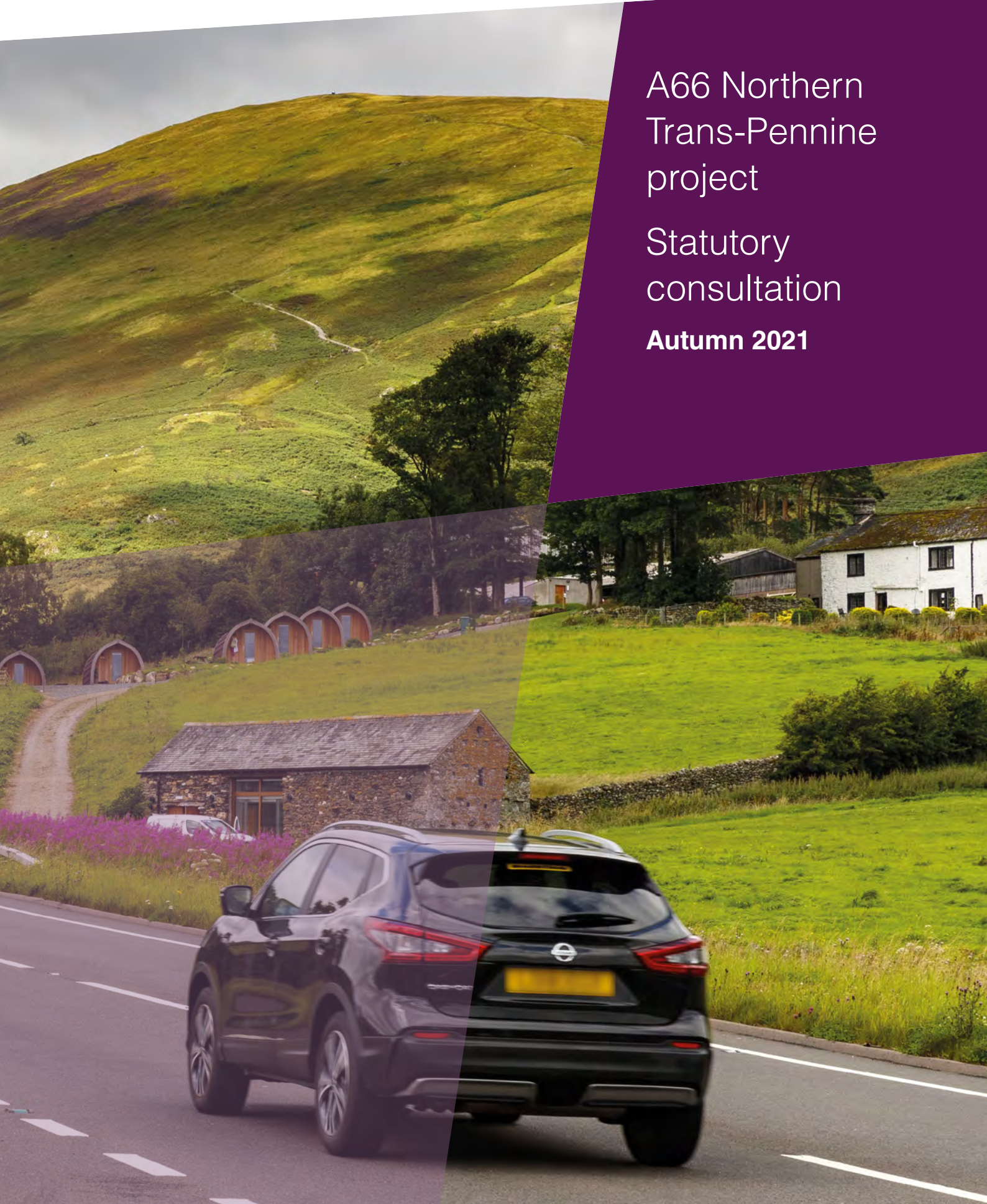


A66 Northern
Trans-Pennine
project

Statutory
consultation

Autumn 2021



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Foreword



The planned improvement of the A66 plays a major part in our £27.4bn Roads Investment Strategy (RIS). It is the biggest investment in the north's road network for a generation and is key to the Government's Build

Back Better and Northern Powerhouse plans, helping support local and regional growth. This huge investment will help level up the regional economic differences across parts of the UK.

The work we will deliver through this project will bring far-reaching benefits to those that use and live near the route. It will provide improved connections between Cumbria, Tees Valley and Tyne and Wear, but also routes between Scotland and the major towns and cities across the north. Critical national freight journeys will also be made more reliable.

By providing better links, we will unlock access to tourism, jobs, essential services and new opportunities.

There are important choices to be made before the plans are submitted to the Planning Inspectorate in the form of an application for a Development Consent Order and a decision is reached by the Secretary of State for Transport. It is vital we listen to feedback from the people that live and work in the area and incorporate this into further design work.

Since the Preferred Route was announced in May 2020, we have continued to work with local communities to provide as much information as possible before launching this statutory consultation.

This is your chance to shape the future of the route. Let us know what you think about our latest designs and help us improve your journey.

A handwritten signature in black ink that reads "Lee Hillyard". The signature is written in a cursive, slightly slanted style.

Lee Hillyard
Project Director

Your voice matters, so we want to hear from you. It is important that you submit your response by 11.59pm on 6 November 2021. Responses received after this time may not be considered.

Your participation

Improving safety, journey times, reliability and resilience on the A66 between the M6 and the A1(M).

We are proposing to invest around one billion pounds to improve the remaining single carriageway sections of the A66 to dual carriageway between M6 junction 40 and the A1(M) at Scotch Corner.

This consultation will run for six weeks from 9am on Friday 24 September to 11.59pm on Saturday 6 November 2021.

In summer 2019, we consulted on our proposed routes for improving the route. In spring 2020, we announced our Preferred Route based on your feedback and our development work at that time.

Since then, we have been carrying out a range of environmental and geological surveys including drilling approximately 300 bore holes

and digging approximately 200 trial pits, to discover more about the land, plants, wildlife and cultural heritage in the area. This has given us new insight into how we can improve our initial design for the A66.

Following this work and your feedback, we have made several changes to the proposed Preferred Route design. We want to hear from you, using our feedback form, on this new design of the A66.

The consultation material, as well as some background information and guidance, can be accessed on this link:

www.highwaysengland.co.uk/A66-NTP

Visit us

Please refer to the opposite table for dates, times and locations of our consultation events where you can view the consultation materials and meet our project team.

Get involved

All our consultation materials are available in our virtual consultation room which you can access by visiting our website www.highwaysengland.co.uk/A66-NTP

If you do not have access to the internet or if you prefer a hard copy of the materials, you can call us on **0333 090 1192** or email A66NTP@highwaysengland.co.uk or write to us marking your envelope **FREEPOST A66NTP** to request a copy.

We will also make all our materials available at deposit points along the route. Please see page 106 for a full list of deposit points. Please remember to call the deposit points before you go to make sure they are open.

Consultation events

Dates	West	East
Sunday 26 September	The former Llama Karma Kafe, 2pm-6pm	
Monday 27 September	Haydock Centre, Penrith, 3pm-8pm	Dalton and Gayles Village Hall, 3pm-8pm
Tuesday 28 September	Haydock Centre, Penrith, 10am-4pm	Dalton and Gayles Village Hall, 10am-4pm
Wednesday 29 September	Haydock Centre, Penrith, 8am-2pm	
Thursday 30 September	The former Llama Karma Kafe, 2pm-6pm	
Friday 1 October	Kirkby Thore Memorial Hall, Midday-8pm	Bowes Village Hall, Midday-8pm
Saturday 2 October	Kirkby Thore Memorial Hall, 9am-4pm	Bowes Village Hall, 9am-4pm
Monday 4 October	Warcop Parish Hall, 3pm-8pm	Gilling West Village Hall, 3pm-8pm
Tuesday 5 October	Warcop Parish Hall, 10am-4pm	Gilling West Village Hall, 10am-4pm
Wednesday 6 October	Warcop Parish Hall, 8am-2pm	
Saturday 9 October	Appleby Hub, 3pm-8pm	The Witham, Barnard Castle, 3pm-8pm
Sunday 10 October	Appleby Hub, 10am-4pm	The Witham, Barnard Castle, 10am-4pm
Monday 11 October	Appleby Hub, 8am-2pm	The Witham, Barnard Castle, 8am-2pm
Wednesday 13 October	Kirkby Stephen Sports & Social Club, 3pm-8pm	
Thursday 14 October	Kirkby Stephen Sports & Social Club, 10am-4pm	

About Highways England in the north

We operate, maintain and improve England's motorways and major A-roads and our network totals around 4,300 miles. While this represents only 2% of all roads in England by length, these roads carry a third of all traffic by mileage and two-thirds of all heavy goods traffic.

Our road network forms the economic backbone of the country, is open 24 hours a day, seven days a week and is relied on by communities and businesses to get from A to B.

Our 1,200-mile network across the north of England stretches from big cities like Manchester and Newcastle to the rural, single carriageways of Cumbria and Northumberland. It is one of the most diverse areas of motorways and major A-roads in the country to maintain and keep moving, so that we all get home safely.

We also support local tourism, connecting the millions of holidaymakers who travel across the country to visit hotspots like the Lake District and Yorkshire Dales every year.



The route is **50 miles** between Penrith and Scotch Corner

What we are proposing

This project represents one of the largest and most important highways investments in the north of England in a generation. The A66 Northern Trans-Pennine project is classified as a Nationally Significant Infrastructure Project, or NSIP, by the UK Government under the Planning Act 2008. As such, Highways England are required to make an application for a Development Consent Order to obtain permission to construct and operate the new A66.

The project is also what is called an Environmental Information Assessment (EIA) development which means an environmental statement will be submitted with our application for a Development Consent Order, which is the planning permission for a major project such as this. As part of this consultation, we have therefore prepared a Preliminary Environmental Information Report (PEIR) setting out our preliminary assessments to help you understand the likely significant environmental effects of our proposals.

Alongside this environmental statement we will also be submitting a draft Environmental Management Plan (EMP) detailing how the project will minimise or avoid impacts on the environment. We have prepared an outline EMP as part of this consultation which forms part of the PEIR.

Consultation is an essential part of the Development Consent Order process. Your feedback has helped – and will continue to help – shape our proposals for the A66.

We are proposing eight individual schemes along the 50 miles of the A66:

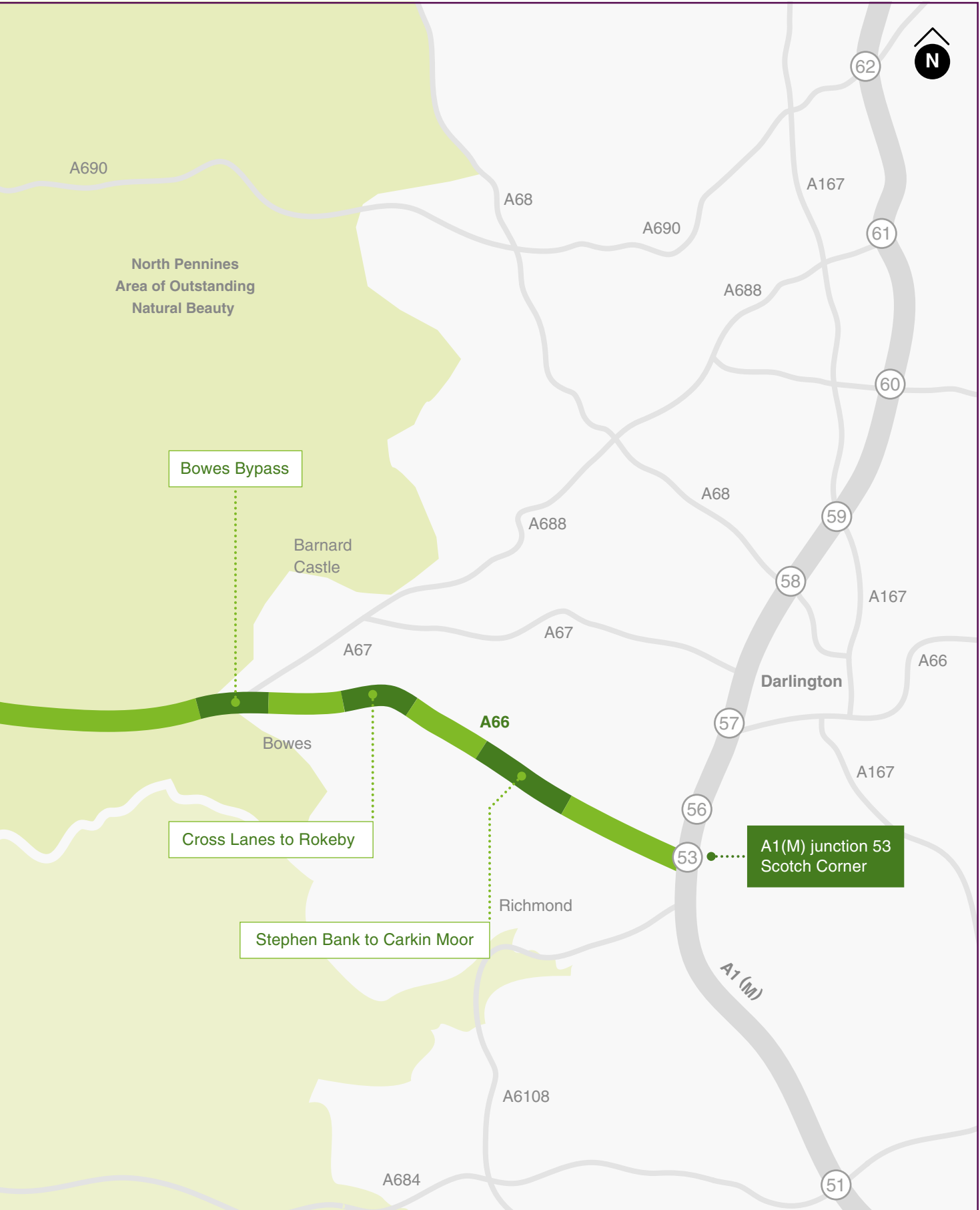
- M6 junction 40 to Kemplay Bank
- Penrith to Temple Sowerby
- Temple Sowerby to Appleby
- Appleby to Brough
- Bowes Bypass
- Cross Lanes to Rokeby
- Stephen Bank to Carkin Moor
- A1(M) junction 53 Scotch Corner



Full project map



The maps on the following pages are not to scale unless a scale rule is present.



Environmental surveys

To help inform the design and build of the new schemes on the A66, we have carried out different types of environmental surveys to understand how our proposals could affect the environment on land within and around the project. This is important given the unique landscape that surrounds the A66. The route is surrounded by the North Pennines Area of Outstanding Natural Beauty, the Lake District National Park and the Yorkshire Dales National Park.

As part of our surveys, we have looked at a broad range of elements, including the existing noise environment, potential for changes to the visual landscape, the type of soils present and the impact on biodiversity. We have also carried out archaeology work owing to the route's rich history as a Roman road.

We have completed and are continuing to undertake a range of environmental surveys including:

- geophysical surveys and analysis of aerial photography to identify unknown archaeology
- initial land and river habitat surveys to identify the plants and animals that might be using them
- several detailed ecology surveys such as birds, bats, invertebrates and mammal surveys



Trial trenching

We are also carrying out trial trenching, which involves carefully digging an area of land for evidence of archaeology. This allows us to study the findings, avoid damaging them during construction and design appropriate mitigation where required. Once we have finished our surveys, we will backfill the trenches to leave the land as we found it.

Geophysical surveys

Geophysical surveys let us look beneath the earth's surface without disturbing the ground. The surveys show us where the ground might have previously been disturbed, allowing us to target further surveys (trial trenching). This is important given the historically rich land local to the A66.

Habitat and ecology surveys (birds, invertebrates and mammals)

Understanding the location and type of plants, animals and their habitats is vital to helping us keep any impact to a minimum. Our ecologists use different methods to survey the area including, for example, looking for hair traces and badger footprints along field boundaries and breeding locations for birds.

Flood and geomorphology modelling

We have assessed our design in areas of potential flooding, whether that is from groundwater, river water, surface water or from sewer sources. Local people have helped guide our flood modelling by providing their insight into flooding hotspots. We have mapped all these sources in the surrounding area and identified flood issues our design might cause.

We have also surveyed environmentally-designated watercourses that will be crossed to understand their structure and the processes that happen within them (known as geomorphology). This initial assessment is important for us to understand the habitats and species that use them and to inform our design process to avoid or reduce risks. A flood risk assessment will be provided as part of our Development Consent Order application.

Where can I find out more?

You can read more about our environmental surveys, along with initial measures to avoid, prevent or reduce impacts on the environment, in our Preliminary Environmental Information Report (PEIR) and its Non-Technical Summary (NTS). You can find these in our virtual consultation room which you can access via our website: www.highwaysengland.co.uk/A66-NTP or at our events and deposit points.

What else we have considered?

The following are key topics that form part of our environmental assessments.

Ecology

The A66 provides access to some of England's richest ecological sites such as Special Areas of Conservation (SACs) and Special Protection Areas (SPAs). These include the River Eden SAC and the North Pennines Moors SPA, Sites of Special Scientific Interest (SSSI) and the North Pennines Area of Outstanding Natural Beauty (AONB). We have designed the road with a particular focus on minimising and mitigating potential impacts on these ecological sites.

Landscape

The route is close to, or within, the North Pennines Area of Outstanding Natural Beauty, the Lake District National Park and the Yorkshire Dales National Park. We aim to preserve the landscape around the project by designing the road to minimise the impact on the natural environment. Our Draft Project Design Report sets out how we consider the local area and incorporate this into the design.



197 accidents between
2013 and 2017, averaging
nearly 40 a year





Geology and soils

Throughout construction, we will monitor specially protected geological zones, such as the North Pennines Area of Outstanding Natural Beauty Global Geopark, by monitoring our impact on geology and soils while we carry out our work. Where there are historic and existing uses of the land, we need to continually monitor the risk of site contamination. We will continue to assess this to ensure there is no risk to human or environmental health while we build the road.

Noise

The improved junctions and dual carriageways will significantly reduce congestion on the A66 and surrounding villages. As a result of the improvements, some communities along the improved A66 will benefit from reduced noise levels. We are carrying out noise modelling to understand where noise might increase as a result of the newly-dualled A66. We are considering appropriate mitigation measures, including low noise surfacing and other screening measures to minimise impacts. Modelling will be reported within the Environmental Statement which will be included in our application for a Development Consent Order.

What else we have considered?

Cultural heritage

Our proposed route has been designed with care and sensitivity, especially in relation to the rich history of the area. We are working closely with local people and organisations such as Historic England to understand potential impacts on cultural sites and aim to preserve the unique character and artefacts in the area. Appropriate design will seek to reduce the impact of the A66 near local archaeological sites and historic buildings. These include the Countess Pillar, the Roman Camp in Kirkby Thore, the settlement at Carkin Moor, the Greta Bridge Roman Fort and St Mary's Church.

Air quality

We are looking at the potential effect of the road on local air quality once it is open to traffic. Existing air quality along the A66 is generally good and we are considering and assessing how the improved road could change the local air quality. While there may be an increase in the volume of traffic using the A66 following our planned improvements, the local road network can expect to see lower levels of air pollution.

During construction, we will have plans in place to prevent dust affecting local communities and businesses.

Waste management

We will minimise waste, re-use as much material as we can on site and, where possible, source sustainable materials during construction. We are gathering information about local waste and recycling centres to understand their capacity to manage any waste we produce. A Site Waste Management Plan will be developed including procedures for monitoring, measuring and reporting hazardous and non-hazardous material produced during our work.

Climate

Highways England is committed to playing its part in reducing carbon emissions. We have recently published our Net Zero Highways Plan to rapidly cut carbon in line with the UK's commitment to be a net zero economy by 2050 and achieve the 1.5°C reduction goal of the Paris Agreement. This plan – which you can read here [highwaysengland.co.uk/netzerohighways](https://www.highwaysengland.co.uk/netzerohighways) – sets out Highways England's ambitious programme as roads play a pivotal role in delivering a net zero carbon connected country.

We are supporting the Government's plan to cut out environmentally damaging emissions and we are taking action in three key areas:

- Net zero for our operations by 2030
- Net zero for maintenance and construction activities by 2040
- Supporting the rapid shift to zero carbon travel on roads by 2050

During construction we will ensure that, where possible, we source materials and resources in a sustainable manner to protect the environment and limit the carbon footprint of the project.

Population and health

We are committed to working closely with local people and businesses to understand how the improved road will affect them. We are also considering the health effects associated with noise, air and light emissions and how a safer, better aligned and less congested old A66 could lead to health improvements for the local community.

Drainage and flooding

We need to consider how we will deal with water on the road when it rains. We must ensure the road drains quickly to be safe for drivers and that the water is stored safely and released slowly so that it doesn't flood local watercourses. To achieve this, storage ponds along the route will collect and allow water to be gradually released into ditches and drains.

The proposed route has been designed to avoid the active floodplain where possible, although in some places this is unavoidable, especially where the road comes near to watercourses. In floodplains, the level of the road will be lifted and we will include alternative flood storage to replace any that is lost due to the increased footprint of the road.

Walking, cycling and horse riding

We are committed to working closely with local communities to provide safe crossing points for walkers, cyclists and horse riders. Where the new A66 impacts an existing walking, cycling or horse riding rights of way, these will be diverted to the nearest safe crossing point. This may be a new junction, underpass or standalone bridge.

We are working with local partners to identify places where we could improve connections to an existing public rights of way that fall outside of our scope of work by considering use of the old A66 where it remains or utilising local authority highway land (within the extents of the improvements). We are exploring

route alternatives to support ambitions for an enhanced and more extensive network for the area, including improved facilities for walkers, cyclists and horse riders and would welcome input. We are particularly keen to understand user journeys and issues faced when using rights of way around the A66.

We will continue to engage with stakeholders to identify opportunities to improve provision for walkers, cyclists and horse riders and, where these are outside the scope of the project, we will explore alternative ways to support these objectives.

Lighting

In this rural area, it is important to maintain dark skies as many animals rely on darkness to navigate and forage for food. This means we are only considering lighting at some junctions and roundabouts for visibility and safety where vehicles are joining and leaving the route. Where we need to do this, we will aim to maintain current lighting levels in surrounding woodland and nearby homes and businesses with screening where appropriate.



Designing a safer A66

On some single carriageway sections, 40mph and 50mph speed limits have been adopted as a result of safety concerns. With the high percentage of HGVs, this changing speed limit, together with the variation in road standards and dimensions along the route, results in slow-moving traffic, longer journey times and unreliable journeys.

The rural surroundings of the A66 also mean there are many smaller communities, businesses and isolated properties that currently have direct access onto the A66. This results in more accidents as vehicles slow down to access exit points and can be dangerous when drivers join the route. We will remove these potentially hazardous turnings as part of the project, providing new links – via the local road network – to safe junctions to provide safer journeys on the newly-dualled sections of the A66.

To reduce risk, we have designed the improvements so there are no gaps in the central reservation, removing right turns. We have included junctions, connected to the

local road network, that enable drivers to safely join and leave the route in the direction of travel only. To enable drivers to travel in both directions, we will provide slip roads that connect to a bridge or underpass that crosses the dual carriageway and ties into the local road network.

These junctions also encourage vehicles to travel more slowly, making them safer for everyone. Every junction has been tailored to meet the individual needs of local communities.

Impact of dualling the A66 on traffic

We have carried out a traffic modelling exercise to inform the design and the environmental impact of the project.

The model is a representation of the road network in the area and of where people travelled to and from in an average month. It uses an industry-recognised method of predicting future traffic flows and conditions, both with and without the A66 project.





The transport model shows the number of people choosing to travel by road and identifies the route they use now and the route they are forecast to use. This enables us to predict how many vehicles will be using each part of the road network in the future and how long it will take to complete a journey.

The model considers these forecasts over a range of years, including the year of assessment, year of opening and 15 and 20 years after opening. The results demonstrate journey time savings between M6 junction 40

and A1(M) Scotch Corner once construction is complete, of between 11 and 13 minutes (20-23%).

While traffic numbers will increase on the A66 with or without the project, our work will make the road more reliable and therefore attractive options for road users. We have looked at the potential traffic numbers on the A66 in future years and further information about this is available in our Local Traffic Report which you can find online or reference copies can be viewed at deposit points or our events.

Designing a safer A66

The increase in traffic flow reflects people benefiting from the opportunity that the dualling offers. The connectivity which the route provides between England, Scotland and Northern Ireland is critical to connecting the country.

The increased flow also reflects more tourists benefiting from improved links to areas such as the Lake District and the North Pennines Area of Outstanding Natural Beauty (AONB), thereby improving the economies within this area.

Accidents on the A66

The A66 has a higher than average accident rate on some sections of the route, with accidents occurring in single carriageway sections and where the dualled and single carriageway sections merge.

The mixture of single and dual carriageway sections leads to difficulties with overtaking, poor forward visibility and difficulties at junctions as a result of short merges and diverges and right-turning traffic both off and onto the A66. Between 2013 and 2017 there were 109 accidents on the single carriageway lengths.

By dualling the remaining single carriageway sections we will reduce the number of accidents and resulting casualties predicted to happen on the route. For more information, please refer to the Local Traffic Report.



You said, we did

Since 2017, we have been working hard to deliver a safer, more connected A66 for local people, businesses, tourists and other road users between Penrith and Scotch Corner. Feedback from individuals and organisations has helped us to deliver on this ambition.

Throughout recent months we have listened to feedback and amended our designs where feasible, so they work better for you. We have been changing the details of our designs to help meet the needs of local landowners and other stakeholders. For example, we have moved accommodation structures such as underpasses or bridges to help farmers maximise their usable land and worked with landowners and local authorities to redirect public rights of way to make them safer for all users.

This process is ongoing and more recently, we have received additional feedback and suggestions to help us further improve the project. This feedback has not been reflected in the designs we are bringing forward in this brochure and the accompanying map books but will be considered as part of the feedback we get during consultation.

We have advised all of our stakeholders to make these suggestions through the formal feedback routes.



How we got to statutory consultation



1970s – 2007

Sections of the A66 have been upgraded in several stages since the 1970s, with the most recent section, the Temple Sowerby Bypass, being widened to a dual carriageway in 2007. However, more than 18 miles of single carriageway remain, making the route accident-prone and unreliable.

2014

In 2014, the Government announced that it intended to examine the case for dualling one of the routes across the Pennines to improve east-west connectivity in the north of England.



2019 – 2020

Based on your feedback, we carefully considered several criteria before we arrived at the proposed route including the impact on major towns and villages, and the impact that our proposals would have on local people and businesses.

The ownership of land means that we have designed the new route line for this project to avoid impacting local landowners, having regard to environmental and engineering considerations where possible.

With the A66 passing through the Trans-Pennine environment, we have carefully considered what impact our proposed changes to the route would have on natural features such as the River Eamont.

Through a careful assessment of the water ways, Areas of Outstanding Natural Beauty, National Parks, and other environmental impacts, we are proposing a project across the A66 which responds sensitively to the environment and seeks to minimise impacts on it.



2017

In 2017, the Government announced that the A66 presented the strongest case for an upgrade and that plans for full dualling between the M6 junction 40 and the A1(M) at Scotch Corner would be developed for the next Road Investment Strategy (RIS).

2019: May – July

In May – July 2019, we held a public consultation to understand views towards the proposed dualled routes. The public consultation ran from 16 May to 11 July 2019. A total of 2,333 people attended the 21 consultation events we delivered for local people to explain the routes. In total, we received 854 consultation responses. We would like to thank everyone who attended and shared their thoughts with us.



2020: May

We announced our Preferred Route in May 2020. We proposed upgrades to seven sections of single carriageway of the A66. Our preferred route covered 18 miles of the current A66.

Autumn 2021

This consultation is your opportunity to have your say on our proposed upgrades to:

- M6 junction 40 to Kemplay Bank
- Penrith to Temple Sowerby
- Temple Sowerby to Appleby
- Appleby to Brough
- Bowes Bypass
- Cross Lanes to Rokeby
- Stephen Bank to Carkin Moor
- A1(M) junction 53 Scotch Corner

Environmental scheme assessments

The potential environmental effects of the project have been assessed and the findings of the preliminary assessment are available in the PEIR and the Non-Technical Summary (NTS). Some topics consider the potential effects route-wide at this stage because of the nature of the information available, others consider each specific scheme and further information is provided for each scheme below. Route-wide and scheme-specific assessments for every topic will be presented in the Environmental Statement.

We acknowledge the importance of this project and we want you to understand its potential impacts on the local environment. This brochure includes technical information on the environmental assessment of the project to inform your response to our consultation. If you want further detail or explanation on any of the technical environmental information, please visit us at one of our events, call us on 0333 090 1192 or email A66NTP@highwaysengland.co.uk

During construction there is potential for air quality effects to people from construction-related activities, including dust and traffic emissions. Significant effects to people are not anticipated during operation, however there are 15 designated ecological sites and 35 veteran and ancient trees throughout the route that could be affected by changes to nutrient nitrogen deposition. The ongoing assessment will consider appropriate mitigation to address these effects, which might include things like a dust management plan to control dust emissions during construction.

At both construction and after completion, the preliminary climate assessment finds that the volume of Greenhouse Gases (GHGs) that the project is expected to create is not considered to be significant and would not have a material impact on the ability of the government to meet its carbon targets. Minimising GHG emissions through design is a core principle of Highways England's standards. This includes delivering measures such as material recovery and using recycled materials; reducing construction traffic; and using renewable energy – and these measures will be set out in the Environmental Management Plan (EMP) for the project. The project will continue to measure, monitor and reduce GHG emissions throughout construction and operation. The assessment also considers how resilient the road will be to future changes to the climate. The design has considered the climatic changes that are predicted ensuring that the road is resilient to more extreme weather events. For example, the drainage design includes allowances for increased future rainfall.

The project will consume large quantities of materials, increasing demand on the existing UK supply chain, with a likely effect identified on aggregates imported to site. Materials will be reused on the project as much as possible, for example a key principle of the design is to allow material removed at one location to be used elsewhere. Measures will be implemented through the EMP to reduce the amount of waste produced, with targets for recycling.

Cumbria County Council, Durham County Council and North Yorkshire County Council have all established different types of Mineral Safeguarded Areas close to the project. The assessment identifies that a number of these would be affected by the project and a likely significant effect is anticipated in relation to the sterilisation of Mineral Safeguarding Sites.

There is the potential for likely effects from construction on walkers, cyclists and horse riders (WCH) due to severance of Public Rights of Way (PRoWs) and other WCH provisions due to the construction of the project. There is also anticipated to be significant effects on agricultural land holdings, through loss of land or damage to other aspects of agricultural holdings which may impact on viability. Nuisance and disruption to access caused by construction has the potential for significant effects to private property and housing.

During operation, there is also the potential for positive effects such as improved connectivity for local businesses and the potential to attract businesses to the area as well as enabling development. Improved connectivity may also be a significant effect for agricultural land holdings and improved screening and vegetation may enhance the attractiveness and usability of community land and assets.

For operation, there is also the potential for beneficial effects on WCHs if additional formal crossing points are introduced across the A66, although there is the potential for adverse effects from increased journey times depending on the final scheme design. There may be both negative and positive health impacts during construction and operation due to change in environmental conditions, such as from noise.

The scheme is being designed to minimise the land take required temporarily and permanently. Consultation with landowners is ongoing to manage and reduce the impact on landowners where possible and the right to compensation and methods for assessing appropriate levels of compensation will be in

line with the Compensation Code (see section later in this brochure on land acquisition).

The development of the project design will continue to consider and explore opportunities to enhance the walking, cycling and horse riding network, as well as to enhance accessibility for local farmers where appropriate. The EMP will set out measures to reduce impacts from noise, dust, lighting and construction traffic as far as reasonably practicable, along with temporary diversions and signage will be put in place to minimise disruption to WCH.

Our landscape and visual assessment considers impacts on landscape character, important landscape designations such as AONB and views from PRoW or residential areas. For the assessment of operational effects, the assessment considers both the opening year, but also 15 years into operation when mitigation planting to screen views is expected to have matured.

Our landscape architects are developing an Environmental Masterplan which will consider and mitigate the visual impacts of the new A66 by identifying planting areas and appropriate species to screen intrusive views. The replacement of habitats and new habitats for protected species are also included in this design. The ongoing assessment and design will seek ways to reduce any predicted increases in noise, for example with noise barriers or low-noise surfacing. An initial draft of the environmental mitigation design, including preliminary landscape, ecology and noise mitigation can be found in the map books.

M6 junction 40 to Kemplay Bank

As the main point of access to Penrith, M6 junction 40 experiences high volumes of traffic from the M6 and the A66 to the west. M6 junction 40 is also prone to bottlenecks caused by high levels of congestion at the Kemplay Bank roundabout, which affects the flow of traffic along the A66 and for north and southbound traffic using the A6.

Although the road between M6 junction 40 and the Kemplay Bank roundabout is a dual carriageway, vehicles slowing down as they approach Kemplay Bank can cause safety issues and create problems for both east/westbound and north/southbound traffic as it passes through the roundabout.

Facilitating free flowing traffic along the A66 by introducing an underpass at this location will deliver major benefits for local people,

including pedestrians and cyclists. Removing east/west A66 traffic from the roundabout means we would reduce around 55% of the total traffic flow at this point. Easier access through the junction, especially at peak times, will improve access to Penrith and other facilities around the junction.

In addition, we have sought to understand the needs of the emergency services in this area and how access would need to be maintained for the Cumbria Constabulary and Penrith Community Fire and Ambulance Station. We have listened to their concerns and updated the design in this area since our Preferred Route Announcement in May 2020.





We are proposing to:

- Widen each of the roads approaching M6 junction 40 (M6 North, M6 South, A66 East, A66 West and A592) to provide additional lanes and a dedicated left turn; each arm would be controlled using traffic signals
- Widen the existing dual carriageway between M6 junction 40 and Kemplay Bank to three lanes in each direction
- Construct a new dual-carriageway underpass below the existing Kemplay Bank roundabout – enabling free-flowing traffic along the A66 and improving access to Penrith and the A6
- Create new slip roads to the A6 and A686 at Kemplay Bank roundabout, allowing drivers to safely join and leave the A66 in both directions. This will also serve the local road network with links to Penrith, Eamont Bridge and other local areas
- Re-route cycleways and footways around the Kemplay Bank roundabout
- Reduce the speed limit to 50mph (both directions) between Kemplay Bank and M6 junction 40 to create a safer driving experience for all road users
- The installation and upgrading of the traffic signals at M6 junction 40 and Kemplay Bank to control traffic movements and to create safer crossing points for pedestrians and cyclists

Environmental considerations

Land to the east, south and west of this scheme is largely rural with several commercial and residential properties located near the A66. Most people that could be affected are located to the north, within the town of Penrith, with the closest residential properties located near to Clifford Road. During construction there is potential for significant air quality effects to people from construction-related traffic along transport routes around Penrith, including within the currently proposed Castlegate Air Quality Management Area (AQMA) or other locations close to these routes that are approaching Air Quality Objective Levels.

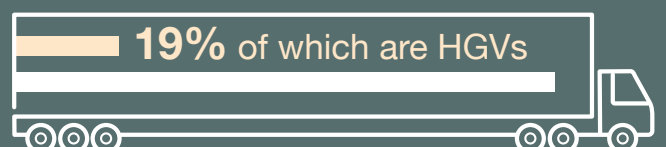
During construction, our preliminary noise assessment has identified the potential for temporary and localised significant effects across the scheme, though this will be assessed further when more information is available about how the construction will be carried out. During operation, noise is anticipated to significantly increase for 117 homes.

There may be effects during construction on the Skirsgill planned development, Kingdom Hall of Jehovah's Witnesses, Wetheriggs Country Park, Skirsgill Park and Happy Hooves Riding Centre due to partial or total loss of those sites. People living close to the route may experience air quality and noise effects during construction along with the visual impact of vegetation clearance and construction activities and, due to night-time

construction, lighting and noise. There is the potential during construction for temporary traffic delays at Kemplay Bank Roundabout to affect journeys to Penrith Hospital and emergency vehicles exiting the Community Fire and Ambulance Station. We will work with emergency services to mitigate impacts on these essential services during construction. There may also be temporary disruption to access by car/bus to community facilities in Penrith and pedestrian access to Carleton Hall Park via the Carleton Avenue underpass. However, during operation, residents to the south of Penrith may experience positive effects through improved access to community facilities due to improved traffic flows around Kemplay Bank Roundabout.

There are a number of important biodiversity sites close to this scheme. During construction there may be impacts on the River Eamont and temporary disturbance to land within Skirsgill Wood. During operation there may be some air quality impacts and some habitats – mostly grassland, but some woodland – will be lost that may affect protected species. There is a potential for fragmentation to habitats including those supporting red squirrel, otter, bats and badger, as well as effects to barn owl, wintering and breeding birds and common toad. Proposed mitigation includes the construction of an underpass, which would reduce the likelihood of significant effects for several species.

This section carries approximately
30,200 vehicles per day



While there are a number of heritage sites close to this scheme, the preliminary assessment has found that no likely significant effects on cultural heritage resources are anticipated during construction or operation for this scheme.

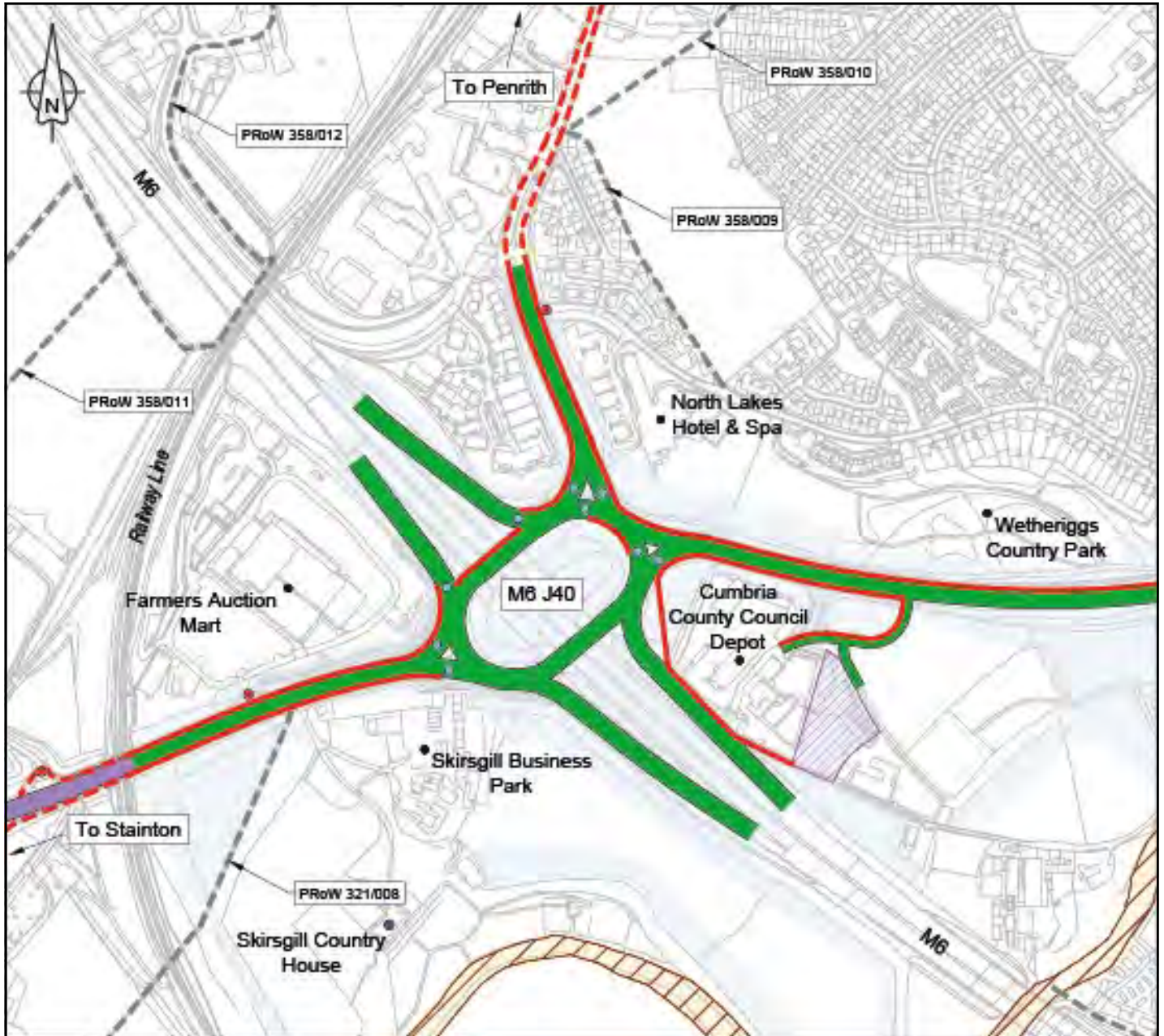
We have identified a number of potentially contaminated areas of land such as railway lines, a disused quarry, a historical landfill, industrial sites and farms that could be affected. There is a risk that groundwater and watercourses such as Thacka Beck and the River Eamont and protected ecological sites such as the River Eden SAC and the SSSI could be affected. Risk assessments will be carried out and method statements developed to ensure that any contamination present does not get released into the environment.

Through careful management of the construction site and good drainage design, no significant effects are anticipated on the water environment during construction or operation. During construction there is likely to be some loss of high value agricultural land and some effects on soils supporting important ecology. This will be minimised as much as possible as the design progresses.

Our landscape and visual assessment identified likely significant temporary effects from construction activities on the local landscape and on the views for residents of Clifton Road, users of Wetheriggs Country Park, visitors to Mayburgh Henge and users of PRow to the south of the scheme. No likely significant effects are predicted for once mitigation planting has matured.



M6 junction 40 to Kemplay Bank





Legend:

Existing A66/other road to remain	Existing Public Right of Way (PRoW) (footpath unless stated)	Listed Building
Proposed Improvement to junction and road layout	Existing Walking, Cycling, Horse Riding provision to be removed	Area of Outstanding Natural Beauty (AONB)
Land required (inc. earthworks, drainage and environmental mitigation)	Existing Walking, Cycling provision	Special Areas of Conservation (SAC)
Decommissioned A66/other road	Proposed Walking, Cycling, Horse Riding provision	Sites of Special Scientific Interest (SSSI)
Proposed compound, storage area	Proposed Walking, Cycling provision	Scheduled Monuments
Proposed borrow pit (excavation of material for use as fill)	Proposed Walking provision	Regional Parks and Gardens
	Uncontrolled crossing	Ancient Woodland
	Controlled crossing	

Penrith to Temple Sowerby

The A66 between Penrith and Temple Sowerby is a single carriageway section which varies in width. Along this section there are several private access points, including one for Center Parcs. These can be difficult and unsafe for drivers to manoeuvre when turning right onto and off the existing A66.

To reduce overall land take and improve local access, we have worked closely with landowners and associated businesses and tenants at High Barn to discuss purchasing the properties for demolition. We have since reached an agreement which enables us to move the new A66 slightly further north, creating a design better suited to the community.

The dual carriageway will closely follow the line of the old A66.

We are proposing to:

- Widen the route to dual carriageway between Penrith and Temple Sowerby on this section, providing more capacity. The scheme predominantly follows the old route. It would involve widening the old A66 to form one side of the new dual carriageway. The second carriageway would be constructed to the north of the existing route
- Provide a new all-movement junction to connect the new A66 route with Center Parcs, providing access to the holiday park and local roads. The junction will cater for all movements on and off the new A66 making it easier for users to join the main highway and prevent tailbacks at peak times. This two-level junction will provide left-in, left-out access and allow access to a length of the old A66 which is being converted to a local road
- Improve access to St Ninian's Church on the Winderwath estate with a new left-in, left-out junction and relocation of the existing car park
- Provide access to the local road network with the introduction of a new left-in, left-out junction at the B6262



Environmental considerations

During construction, noise and vibration and air quality could affect residential, commercial and community buildings located throughout the scheme. Effects will be temporary and localised, depending on the specific activity and construction stage and measures to reduce the effect will be included in the EMP. Our preliminary assessment predicts that, during operation, there will be noise impacts on 12 homes and one non-residential building.

There may also be effects during construction at Center Parcs Whinfell Forest due to disruption to the local road network, which may impact visitors accessing the facility. However, during operation improved access from the provision of a new junction is expected to benefit Center Parcs.

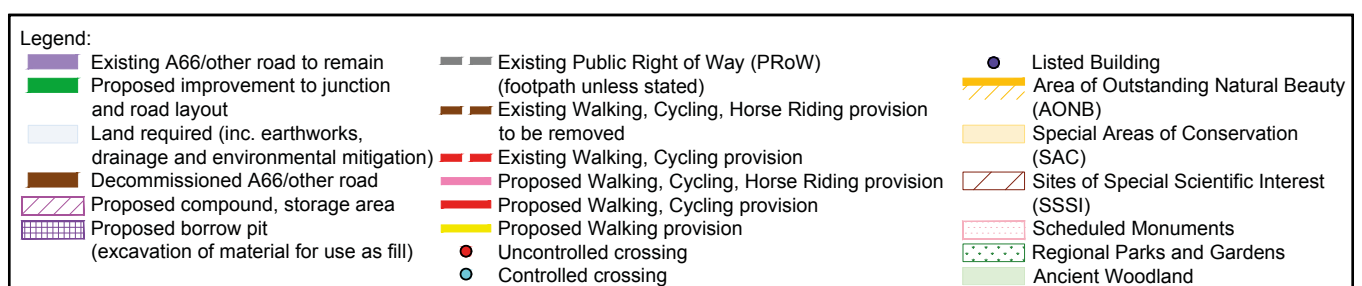
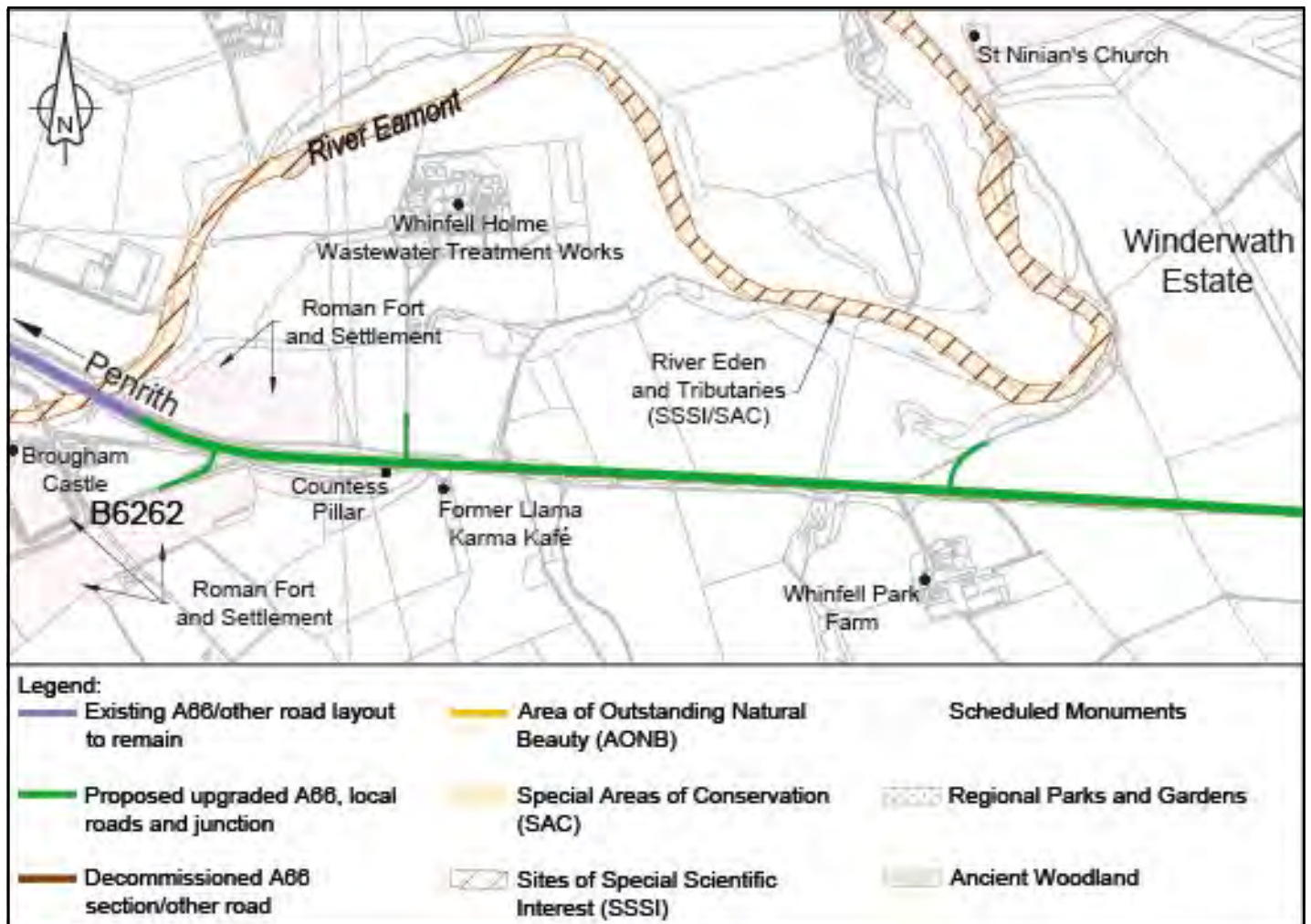
Our biodiversity assessment has identified that the construction of proposed new discharges to the River Eamont have the potential to adversely impact water quality in the River Eden SAC/SSSI and habitat loss may occur affecting Whinfell Forest County Wildlife Site, designated for red squirrel. There is also expected to be loss of grassland, woodland and linear habitats. Bat roosts and crossing points have been identified in this scheme, which are likely to suffer impacts. Other potential impacts during operation include the temporary loss of key foraging resources for bats until habitat replanting schemes are completed and matured and adverse impacts to otter, badger and water vole habitats. Likely significant effects are predicted for species including brown hare and polecat, as well as reptiles and amphibians due to habitat loss and fragmentation.

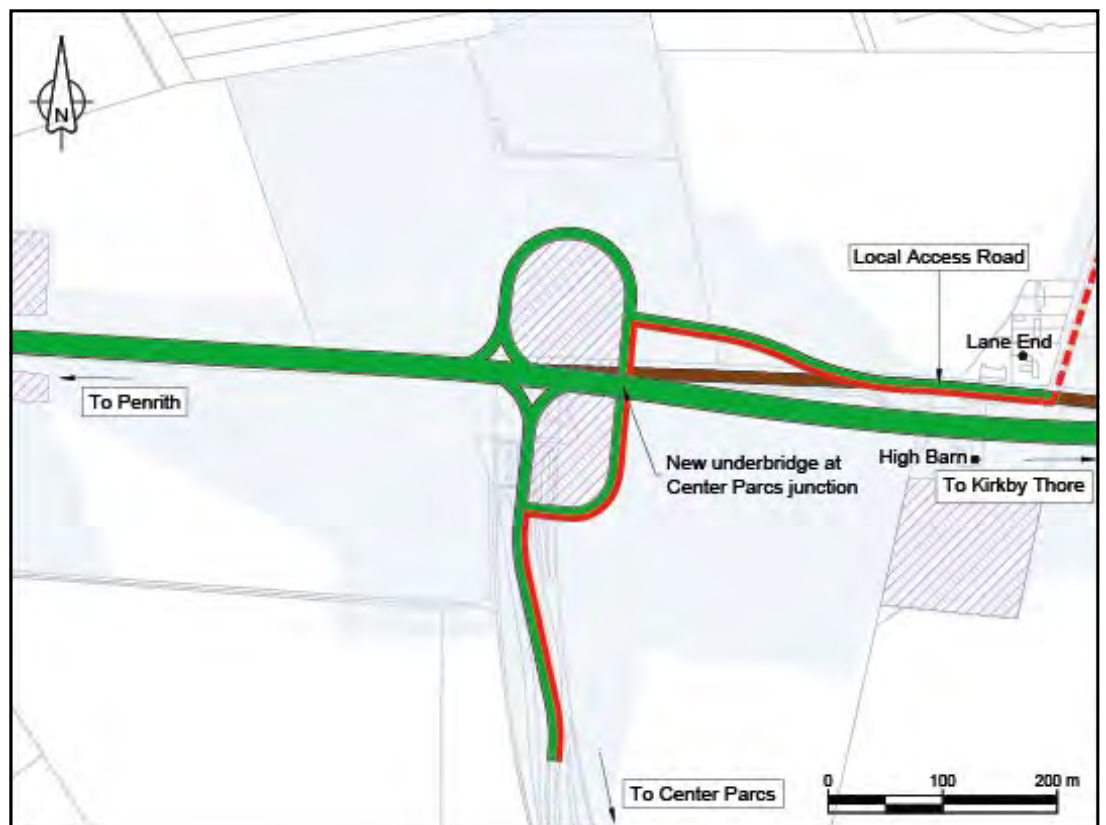
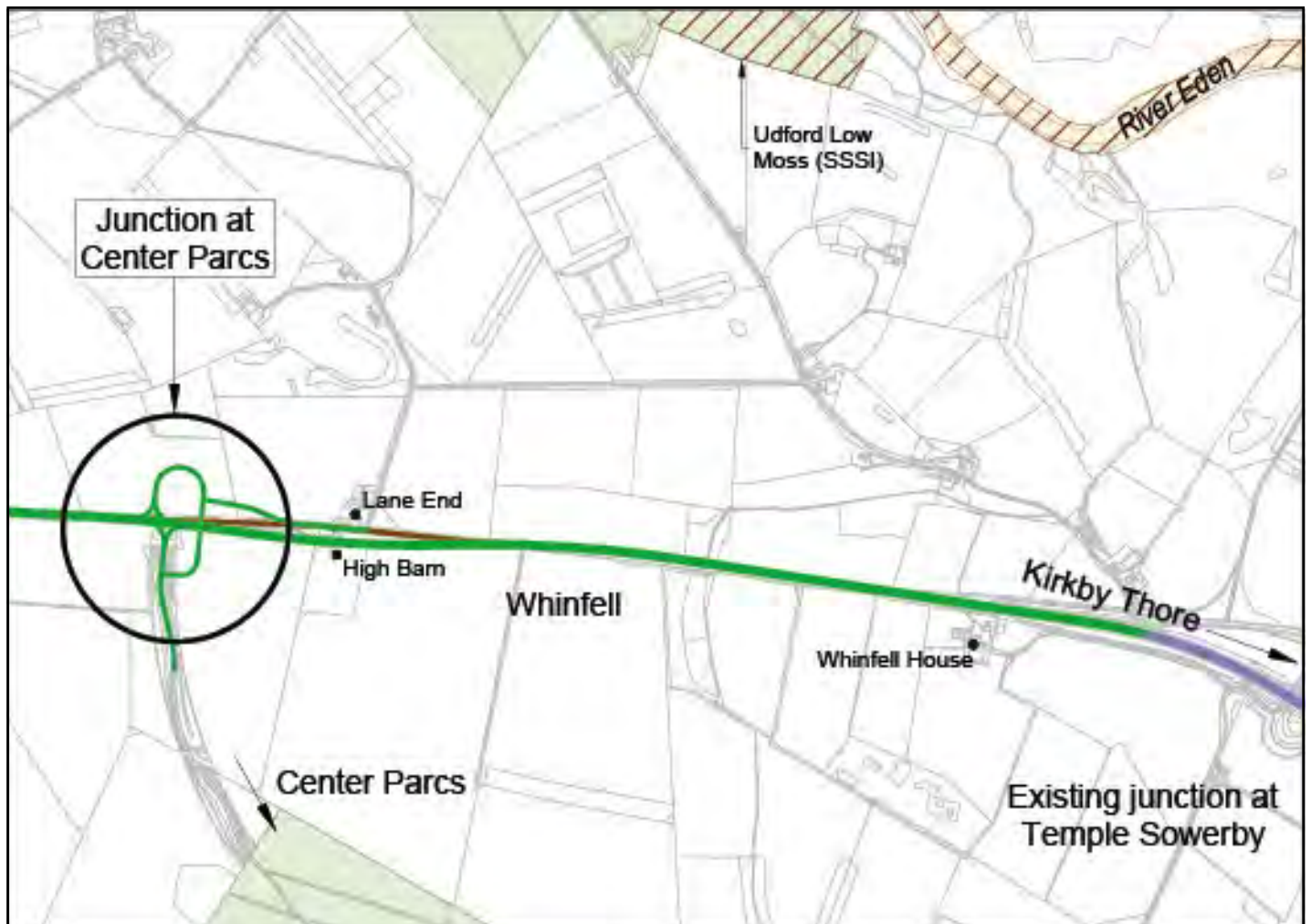
Our preliminary Cultural Heritage Assessment identified that there is the potential for effects at the scheduled monuments – Ring ditches at Brougham, as well as the site of the Hartshorn Tree and associated cropmarks. We will minimise these effects through design and remaining impacts will be mitigated to some extent by what is called ‘preservation by record’. This is where we investigate the archaeological remains prior to construction, analyse the artefacts and publish the results of what is found.

We have identified potential contamination sites such as historical tank and sewage works. Risk assessments and method statements will aim to protect residential properties, the principal aquifer and watercourses such as the River Lowther and the River Eamont. There is permanent land take and loss of high value agricultural land. Pollution prevention and drainage design will ensure that important features of the water environment such as the River Eamont and Light Water do not experience significant effects.

Construction activities associated with this scheme are anticipated to have temporary significant effects on the landscape, as well as visual effects on nearby residents as well as users of PRoW and visitors to Center Parcs holiday village. Opportunities for further mitigation and landscape integration are being considered for this scheme.

Penrith to Temple Sowerby





Temple Sowerby to Appleby

The Temple Sowerby to Appleby stretch of the A66 passes close to the villages of Kirkby Thore and Crackenthorpe.

For just over two miles a single carriageway, varying in width, skirts the village of Kirkby Thore with local roads directly connected by several junctions and private access points. This includes an existing access route through the village of Kirkby Thore, which HGVs use to gain access to businesses to the north of the village.

Continuing eastwards there is a single carriageway for 2.5 miles which runs alongside the village of Crackenthorpe. The current A66 has narrow verges and poor alignment which presents significant visibility issues, particularly at junctions.

The route between Temple Sowerby and Appleby suffers from a high accident rate (approximately seven per year) and although speed limits were reduced from 60 mph to

40 mph in 2016 to reduce the risk of collisions, the high rate of accidents remains.

When we announced our Preferred Route back in 2020, we proposed a northern bypass to skirt around the top of Kirkby Thore, while keeping the existing route as a local road for residents to access the village. At Crackenthorpe, we selected the northern bypass route which would have run furthest away from the village.

Since that time, we have undertaken further survey work in the local area and continued engagement, particularly with local authorities and statutory bodies such as Natural England and the Environment Agency. This has given us more insight into alternative designs which reduce the impact on the surrounding environment, particularly at Trout Beck, which is part of an internationally designated site of ecological importance, the River Eden and a Special Area of Conservation (SAC).



While the solution may have been feasible, the full Preferred Route announced in May 2020 is no longer under consideration. This route crossed the Trout Beck and its floodplain at one of its widest points and would have required a substantial structure of around 800m in span.

The work we have undertaken since the Preferred Route Announcement in May 2020 has led us to the conclusion that the potential impact on Trout Beck and on the habitats and species it supports, is too substantial to continue with this route and that there are other alternative routes which would have less impact. Natural England and the Environment Agency both expressed reservations and concerns in regard to the impact on the internationally designated SAC.

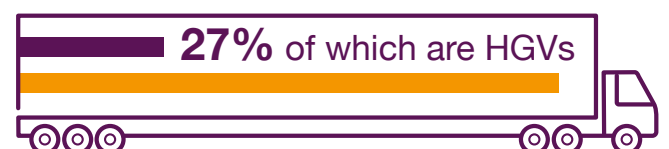
We therefore developed alternatives to consider whether there is a route with a lower impact on the Trout Beck and River Eden while also taking account of impacts on people, local businesses and other special features in the area such as the scheduled ancient monuments. Following an initial sifting

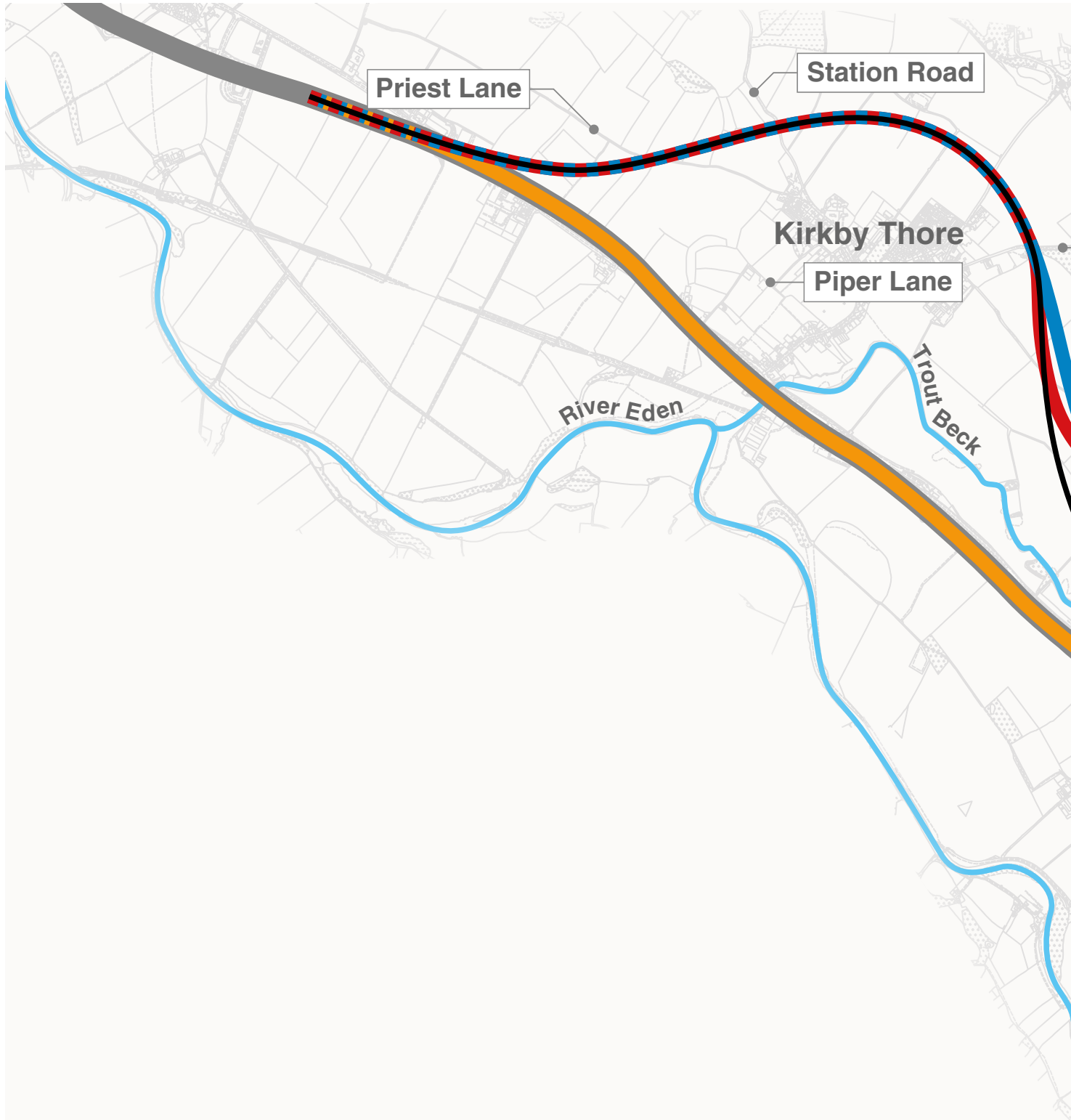
process three routes were progressed in more detail. Following a final sifting process we determined a new preferred alignment based on a reasoned consideration of the impacts of each. These alternative routes only vary along the Kirkby Thore stretch of the scheme, east of Long Marton because as the route heads towards Crackenthorpe, the scheme is broadly the same in all routes under consideration.

The three alternative routes we considered are colour-coded for ease of reference: Blue, Orange and Red. The Blue Route is the route we are recommending be taken forward for the reasons outlined in more detail below.

If you require further information about the sifting process undertaken to determine the Blue Route as the preference, please refer to the Route Development Report and the Preliminary Environmental Information Report (PEIR) both of which can be found online via the A66 webpage or in deposit points and at event locations. Further details on events and deposit points can be found in this brochure.

This section carries approximately
16,500 vehicles per day





Key

- Previous Preferred Route
- Blue Route (our preference)
- Red Route
- Orange Route
- Existing A66

All Routes



Blue Route (Our preference)

Our preference, the Blue Route, is largely an evolution of the route that was shared during our Preferred Route Announcement in May 2020. The proposed Blue Route would comprise a new offline bypass around the north of Kirkby Thore and a bypass to the north of Crackenthorpe.

Following the line of the previously announced Preferred Route, the Blue Route would travel in a north-easterly direction from the end of Temple Sowerby Bypass, crossing over Priest Lane and under Station Road before turning south after passing north of the village.

Heading south, the route will pass under Main Street (where a new junction would be provided) and under Sleastonhowe Lane. Here and as far as the Long Marton road, the route would deviate from the previously announced Preferred Route, with the alignment around 100m further east (at its most distance) to allow a shorter crossing of Trout Beck and its floodplain.

East of Long Marton Road the Blue Route will then follow the line of the previous Preferred Route as it turns in a south-easterly direction to follow the line of the Roman Road towards Appleby. This bypass would be connected back into the old A66 at the eastern end of the scheme with access to Crackenthorpe and Appleby being provided via connections to the existing road network.

The preferred Blue Route is similar to the previous Preferred Route from May 2020 insomuch as it will include:

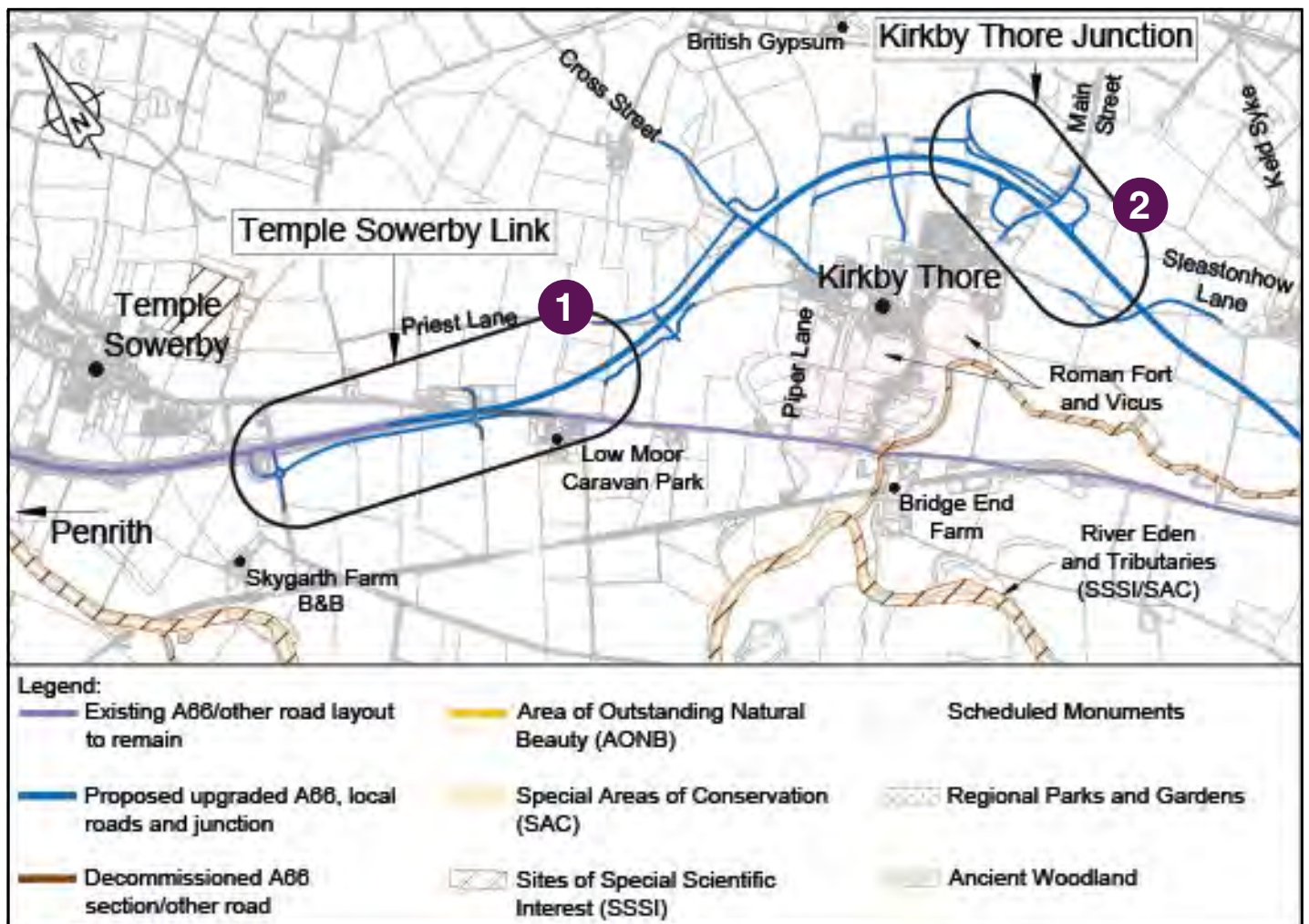
- A new junction at Main Street to the north-east of Kirkby Thore. Main Street will pass over the proposed A66 alignment on a bridge structure. This junction will maintain the key local connection onto the A66 and has the additional benefit of providing access to businesses and hauliers to the north of the village. This will contribute to a reduction in the number of HGV movements through Kirkby Thore
- New bridge structures for both Station Road and Sleastonhowe Lane to enable access over the A66; a diversion would lead from Priest Lane to Station Road to maintain local traffic access
- A crossing over Trout Beck and its associated flood plain (see below)
- A new junction at Crackenthorpe on the westbound carriageway of the new A66 to provide left-in, left-out access. The junction would link to the old A66 and the B6542 and provide access to both Crackenthorpe and Appleby
- A new left-in junction to the eastbound carriageway at the existing Appleby bypass junction
- A small impact on land allocated for housing at Townhead
- Impacts on farms and associated land and requires the demolition of two residential properties (Winthorn House and Dunelm). We are in ongoing discussions with all affected landowners
- Allowance for local traffic to use the old A66 between Appleby and Temple Sowerby as part of the local road network

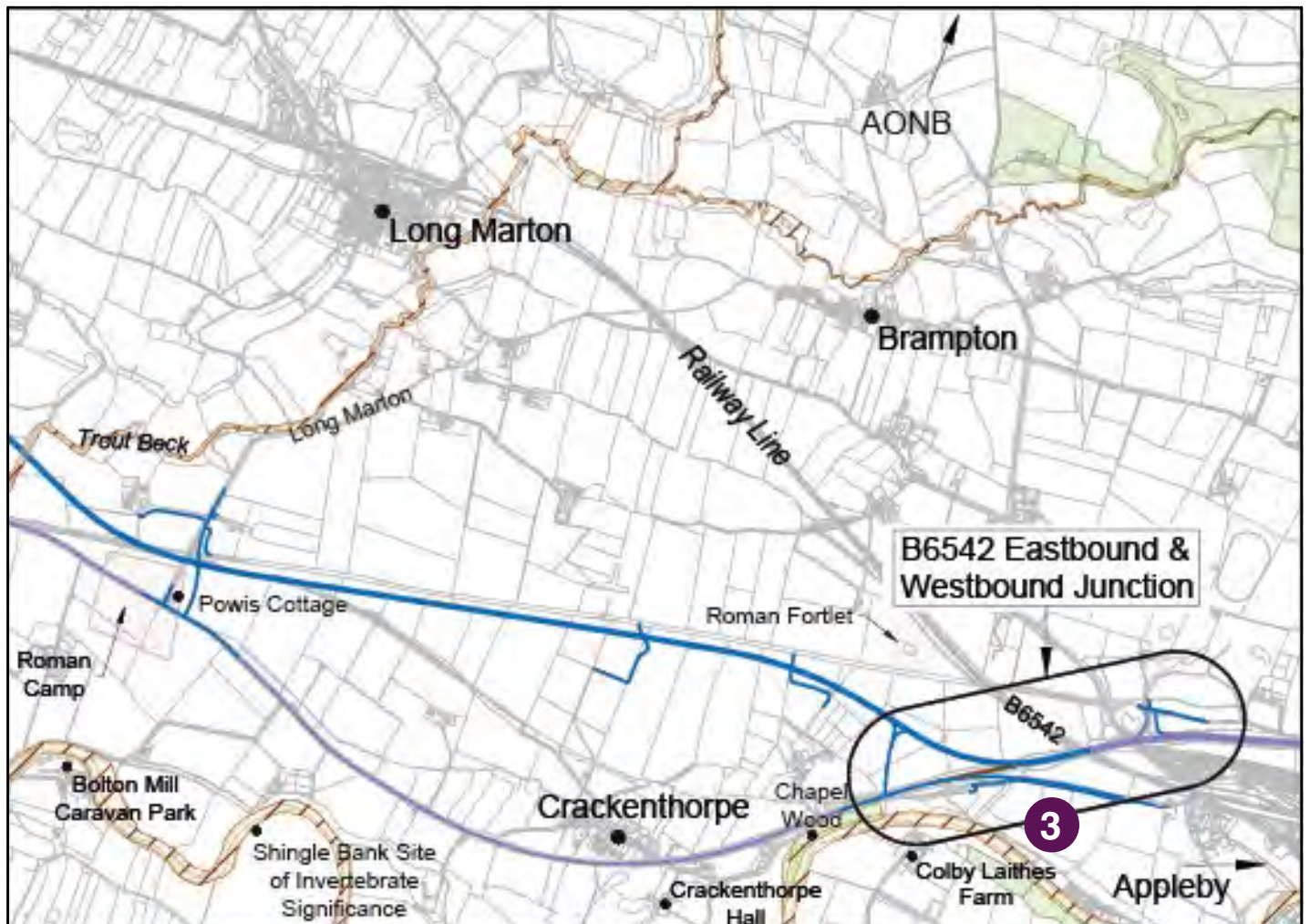
The Blue Route differs from the previous Preferred Route insomuch as it will:

- Improve connections between the old A66 and the local road network with a short section of road from the Temple Sowerby Bypass junction, allowing access for local traffic and other road users
- Reduce the length of the crossing over Trout Beck and its associated floodplain from 800m to approximately 400m. The multi-span crossing will be perpendicular to the watercourse rather than run alongside it therefore thus reducing the impact on the flood and river structure. Modelling has shown that there will only be minor impacts on the Trout Beck
- Reduce the cost of the structure at this location to less than the previous Preferred Route
- Shorten the structure in the floodplain meaning that the construction risk associated with Blue Route is less than the previous Preferred Route
- Have a lesser impact on the Eden Rivers Trust project to re-naturalise this length of the Trout Beck when compared to the previous Preferred Route
- Move closer to and increase land required from Sleastonhowe Farm
- Include a bridge over the new A66 at the Long Marton road close to Powis House. This will maintain connectivity between Bowdon and Long Marton and will also allow traffic to access the existing A66 to travel east or west – where traffic levels will be considerably reduced – leading to a safer junction. The previous Preferred Route included a junction at this location however this has been discounted based on traffic assessment, design implications and impacts on the Roman Camp Scheduled Ancient Monument

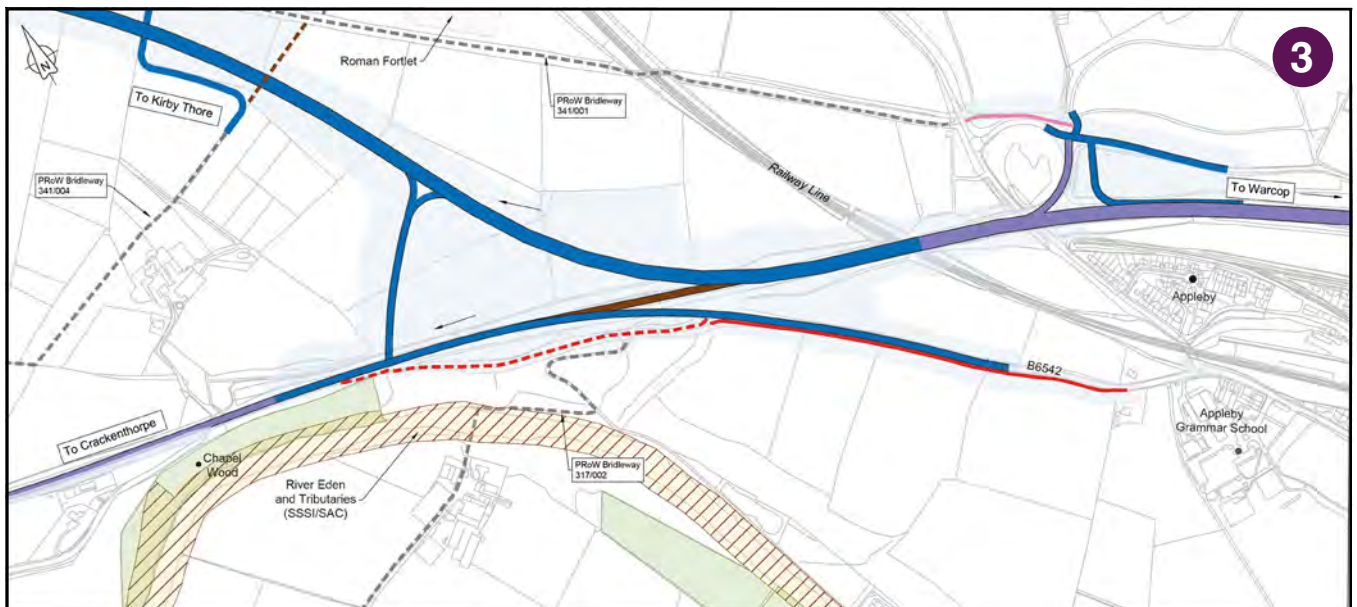
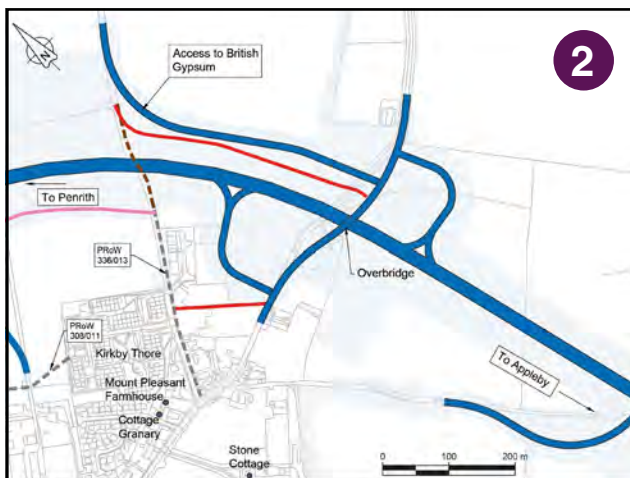
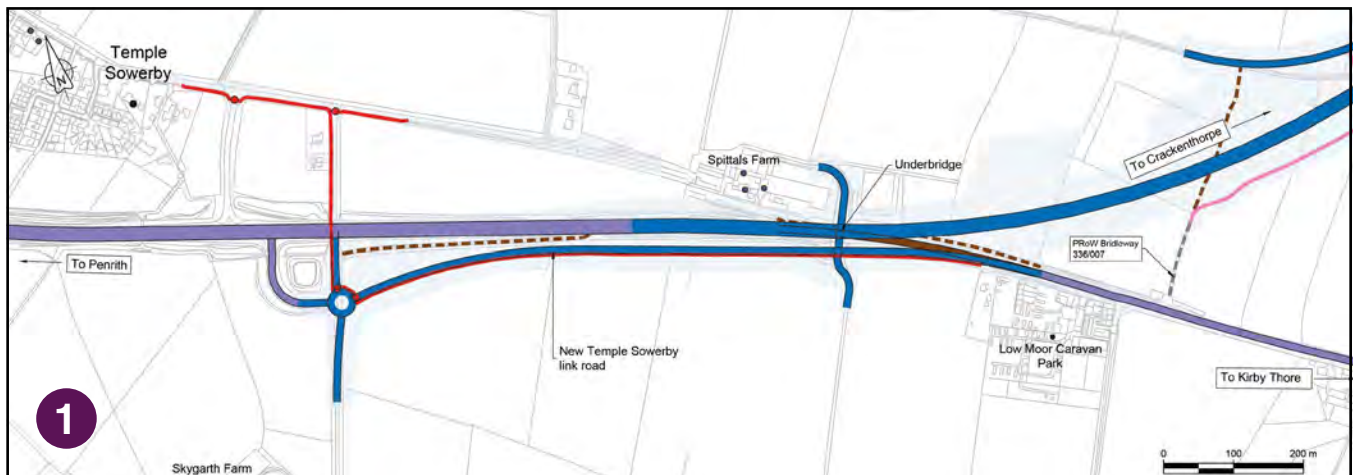


Blue Route (Our preference)





Blue Route junction arrangements



Legend:							
	Existing A66/other road to remain		Proposed improvement to junction and road layout		Existing Public Right of Way (PRoW) (footpath unless stated)		Listed Building
	Land required (inc. earthworks, drainage and environmental mitigation)		Decommissioned A66/other road		Existing Walking, Cycling, Horse Riding provision to be removed		Area of Outstanding Natural Beauty (AONB)
	Proposed compound, storage area		Proposed Walking, Cycling provision		Proposed Walking, Cycling provision		Special Areas of Conservation (SAC)
	Proposed borrow pit (excavation of material for use as fill)		Proposed Walking, Cycling, Horse Riding provision		Proposed Walking provision		Sites of Special Scientific Interest (SSSI)
			Uncontrolled crossing		Controlled crossing		Scheduled Monuments
			Controlled crossing				Regional Parks and Gardens
							Ancient Woodland

Environmental considerations (Blue Route)

During construction there is potential for significant but temporary noise and air quality impacts on residents located close to the route, including residents at the north of Kirkby Thore and Appleby. During operation, the preliminary assessment predicts significant adverse noise effects to 256 homes and four non-residential buildings and significant beneficial effects to 124 homes and eight non-residential buildings.

For the Blue Route, there is potential for a significant effect during construction on the local population and on Common Moss through loss of land for construction. During operation, there will be additional noise impacts on homes in central and north Kirkby Thore and Appleby, however some householders would experience positive health effects through reduced traffic and noise, particularly to the south of Kirkby Thore.

During construction, the building of the proposed new river crossing has the potential to adversely impact water quality in the River Eden SAC/SSSI, which would affect the biodiversity of the watercourse. The blue alternative has the potential to lead to loss of ancient woodland, Priority Habitats, hedgerows and soils. Design development is ongoing to avoid as many of these impacts as possible. As this alternative is offline, there is potential for previously undisturbed habitats to become permanently fragmented, affecting various animal species and potential bat crossing points could be affected. During operation, air quality changes may affect some designated ecological sites.

The cultural heritage assessment has identified potential permanent significant adverse effects on the Roman Camp, 350m east of Redlands Bank. The project team is

working with Historic England to consider appropriate avoidance and mitigation strategies as part of the ongoing design process, which will be reported in the environmental statement we submit as part of our Development Consent Order.

The preliminary geology and soils assessment has identified potential likely significant effects at construction due to the permanent land take and loss of high value agricultural land and likely significant effects on soils supporting SAC or SSSI. The key water environment for this scheme is Trout Beck which is a tributary of the River Eden and part of the SAC. The assessment has considered impacts to Trout Beck in relation to how the beck is able to move around its flood plain during operation. Using flood and geomorphology modelling it has demonstrated that it will be possible to construct the crossing of Trout Beck without a significant effect on the watercourse and how it functions. No significant water environment effects on Trout Beck or other groundwater or watercourses are anticipated.

Temporary construction activities will impact on the landscape, including the North Pennines AONB, as well as visual effects for residents of Kirkby Thore and Appleby. The new offline section of road to the east of Kirkby Thore in particular, including the crossing of Trout Beck, would be expected to be a dominant feature in the landscape, though some features of the landscape in this area, such as hedgerows are degraded and there may be potential to enhance these key features through the landscape design. Landscape mitigation design is ongoing for this scheme.

Orange Route (Online alternative)

The Orange Route was developed as an alternative which crossed Trout Beck at a point where it was already constrained by the existing A66 bridge at Bridge End. This constraint means it may have had a lesser effect overall on the River Eden SAC.

The Orange Route principally followed the route of the existing A66 along the southern edge of Kirkby Thore, before bypassing Crackenthorpe to the north similar to our preference, the Blue Route and the Red Route.

From the end of Temple Sowerby Bypass the Orange Route initially ran to the north of the existing A66 before crossing to the south, close to Piper Lane. It would then have run parallel to the A66, to the rear of a row of six houses, before crossing Trout Beck at Bridge End. At this location the beck is already constrained by the existing A66 bridge and other buildings around Kirkby Thore. Kirkby Thore would have been accessible via the existing junction at Temple Sowerby and the old A66 which would have been connected via a series of improvements to the local road network in the Priest Lane area.

East of Trout Beck, the route would have passed through Bridge End Farm, requiring the demolition of some farm buildings and behind the petrol filling station, running parallel to the existing A66.

East of Long Marton Road the Orange Route would then have followed the line of the previous Preferred Route as it turns in a south-easterly direction to follow the line of the Roman Road towards Appleby. This bypass would have been connected back into the old A66 at the eastern end of the scheme with access to Crackenthorpe and Appleby being provided via connections to the existing road network.

The Orange Route is similar to the previous Preferred Route insomuch as it would have included:

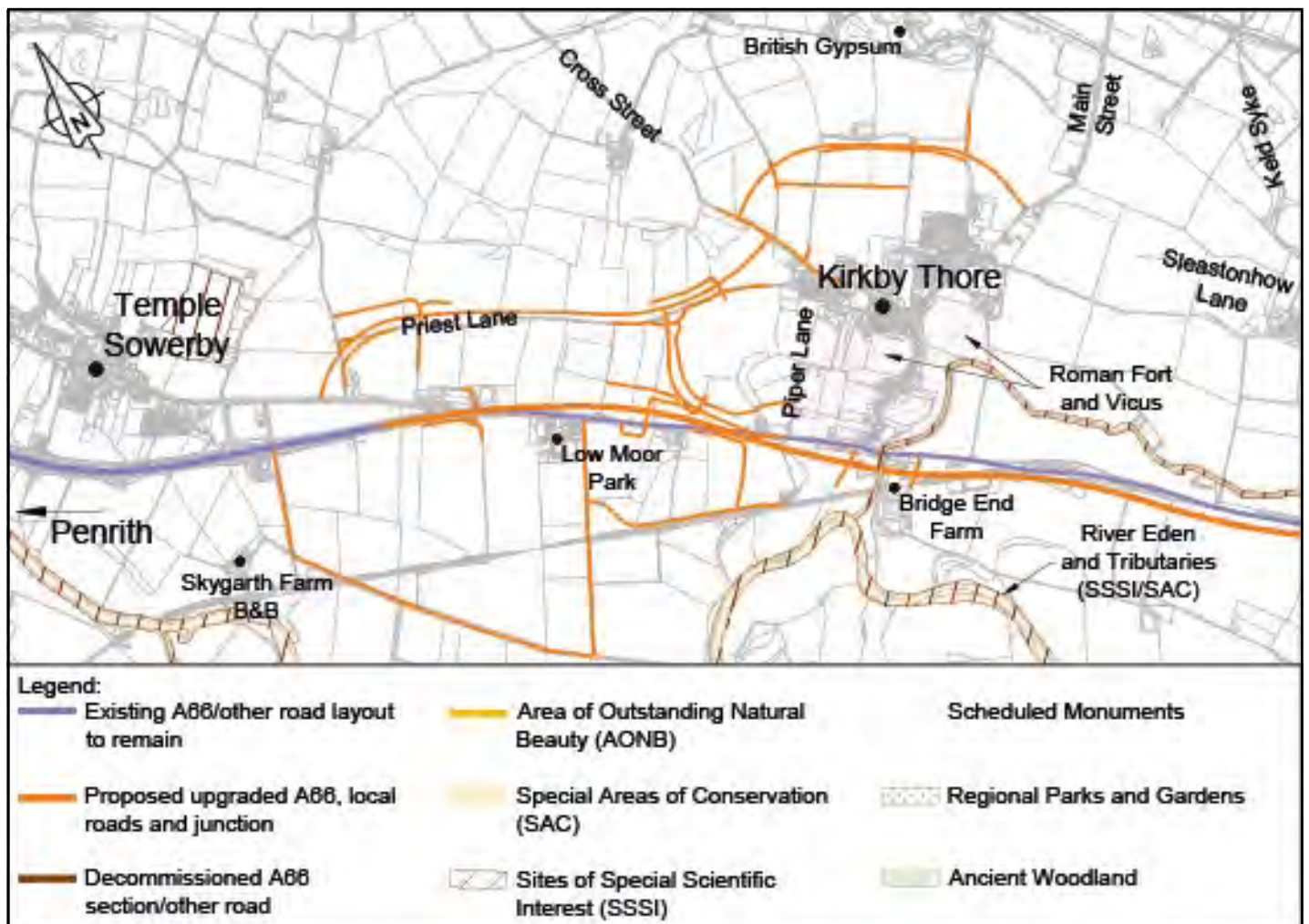
- A crossing over Trout Beck and its associated flood plain (see below)
- A new junction at Crackenthorpe on the westbound carriageway of the new A66 to provide left-in, left-out access. The junction would link to the old A66 and the B6542 and provide access to both Crackenthorpe and Appleby
- A new left-in junction to the eastbound carriageway at the existing Appleby bypass junction
- Allowance for local traffic to use the old A66 between Appleby and Temple Sowerby as part of the local road network

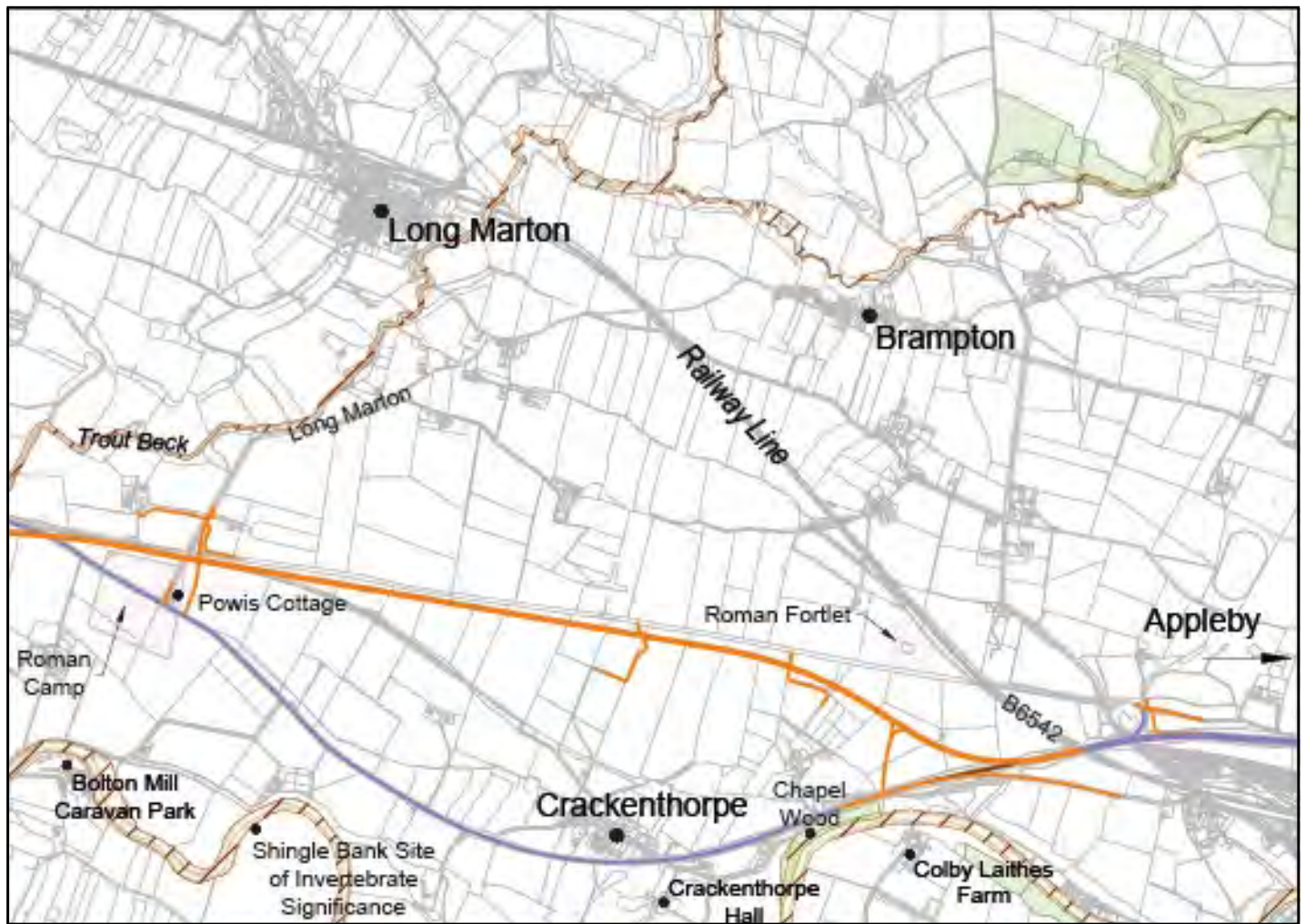


The Orange Route differs from the Preferred Route announced in May 2020 as it would have:

- Retained the road infrastructure within the existing road corridor
 - Resulted in a shorter A66 by approximately 700m when compared to the previous Preferred Route
 - Reduced the length of the crossing over Trout Beck and its associated floodplain from 800m to approximately 300m. The multi-span crossing will be perpendicular to the watercourse rather than run alongside thus reducing the impact on the flood and geomorphological regime. It would be located adjacent to the existing Bridge End Structure. Modelling has shown that there will only be minor impacts on the Trout Beck and River Eden at this point. The structure will need to be raised above the existing road levels to enable flood water to pass underneath it (see below)
 - Had no impact on the Eden Rivers Trust project to re-naturalise the Trout Beck when compared to the previous Preferred Route
 - Reduced the cost of the structure at this location is therefore less than the Preferred Route
 - Reduced the cost of the structure at this location is therefore less than the previous Preferred Route
 - Shortened the structure in the floodplain meaning that the construction risk associated with Trout Beck for the Orange Route would have been less than the previous Preferred Route, however the proximity to the River Eden would have increased construction risk
 - Required a bridge over the new A66 at Long Marton Road close to Powis House.
- This would have maintained connectivity between Bowdon and Long Marton and would also have allowed traffic to access the existing A66 to travel east or west where traffic levels would have been considerably reduced leading to a safer junction. The previous Preferred Route included a junction at this location however this has been discounted based traffic assessment, design implications and impacts on the Roman Camp Scheduled Ancient Monument
- Created new local roads to the west and northwest of Kirkby Thore to allow access to and from the village but would also have helped reduce the number of HGVs travelling through the centre of Kirkby Thore. This would have introduced a more substantial road network to the west of Kirkby Thore increasing journey times and distances for traffic heading to the north of Kirkby Thore
 - Removed any impacts on Station Road and Sleastonhowe Lane
 - Removed the small impact on land allocated for housing at Townhead
 - Impacted on farms and associated land, particularly Bridge End Farm which would have needed to be demolished at least in part. We are in ongoing discussions with all affected landowners
 - Not required the demolition of two residential properties (Winthorn House and Dunelm)
 - Resulted in significantly higher land acquisition costs when compared to the previous Preferred Route resulted in approximately 30% of an area of land allocated for housing (land adjacent to primary school allocation)

Orange Route (Online alternative)





Environmental considerations (Orange Route)

During construction there is potential for significant but temporary effects, including noise and air quality, to residents located close to the route especially those at the south of Kirkby Thore. Our preliminary assessment predicts that during operation there will be significant adverse noise effects to some residential and non-residential buildings but also beneficial effects on others.

There will be some disruption throughout construction on land adjacent to the primary school, Acorn Bank (National Trust), Common Moss and Piper Lane Recreational ground through loss of land for construction.

The construction and operational effects on biodiversity would be similar to the Blue Route as above. There would be effects on the River Eden SAC during construction due to the crossing of Trout Beck being closer to where it joins the main river, though this would be managed through measures in the EMP.

Our cultural heritage assessment has identified that, at construction stage, permanent significant adverse effects are anticipated at the Kirkby Thore Roman fort and associated Vicus and the Roman Camp east of Redlands Bank. Through further design work we aim to minimise or avoid these impacts on the Roman Camp, but effects on the Kirkby Thore Roman Fort and associated Vicus are unavoidable due to the location (and height required for flood flows) of the Trout Beck crossing. We would recover and record all historical findings at these locations.

We're paying attention to certain sites to manage any potential soil contamination. These sites include farms, infilled ground, a sewage works, the garage/haulage yard, petrol filling station and railway. Risk assessments and method statements would be required to prevent contamination from affecting properties, public open spaces, a principal aquifer and surface waterbodies including Trout Beck.

There will be some permanent land take and loss of high value agricultural land.

For the Orange Route alternative, visual effects are expected for residents of Kirkby Thore and Appleby. Landscape effects would be similar to the Blue Route, though the alignment close to the existing A66 does keep the road closer to its existing corridor and minimises impacts.



Red Route (Offline Alternative)

As with the Blue Route, the Red Route alternative was developed following analysis of the Environment Agency's flood maps for the area around Trout Beck. It sought to reduce impact on the SAC by crossing Trout Beck and its floodplain further upstream at a narrower point than either the previous Preferred Route or the Blue Route.

The proposed Red Route would comprise a new offline bypass around the north of Kirkby Thore and a bypass to the north of Crackenthorpe.

Following the line of the previous Preferred Route, the Red Route would travel in a north-easterly direction from the end of Temple Sowerby Bypass, crossing over Priest Lane and under Station Road before turning south after passing north of the village.

Heading south, the route would pass under Main Street (where a new junction would be provided) and under Sleastonhowe Lane. Here the Red Route would deviate from the previous Preferred Route, with the alignment initially around 100m further east before running parallel to Sleastonhowe Lane heading generally in the direction of Long Marton.

The road would then cross over Keld Syke followed by Trout Beck and its associated floodplain as it turns south. This would be approximately 500m further east than the previous Preferred Route but allows Trout Beck to be crossed at one of its narrowest points.

After crossing Trout Beck, the Red Route would head southeast to rejoin the line of the previous Preferred Route (near Crackenthorpe) as it follows the line of the Roman road towards Appleby. We would connect this bypass into the old A66 at the eastern end of the scheme with access to

Crackenthorpe and Appleby being provided via connections to the existing road network.

The Red Route is similar to the Preferred Route as it will include:

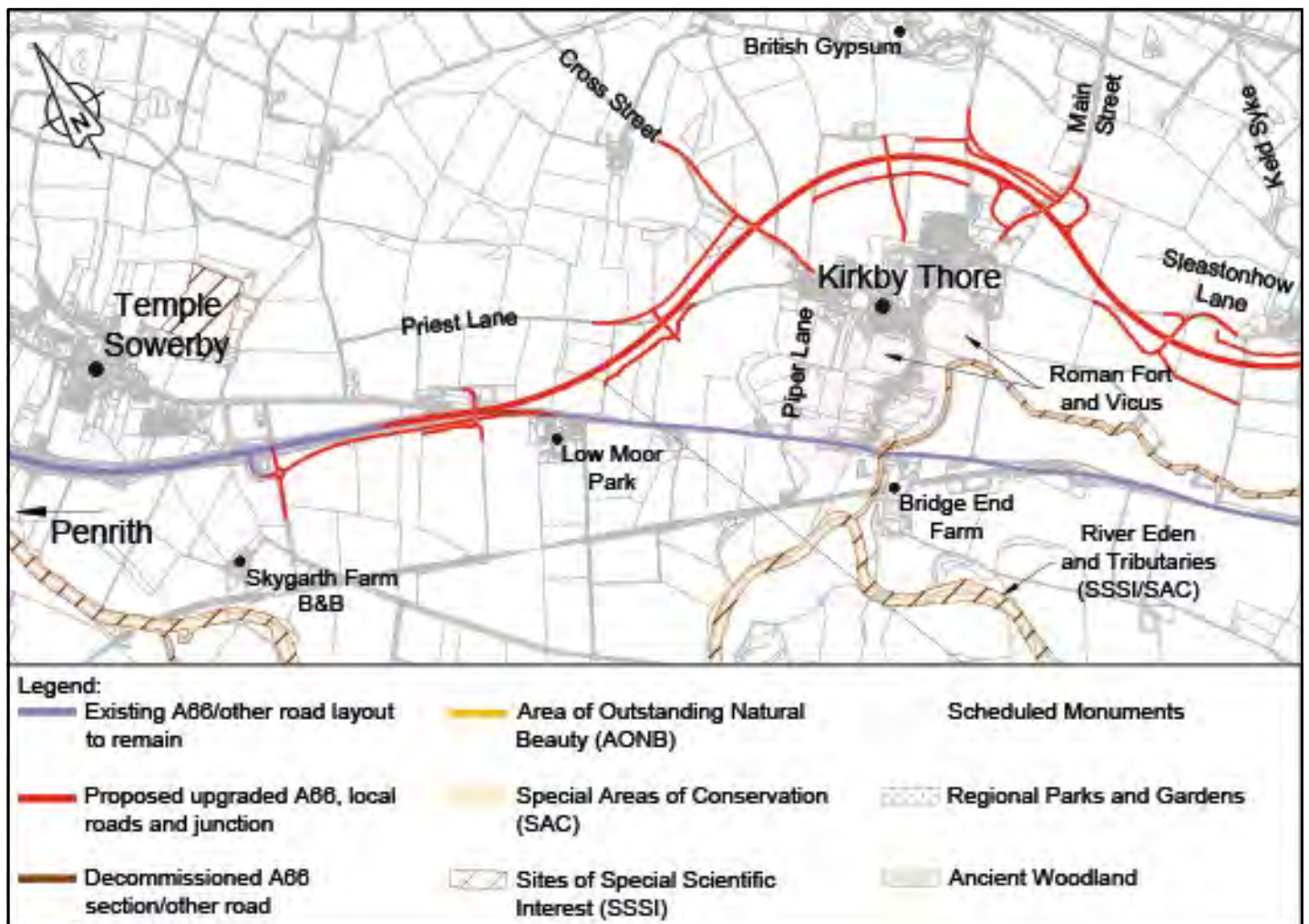
- A new junction at Main Street to the north-east of Kirkby Thore. Main Street will pass over the proposed A66 alignment on a bridge structure. This junction will maintain the key local connection onto the A66 and has the additional benefit of providing access to businesses to the north of the village. This will contribute to a reduction in the number of HGV movements through Kirkby Thore
- A new bridge structures for both Station Road and Sleastonhowe Lane to enable access over the A66; a diversion would lead from Priest Lane to Station Road to maintain local traffic access
- A crossing over Trout Beck and its associated flood plain
- A new junction at Crackenthorpe on the westbound carriageway of the new A66 to provide left-in, left-out access. The junction would link to the old A66 and the B6542 and provide access to both Crackenthorpe and Appleby
- A new left-out junction to the eastbound carriageway at the existing Appleby bypass junction
- A small impact on land allocated for housing at Townhead
- Impacts on farms and associated land and requires the demolition of two residential properties (Winthorn House and Dunelm)
- Allowance for local traffic to use the old A66 between Appleby and Temple Sowerby as part of the local road network

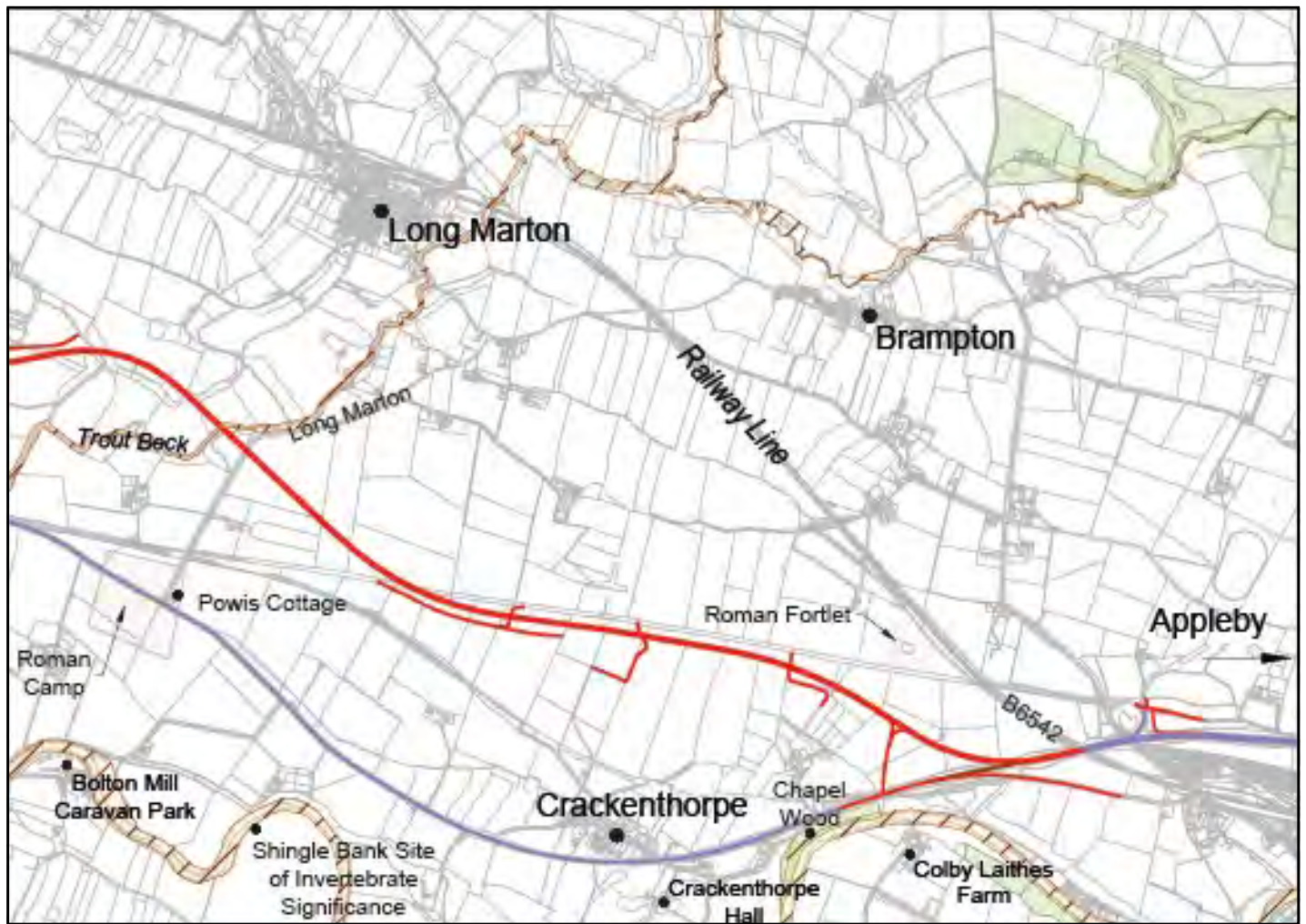
The Red Route differs from the previous Preferred Route as it would have:

- Improved connections between the old A66 and the local road network with a short section of road from the Temple Sowerby Bypass junction, allowing access for local traffic and other road users
- The road would have a lot of rise and fall due to the terrain
- Reduced the length of the crossing over Trout Beck and its associated floodplain from 800m to approximately 300m. The multi-span crossing will be perpendicular to the watercourse rather than run alongside thus reducing the impact on the flood and geomorphological regime. Modelling has shown that there will only be minor impacts on the Trout Beck
- Required the structure be approximately 18 metres above existing ground levels leading to a visually intrusive scheme as it crosses the natural valley
- Had a lesser impact on the Eden Rivers Trust project to re-naturalise this length of the Trout Beck when compared to the Preferred Route Announcement
- Crossed over Long Marton Road due to the elevation of the structure This will maintain connectivity between Bowdon and Long Marton and will also allow traffic to access the existing A66 to travel east or west where traffic levels will be considerably reduced leading to a safer junction
- Moved considerably closer to and increase land required from Sleastonhowe Farm. The Red Route bisects the farm
- Moved considerably closer to Long Marton
- Crossed the geological fault line from Penrith Sandstone to Eden Shales (the formation associated with the British Gypsum extractions, which introduces a higher potential for sinkholes along the route and the risk of dissolution)
- Required a crossing of a further watercourse, the Keld Syke, a tributary of the River Eden



Red Route (Offline alternative)





Environmental considerations (Red Route)

During construction the air quality and noise effects would be similar to that for the Blue Route alternative, but the route also runs closer to residents of Long Marton. Our preliminary assessment predicts that during operation, there will be adverse noise effects on 260 residential and nine non-residential buildings and significant beneficial effects on 120 residential and three non-residential buildings. In addition, for the Red Route, there's the potential for a significant effect during construction on local population, land at Common Moss and town housing allocation sites through loss of land for construction.

Many of the potential biodiversity impacts are similar to the Blue Route alternative, with some differing scales of impact experienced at ancient woodland sites. The scheme contains potential bat crossing points that will be affected by construction and operation. The crossing of the River Eden SAC (Trout Beck) would be a shorter crossing than for Blue or Orange, with potential for slightly less shading effects. It is anticipated that the crossing can be constructed without a significant effect on the integrity of the SAC. No likely significant cultural heritage effects are expected for the red alternative.

The crossing at Trout Beck would be slightly shorter for the Red Route. Modelling has shown that it can be constructed without affecting flood flows or the geomorphology of the watercourse.

The key difference in landscape and visual terms of the red alternative is that the crossing of Trout Beck would need to be at a height of 18 metres to allow clearance of the watercourse and the adjacent local road, due to the landform at this location. In terms of impacts on the AONB, the Trout Beck crossing will be slightly closer to the edge of the AONB and larger, therefore will impact more on views of the AONB from the bridleway that runs along the Roman road to the west of Powis House. This will be a more dominant feature in the landscape and it is unlikely that it could be possible to mitigate this impact through planting.

Impacts on Appleby Fair

All routes currently have an impact on part of the Fair Hill site at Appleby which is the field used for the annual Appleby Fair. While this is a relatively small land take, designed to facilitate a safer junction arrangement, we are aware of the impacts this might have. We are working hard to redesign this junction, prior to the submission of our Development Consent Order, to remove this impact and we will work with the Gypsy, Roma and Traveller communities as well as local people and local authorities to keep them updated.

Summary of Route preference for Temple Sowerby to Appleby

We carried out a sifting exercise to compare the alternative routes for Temple Sowerby to Appleby. We compared alternatives regarding engineering, environmental, traffic, economic and stakeholders as well as policy compliance. Our three imperatives of Safety, Customer Service and Delivery were crucial to assessing these options.

An initial sift between the Blue and Red Route was undertaken to determine a preferred northern bypass to then compare against the online Orange Route.

While the Red Route reduces the cultural heritage impacts it is also longer, has worse highway alignment and includes a much higher bridge above the valley leading to visual impacts on the AONB and wider landscape. It would also mean increased noise for the residents of Long Marton and would cross a second tributary of the River Eden (the Keld Syke). Due to the height of the structure on the Red Route it will be unlikely that mitigation measures can reduce these impacts.

Therefore the Blue Route was taken forward as the northern bypass alternative to be compared with the online Orange Route.

While the flood and geomorphology assessments demonstrated that both the Blue and Orange Routes were viable, the Orange Route was discounted primarily due to the unavoidable impact on the Roman Fort and Vicus Scheduled Ancient Monument south of Kirkby Thore. It was considered that, as there were viable alternative routes, the substantial harm caused to the site could not be justified and would conflict with national planning policy and so would not gain planning consent. Whilst the Blue and the Orange Routes both pass through the Roman Camp at Long Marton, the Orange Route impacted the Roman Fort and Vicus, the Blue Route does not. This was our primary consideration in promoting the Blue Route.

As the Orange Route is south of the village the number of homes that experience an increase in noise and air quality is less than the Blue Route. However the increase in noise and visual impact due to the elevation of structure means that mitigating the Orange Route will be difficult to implement compared to the less physically constrained Blue Route. Whilst the Blue Route will introduce a road into open countryside, impacting both people and the environment, it is considered that the Blue Route affords greater opportunity for appropriate mitigation such as planting and screening.

The Orange Route is shorter than the Blue Route and offers improved journey times and reduced construction costs. However, the additional costs associated with the acquisition of Bridge End Farm together with the extent of the side road network to provide access to the village, would offset any potential cost savings. The Blue Route provides the opportunity to locate a junction north of the village enabling direct access for villagers and businesses to the north therefore resolving a long-standing traffic issue in the village of Kirkby Thore.

While the Blue and the Orange Routes both pass through the Roman Camp at Long Marton, the Orange Route impacted the Roman Fort and Vicus, the Blue Route does not.

On the balance of impacts it is our conclusion that the Blue Route is our preference. More information is set out in the Route Development Report.

Appleby to Brough

The A66 between Appleby and Brough includes a five-mile section of single carriageway with local access junctions. The seven junctions along this section of the route vary in layout and can present safety issues to drivers, with vehicles attempting to join the main A66 carriageway which operates at a much higher speed than the local side roads which join it.

The junctions at Sandford and Warcop comprise ghost islands – islands that use only road markings with no raised curbs or other physical obstructions – and there are no specific facilities provided at Moor House, Hayber Lane, Toddygill, Flitholme and Langrigg junctions. Drivers can also find themselves in a vulnerable position when attempting to slow and leave the A66, especially when turning right.

The existing A66 runs to the south of the North Pennines Area of Outstanding Natural Beauty in the Warcop area. This makes our work challenging as constructing and developing infrastructure in an AONB is subject to national planning policy. In order to develop anything in an AONB we have to demonstrate ‘exceptional circumstances’ and that developing in the AONB is in the public interest. The Preferred Route we announced in May 2020 (Black Route) marginally encroaches into the AONB at its eastern end.

We have been actively looking at how such marginal encroachment into the AONB can be balanced against the impacts that alternative routes outside of the AONB might have on the local environment, property and communities.





We have met with Natural England, the AONB Partnership, the Ministry of Defence (MoD) and parish councils to discuss the issues and seek their views on how our proposals may affect them and how to best address any concerns that they may have with our proposals. As a result, we have looked at several alternative routes in the central and eastern sections.

At the western end, we did not consider that there was a need to look at additional alternatives as the route in this location (outside the AONB) was acceptable in terms of its environmental impact and compliance with national policy. The alternatives in the central and eastern sections are explained below.

We have listened to the local community in Warcop and are aware that some local people support a route through the North Pennines AONB. However, based on the available evidence, we consider that a route that cuts through the AONB and severs the MoD range would conflict with national planning policy and so would not gain planning consent.

We consider that this alternative route would result in more harm to the AONB and would have greater environmental impact than our own proposal and that the planning policy test of 'exceptional circumstances' would not outweigh this harm. Should evidence emerge which would satisfy the requirements of national planning policy tests for this alternative route during consultation then we will consider this and decide whether we should make a change to our proposed design.

Alternative Routes

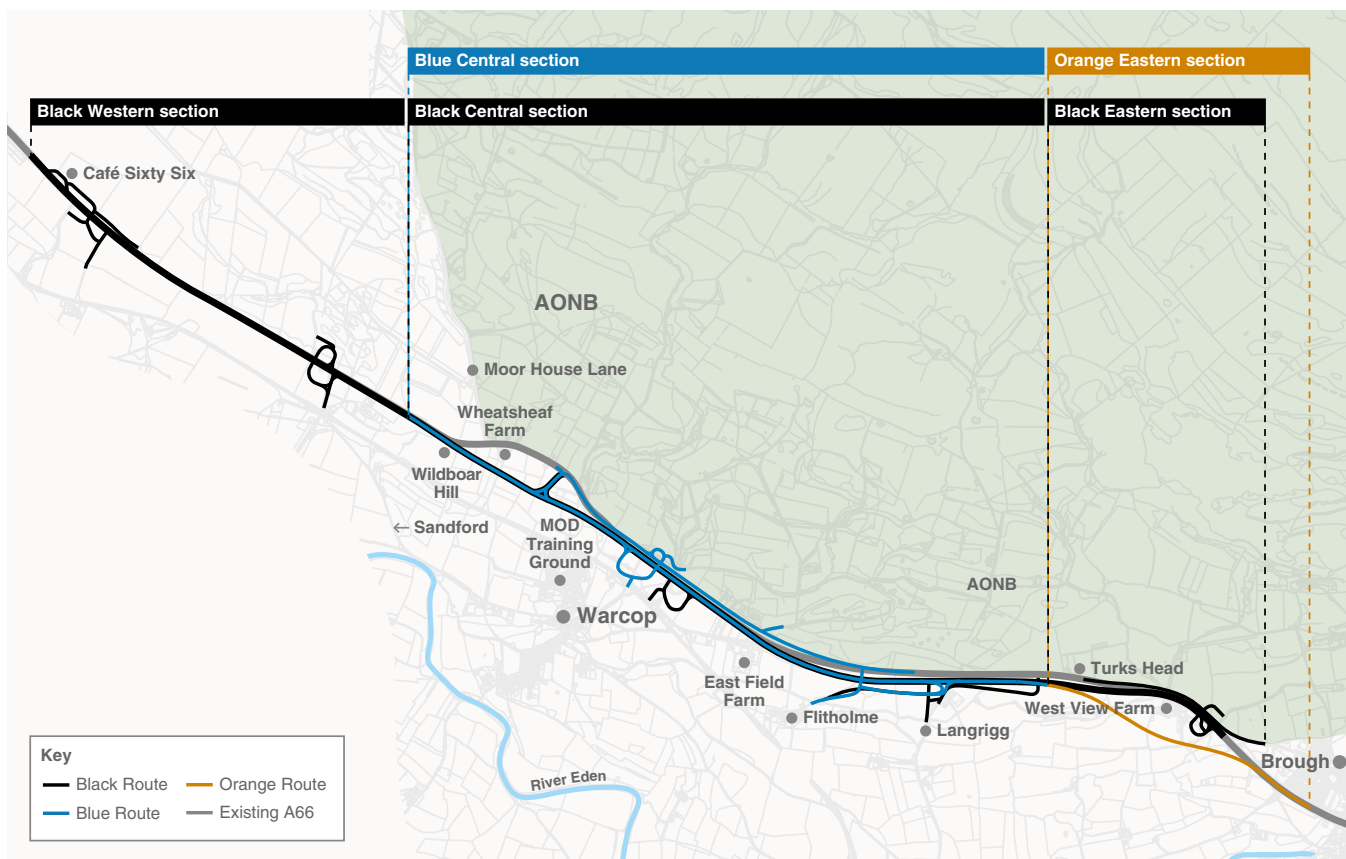
We have considered a number of different route combinations to explore these impacts and associated advantages. These were presented at a public engagement session in Warcop Parish Hall which was also attended by affected landowners, parish councillors and other interested members of the community in summer 2021. These route combinations are shown below:

Four end-to-end routes were formed through the combination of three component sections. These components are referred to as the Western, Central and Eastern sections. The end-to-end route combinations are as in the table below.

The end to end route combinations are:

	Western Section	Central Section	Eastern Section
Route One	Black	Black	Black
Route Two	Black	Blue	Black
Route Three	Black	Black	Orange
Route Four	Black	Blue	Orange

Following from the work we have undertaken in recent weeks and months and our engagement with stakeholders including the AONB Partnership and Natural England, our preference in this location is Route Two: Black in the Western Section – Blue in the Central Section – Black in the Eastern Section. This is a new scheme that differs to that first announced in May 2020. The reasons for this preference are outlined overleaf.



The Western section (Café Sixty Six to Wheatsheaf Farm)

For the Western Section, we only have the Black Route. This route follows the line of the Preferred Route announced which was announced in May 2020. We have made some minor changes to the access arrangements around Café Sixty Six and Far Bank End to better serve the properties in this area.

Starting from Coupland Beck, this comprises 2.6km of online widening. The eastbound carriageway will utilise the existing A66 in this section with a new westbound carriageway built to the south of the existing carriageway.

An eastbound access lane will be provided at Café Sixty Six and a replacement underpass will serve both New Hall Farm and Far Bank End, with a left-in, left-out junction on the westbound carriageway. Access tracks will link the underpass with each carriageway, providing access to the A66 in all directions for farms, properties and land at this location.

Following stakeholder feedback, a new grade-separated junction is proposed to be provided at Sandford with a bridge under the new A66 to connect to the B6259 providing access to MoD and agricultural land in the north. It also seeks to improve connectivity between local footpaths and bridleways by providing a route under the new A66. This would have the added benefit of improving the link between Great Ormside, Sandford and the North Pennines AONB.

No alternatives have been proposed to the alignment for this section of the route as it does not affect the AONB and has been through the routes development process during the earlier phases of the project. We recognise however that there has been some feedback from members of the local community about these proposals which queries why we have widened to the south of the existing A66 rather than the north. Engagement around this issue is ongoing and stakeholders have been encouraged to participate in the statutory consultation and make their comments formally where they will be reviewed and responded to.

Central section (Wheatsheaf Farm to Turks Head)

In the central section we have looked at two possible route alternatives. The Black Route which is the same as the previous Preferred Route announced in May 2020 and the Blue Route which is an alternative we have developed which takes the route slightly further north. This results in a minor encroachment into the AONB and the need to carry out works to the MoD infrastructure in this area. This alternative Blue Route has been developed for this section of the route to reduce the impact the Black Route has on both people and communities (the main village of Warcop on East Field Farm) and on the local environment.

Black Route description

From Sandford this route will generally follow an alignment to the south of the existing A66 diverting south from the line of the old A66 at Wilboar Hill. An underpass will be provided to allow access to agricultural land and drainage ponds at W heatsheaf Farm. We will provide a new structure crossing Moor Beck, which will also be used to convey an existing footpath under the new A66.

New junctions will be provided at Warcop on the westbound and eastbound carriageways to facilitate access to the A66 in both directions and providing access to the village of Warcop and the de-trunked A66. These junctions will maintain access to the village of Warcop, MoD facilities, side roads, properties and land to the north and south of the A66 via a new underbridge located to the east of Moor Beck bridge.

From East Field Farm, the route continues to the south of the existing A66. A new junction will be provided at Langrigg, close to its current location. Movements will be limited by providing a left-only junction with appropriate diverge and merge tapers on the westbound carriageway only.

A new local road to the south of the new A66 alignment will link the village of Flitholme with Langrigg, providing access to the westbound A66 and the local road network. This local road is linked to Langrigg by a staggered cross roads. This junction also links to a new local road to the south of the A66 heading east to a new overbridge provided opposite The Gatehouse and connecting to the existing A66 near Turks Head.

Blue Route description

The Blue Route would move the new A66 further away from the community of Warcop compared to the Black Route. However, it is recognised that some residents and businesses previously unaffected by the previous Preferred Route may now be impacted by these proposals.

It is proposed that between Wildboar Hill and Flitholme, the route will follow the line of the existing A66, by using the old A66 as the new eastbound carriageway and building the new westbound carriageway to the south. It is also proposed that a new road for local journeys will be constructed to the north of the new A66. Part of this new local road will result in minor encroachment into the boundary of the AONB.

It is proposed to lower the new A66 to be on a smaller embankment closer to existing ground levels around Warcop, with access to the MoD training camp and local road to the north crossing over the top of the new road. Constructing this route closer to existing ground level will significantly reduce the visual impact of the route. The route will be moved further north away from Warcop village, but the new local road will encroach further in to the AONB and will require the demolition and relocation of some MoD facilities.

A new local road is also proposed to provide connection between Flitholme and Langrigg, with a westbound-only junction at Langrigg. Another new local road is proposed at Turks Head to connect Langrigg to the old A66 via a new overbridge.

Black and Blue Route comparison

The Blue Route is similar to the Black Route (previous Preferred Route) as it will include:

- A new junction at Warcop providing full access to and from the new A66 for the village and the MoD facilities
- A new local road connection between Flitholme and Langrigg with a new westbound junction providing left on/left off access to the new A66
- Local road will be provided to local access for residents, farm traffic and walkers, cyclist and horse riders users
- Underpasses provided at Wheatsheaf Farm for local access
- Underbridge provided at Moor Beck for local access
- Both routes join the eastern section of the scheme to the east of Langrigg

The Blue Route differs from the Black Route (previous Preferred Route) as it will:

- Move the route to north away from the village of Warcop and existing properties to the south of the A66
- Result in a minor encroachment into the AONB of around 30m over a length of around 1.1km
- Have a direct effect on MoD operations resulting in the need to combine two existing compounds into one
- Result in a route which is much lower than the previous Preferred Route proposals leading benefits in terms of noise and visual intrusion
- By extending the local road, on the alternative Blue Route, into the AONB and MoD training camp on the north side of the old A66 further to the east, an opportunity to provide an underpass at Flitholme has been presented. This full height underpass would allow Flitholme residents access to the local road network. It is proposed that this underpass and road from Flitholme would be connected to Langrigg via a new local road, allowing residents to access the local road network

Eastern section (Turks Head to Brough)

Black Route description

The Black Route is an evolution of the previous Preferred Route that was presented in May 2020 for this section. To the north of the new dual carriageway, the old A66 will be used for access to the local road network, west to Warcop or east to Brough. A new local road will be provided to the north from Turks Head into Brough; this will encroach into the AONB.

An overbridge is proposed at Gate House, following which the route continues to the south of the existing A66 before tying into Brough Bypass near West View Farm.

A new farm accommodation underpass will be provided to the west of West View Farm for agricultural vehicle and livestock use only. This will be constructed under the new A66 and local road.

An overbridge will also be provided for agricultural use, walkers, cyclists and horse riders to the east of West View Farm, providing access to land on the north side of the A66 and maintaining footpath and bridleway connectivity. This will encroach slightly into the AONB.

A left-only junction with appropriate diverge and merge tapers on the westbound carriageway is proposed to provide access to properties, farm and land on the south side of the new dual carriageway. Eastbound local movements to Brough will be via the accommodation bridge to join with the local road into Brough.

It is proposed that the sections of the old A66 will maintain access into the AONB for walkers, cyclists and horse riders.

Orange Route description

The Orange Route has been developed for the eastern section of the route to demonstrate how the AONB can be avoided entirely.

For the Orange Route, the new A66 dual carriageway would head in a south-easterly direction from a point near to Turks Head on an alternative alignment to the south of West View Dairy Farm and connect back into the old A66 dual carriageway near to Musgrave Lane Overbridge further east than the current Preferred Route.

This option would require the acquisition of one residential property and will impact West View Dairy Farm considerably.

A new underpass would be required to provide access to land on the south side of the new A66 and to maintain footpath and bridleway connectivity.

As the Orange Route would run to the south of the existing A66, the existing A66 would be used for local journeys. We would not therefore need to build a new local access road to allow the existing north and south movements from properties on the south side of the old A66 to be maintained. The Orange Route would avoid an incursion into the AONB at the Brough end of the scheme.

Black and Orange Route comparison

The Orange Route shares no similarities with the Black Route (Preferred Route).

The Orange Route differs from the Black Route as it will:

- Move the route around 300m south of the existing A66
- Require no encroachment into the AONB
- Create a completely new stretch of road which would have a detrimental effects on the setting of the AONB
- Enable the existing A66 to remain as a local access road and remove the need for underpasses or overbridges to provide access across the new A66 in this section
- Require the demolition of a residential property and have significant impacts on the operation of West View Dairy Farm
- Require an additional length of around 500m of dual carriageway in order to tie into the existing A66 at Brough



Environmental considerations (all route alternatives)

This section considers the effects of the different route combinations on the local area.

During construction, noise and vibration and air quality could affect residential, commercial and community buildings. These effects will be temporary and localised, depending on the specific activity and construction stage. Measures to reduce the effect will be included in the EMP. Our preliminary assessment predicts that, during operation, there could be potential significant noise impacts on:

- **Black-Black-Black Route** – 58 homes and five non-residential buildings with significant beneficial effects on five homes
- **Black-Blue-Black Route** – 42 homes and two non-residential buildings, and significant beneficial effects on five residential buildings
- **Black-Black-Orange Route** – 75 homes and five non-residential buildings, with significant beneficial effects on nine homes and one non-residential building
- **Black-Blue-Orange Route** – 42 homes and two non-residential buildings, and significant beneficial effects on nine homes and one non-residential building

The MoD may be impacted by the potential loss of use or access to land while the scheme is being built. There is also potential for additional effects on the MoD and on Rowan House Housing due to land needed during construction.

There is also the possibility of a bridleway being severed although this applies to both alternatives in the central section.

The potential biodiversity impacts are expected to be similar for all routes, however the Orange Route crosses an additional watercourse and, as it is a new stretch of road, it has the potential to cause fragmentation and loss of habitat.

All routes in this location may result in potential permanent adverse biodiversity impact on the River Eden SAC/SSSI and the North Pennine Moors SAC/Special Protection Area through potential air quality impacts. Habitats utilised by species such as otter, water vole, badger, bats, reptiles and barn owls are likely to experience significant effects and there is potential for disturbance during construction for breeding and wintering birds. Potential bat crossing points will be affected by construction and operation activities. The ongoing assessment and design will seek ways to reduce any predicted impact of the scheme.

We have undertaken a Cultural Heritage Assessment which shows that for all routes there are potential permanent significant adverse effects impacts on Warcop Roman Camp and Roman Road, southwest of Moor House. In addition the Boundary Stone to the north of Bullistone Cottage, to avoid a significant adverse effect, would need to be temporarily removed during construction works and then reinstated at, or close to, its original location after the construction of the new route.

The geology and soils assessment has identified the possibility of significant effects from construction impacts for all route alternatives due to the potential permanent land take and loss of high and medium value agricultural land.

We have identified an opportunity to enhance the UNESCO Global Geopark if we can permanently expose geology of scientific interest. During construction, we will provide alternative routes where footpaths or bridleways have been affected to allow access to continue into the Geopark so people can still enjoy the area during construction.

We have considered the impact on water courses locally including the River Eden and the borehole at West View Brough. Our assessments have shown there is likely effects either during construction or operation for any of the alternative routes for this scheme.

Our assessment of the Black-Black-Black route suggests impacts on the landscape, the North Pennines AONB with some visual effects for local villages, users of the PRoWs locally and visitors to Eden Valley Railway and Brough Castle. The same areas are expected to experience the same effects from all other route alternatives, however routes ending in the orange alternative will have a greater impact on Brough Castle.

In terms of impact on the AONB, the Black-Blue-Black route has similar effects to the Black-Black-Black alternative to the west of Wheat Sheaf Farm. Between Wheat Sheaf Farm and Eastfield Farm the Black-Black-Black alternative has a high embankment of 8 metres height. The Black-Blue-Black route is retained in a smaller corridor, leading to less of an influence on landscape character and setting of the AONB, although there is larger direct impacts on the AONB due to the construction of a new local access road within the AONB boundary.

To the east of Flitholme the land around Lowgill Beck will be altered and vegetation will be lost in field boundaries and lanes although the effects will be slightly less than those for the Black-Black-Black route. East of Broom Rigg the effects will be similar to those for the Black-Black-Black alternative.

The Orange Route will only differ to the Black Route at the eastern end of the scheme where the new road would be built to the south of West View Farm. The offline section will cross Lowgill Beck and another tributary to the east. There will be loss of vegetation in field boundaries and alteration of field pattern and severance of a PRoW, all of which will result in impacts on the setting of the AONB in a limited area during construction. The effects of the Black-Black-Orange alternative on the AONB will be similar to those of the Black-Black-Black alternative although the structure crossing Lowgill Beck will be noticeable in views towards the AONB, and there will not be physical effects on the AONB at the eastern end of the scheme. The orange alternative does, however, avoid the direct physical impact on the AONB.

In all cases the effects on the AONB will be mitigated with the passing of time as planting becomes established which will soften the appearance of earthworks and integrate them into the surrounding landscape.

Summary of route preference for Appleby to Brough

A sifting exercise was carried out to compare the alternative routes for the central and eastern sections of Appleby to Brough. We have compared the alternatives in relation to engineering, environmental, traffic, economic and stakeholder principles as well as planning policy compliance. Our three imperatives of Safety, Customer Service and Delivery were considered crucial to assessing the alternatives.

For the Western Section the route being promoted is based on the Preferred Route announced in May 2020.

For the Central Section a comparison was undertaken between the Black and the Blue Routes incorporating the relevant parts of the full route environmental assessments.

Within the Central Section, the Blue Route has a slight incursion into the AONB where there is no incursion with the Black Route. The Blue Route is predominantly at ground level compared to the 8 metres high embankment on the Black Route and the road infrastructure is retained in a smaller corridor, leading to less of an influence on landscape character and setting of the AONB. There is an incursion into the AONB due to the construction of a new local access road, although considering both the direct incursion and the indirect setting impacts the overall impact on the AONB, is considered to be lower for the Blue Route.

The Blue Route is also further away from the community of Warcop and East Field Farm therefore reduces the noise, air quality, safety and biosecurity impact at this location compared to the Black Route. We do however recognise that the route will be closer to a small number of residential properties.

The alternative Blue Route junction at Warcop would be predominantly sited on land previously used by the MoD. An area of the MoD tank storage and filling station compound would be lost with the new local road provision so an existing MoD compound area to the east will be upgraded and extended to ensure no loss of facilities for the MoD. The exact size of the extended combined compound area is being developed. We are working with the MOD to fully understand their requirements and will provide replacement facilities on a like-for-like basis. We will be looking to minimise the area of encroachment into the AONB as much as possible.

For these reasons we believe there is an exceptional circumstances case that can be made for an incursion into the AONB for our preference of the Blue Route. We have engaged with Natural England, AONB Partnership and MoD to discuss the principles of both the Black and Blue Route in coming to this conclusion.

For the Eastern Section a comparison was undertaken between the Black and the Orange Routes incorporating the relevant parts of the full route environmental assessments.

The Orange Route has been discounted for a number of reasons. The Orange Route has a greater impact on local people as it passes close to commercial and farming operations and requires demolition of a residential property. The Orange Route is considered to have a detrimental effect on the setting of the AONB and it would also have a greater effect on a number of watercourses in this section including the requirement for a significant structure to be constructed over Low Gill Beck.

It also requires additional land take and severs a substantial farm operation.

While the Black Route encroaches into the AONB through the construction of a local road and farm access, the overall impacts on the AONB are expected to be lower than for the Orange Route which has a greater impact on setting. Therefore, given the additional impacts

that the Orange Route would have due to the creation of a new length of road in open countryside, it is our preference to take the Black Route forward.

As a complete route this results in a combination of Black-Blue-Black being taken forward as our preference.

Brough Hill Fair

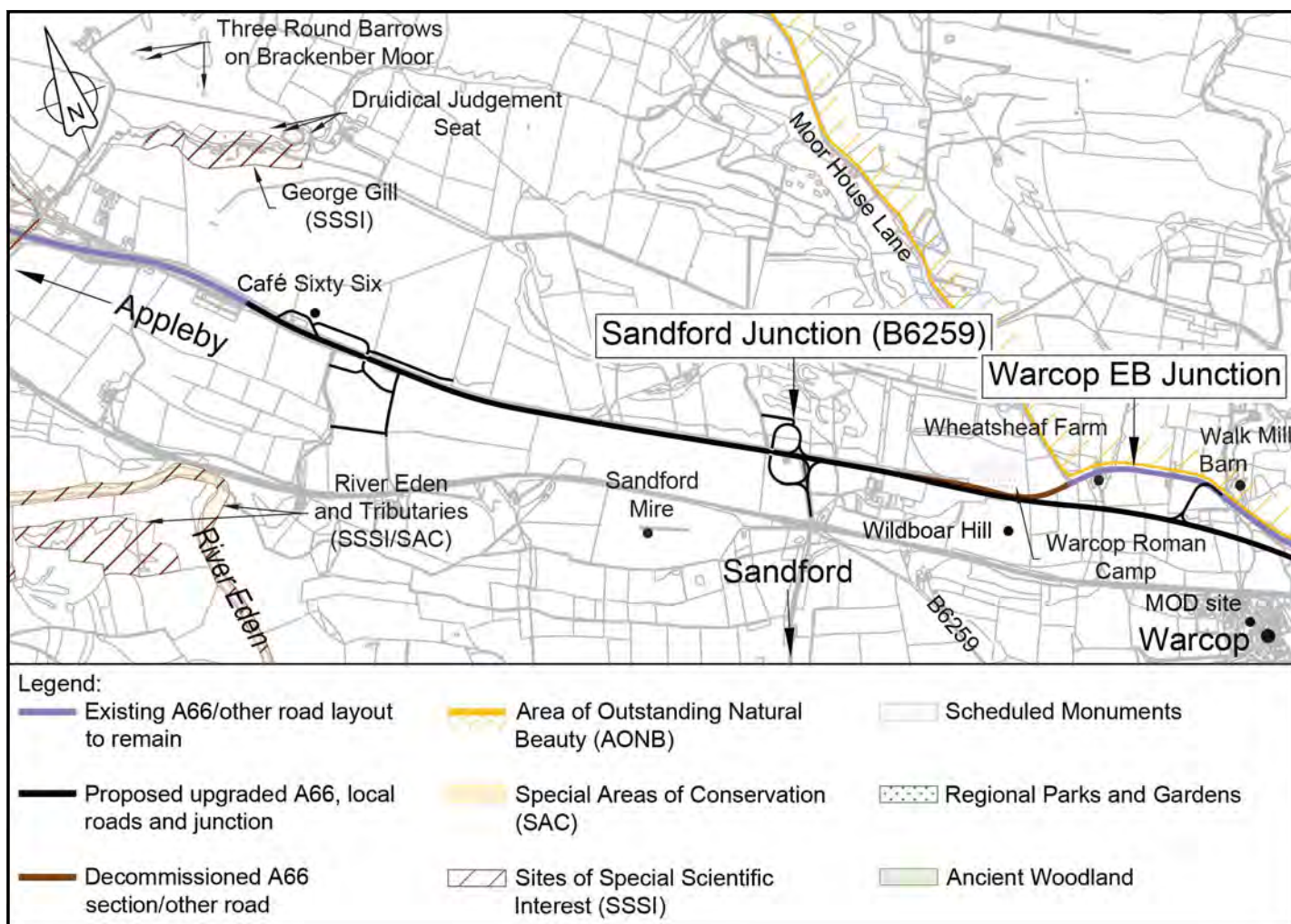
The Brough Hill Fair has been a fixture of the Gypsy community's calendar for centuries. The event was once held on Brough Hill but was relocated around 70 years ago to a field adjacent to the A66, to the north of Lowgill Beck. While attendance at the Fair has dwindled in recent years it is culturally very important to the Gypsy community.

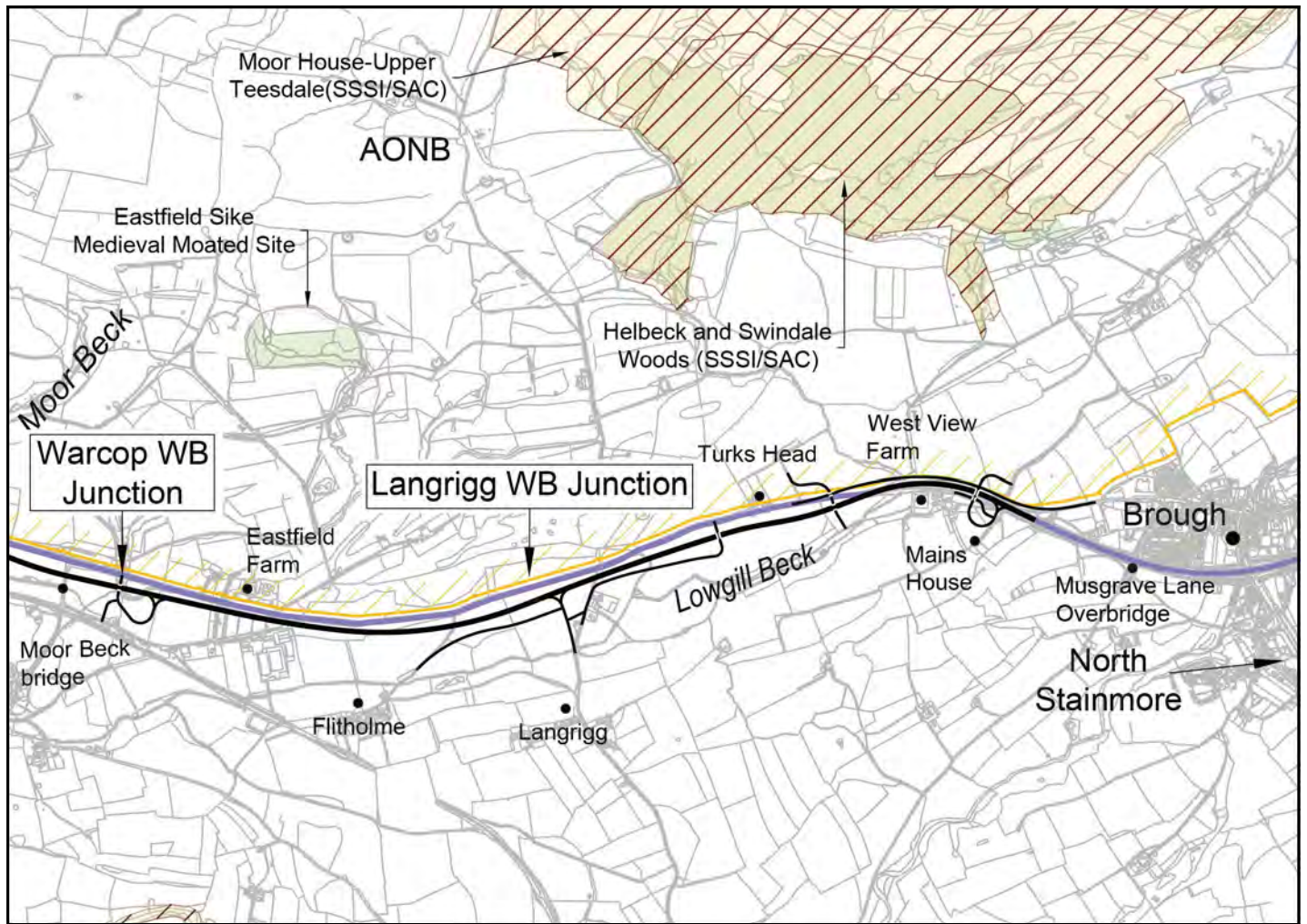
All of the route alignment alternatives on this section of the A66 would require the Brough Hill Fair to be moved to a nearby

site. Highways England recognises the cultural significance of such an event in this location and we are working hard with landowners, local authorities, event organisers and attendees to find an appropriate site. Working collaboratively, we believe we have identified a suitable alternative site which is as close as possible to the existing location and will provide better access and facilities for the Gypsy community in attendance at the Fair.

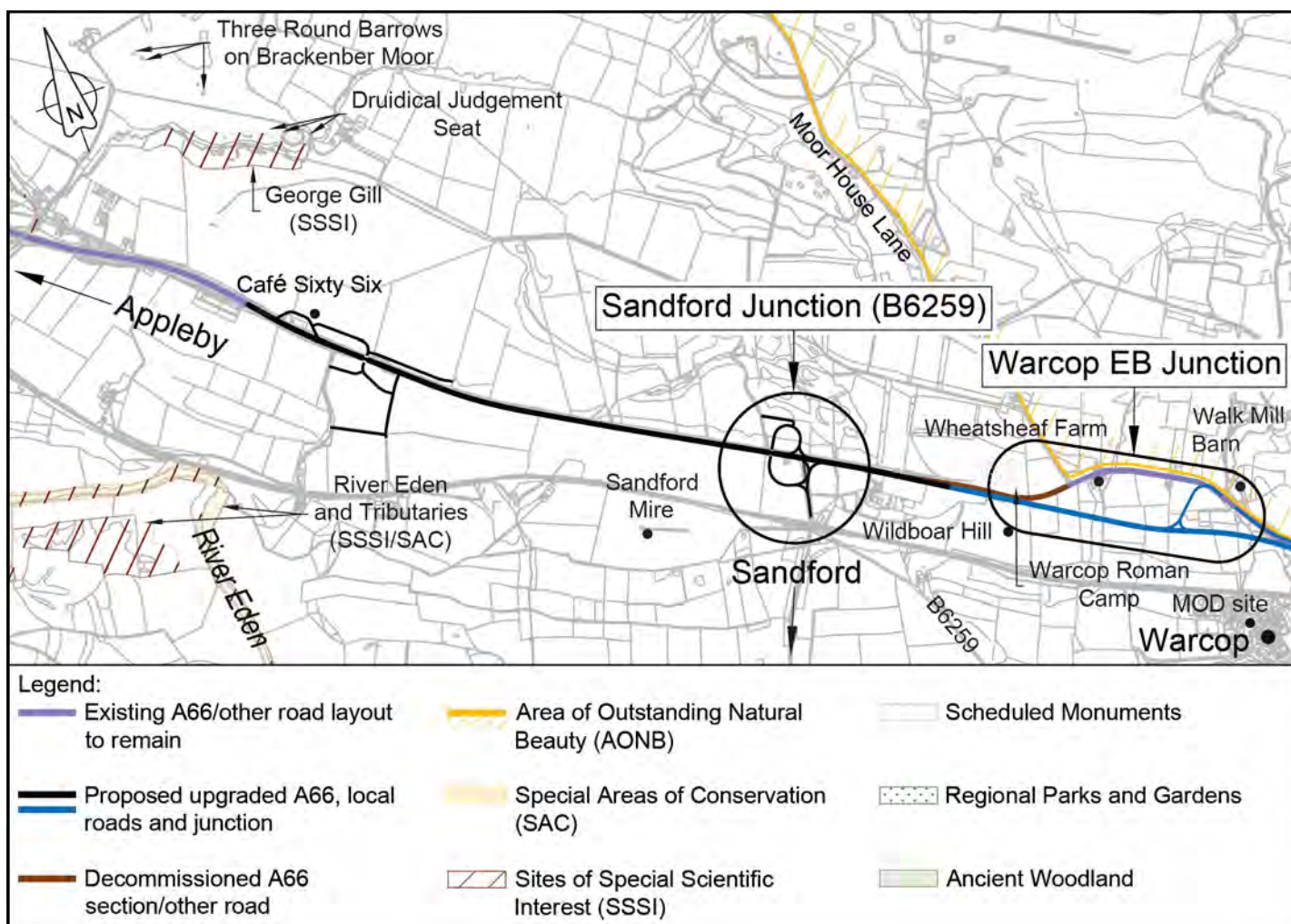


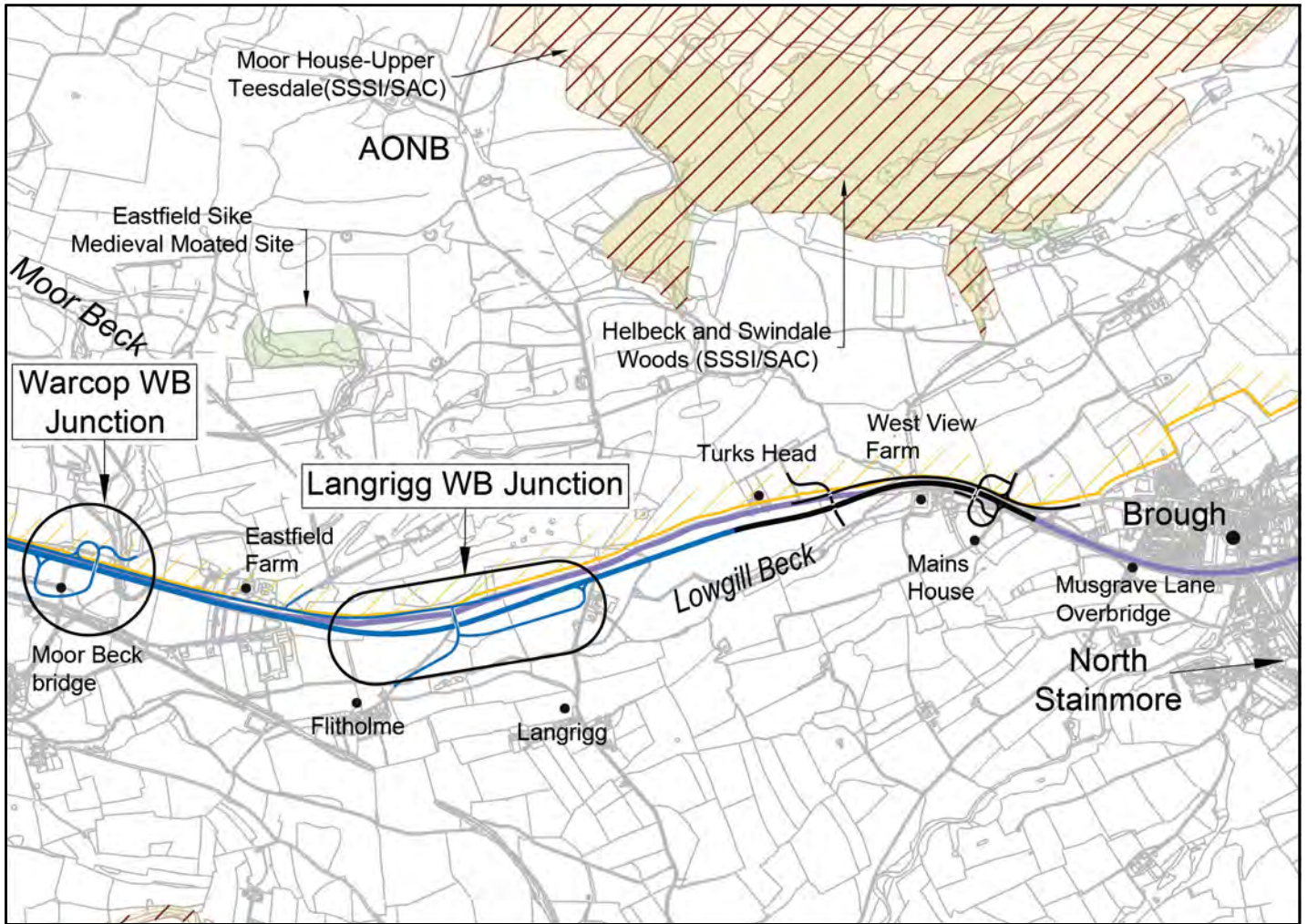
Black-Black-Black Route



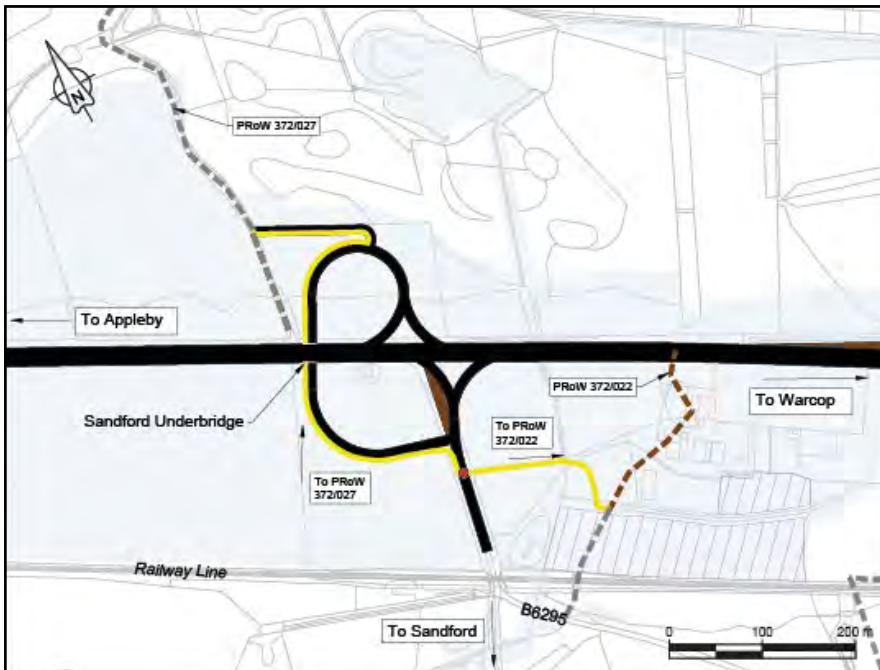


Black-Blue-Black Route (our preference)

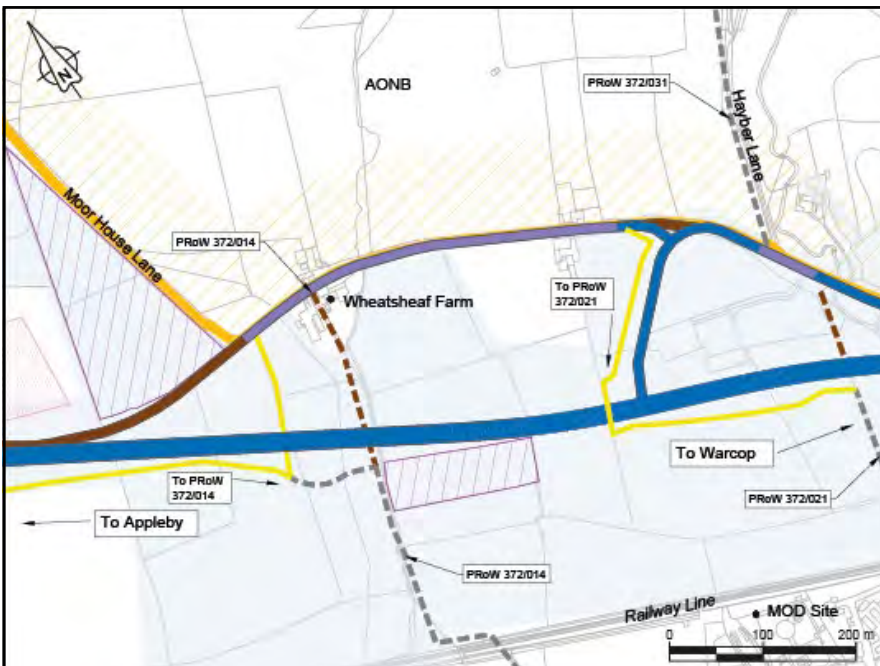




Black-Blue-Black junctions arrangements

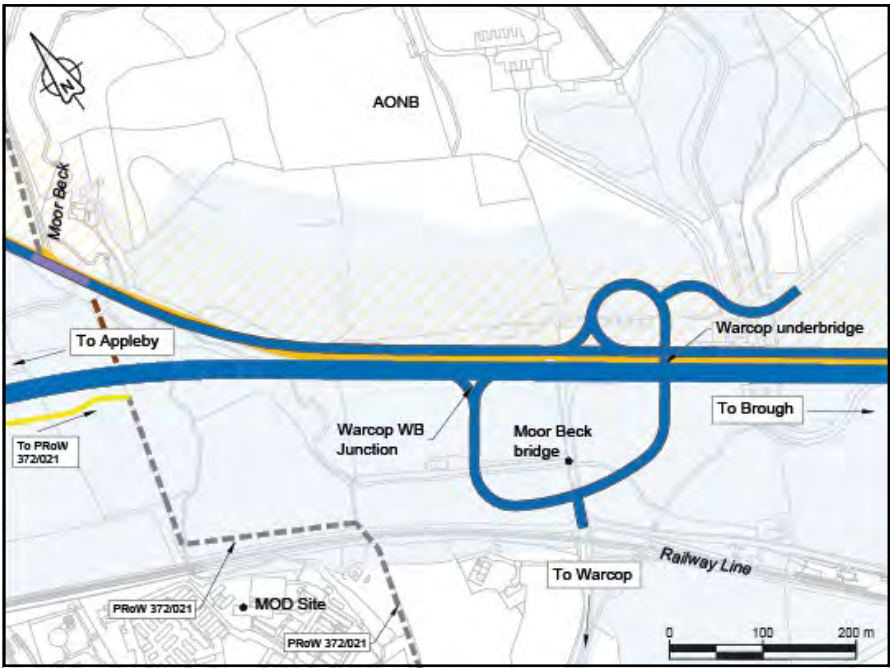


Sandford junction

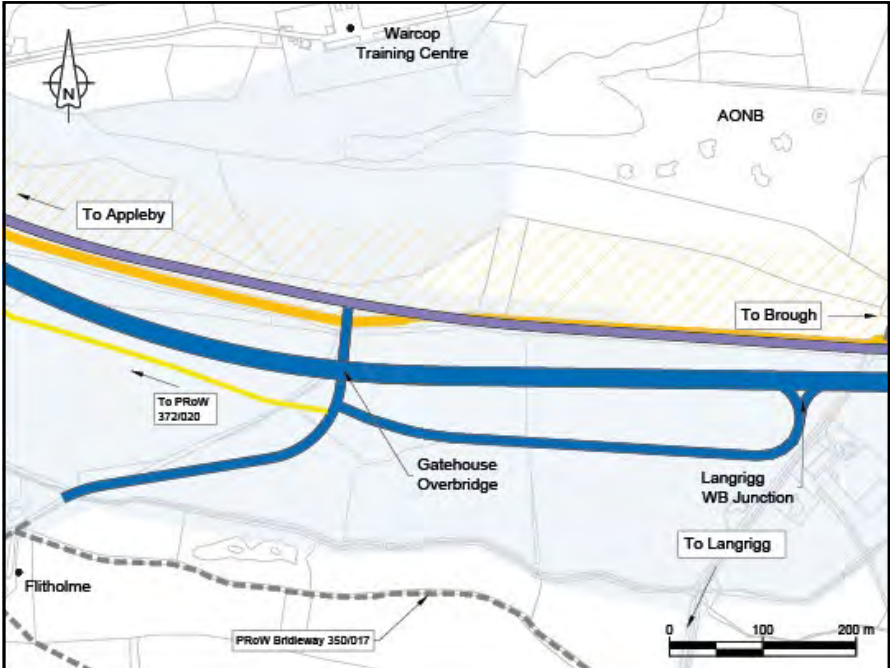


Warcop eastbound

Legend:					
	Existing A66/other road to remain		Existing Public Right of Way (PRoW) (footpath unless stated)		Listed Building
	Proposed improvement to junction and road layout		Existing Walking, Cycling, Horse Riding provision to be removed		Area of Outstanding Natural Beauty (AONB)
	Land required (inc. earthworks, drainage and environmental mitigation)		Proposed Walking, Cycling provision		Special Areas of Conservation (SAC)
	Decommissioned A66/other road		Proposed Walking, Cycling, Horse Riding provision		Sites of Special Scientific Interest (SSSI)
	Proposed compound, storage area		Proposed Walking, Cycling provision		Scheduled Monuments
	Proposed borrow pit (excavation of material for use as fill)		Proposed Walking provision		Regional Parks and Gardens
			Uncontrolled crossing		Ancient Woodland
			Controlled crossing		

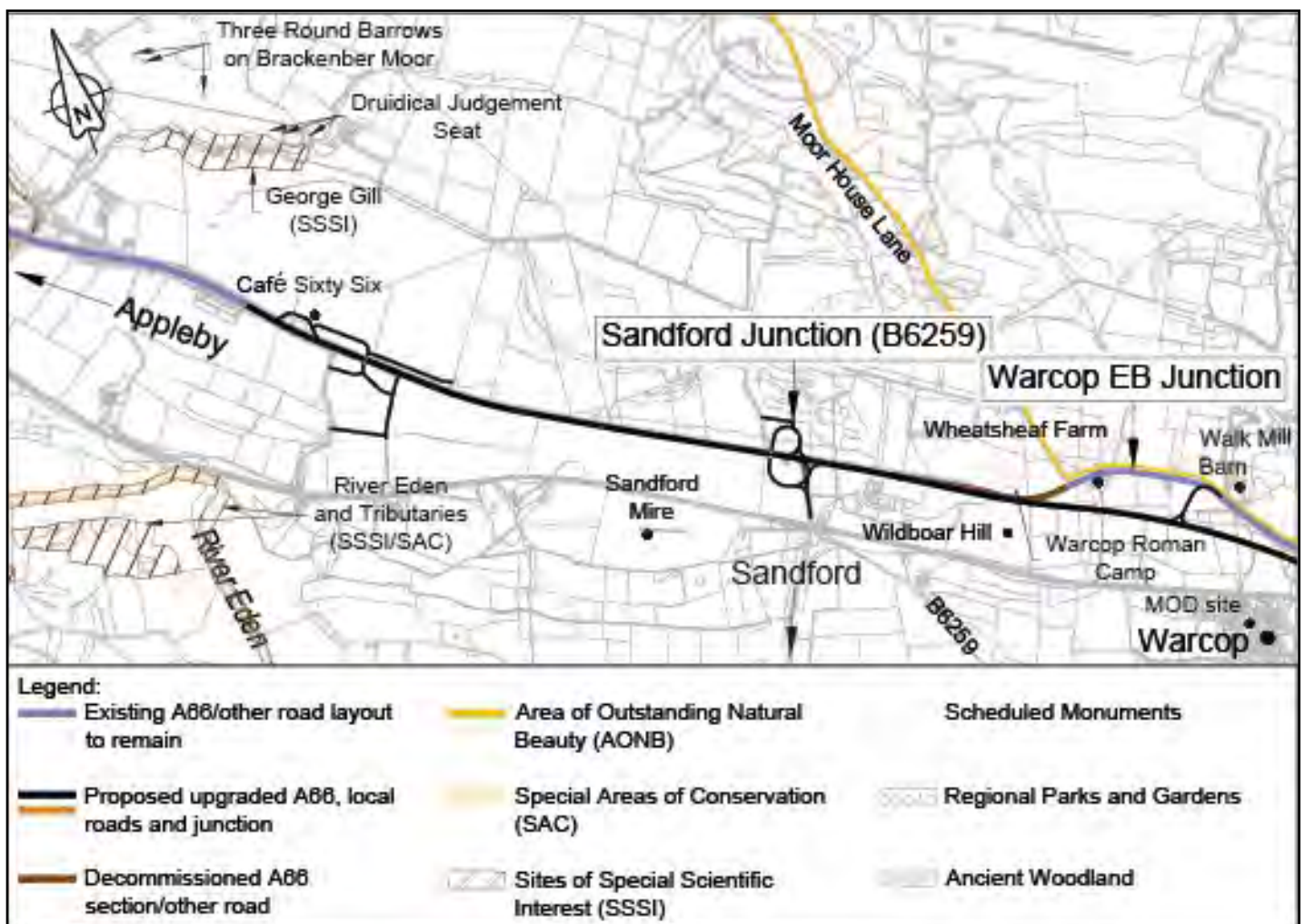


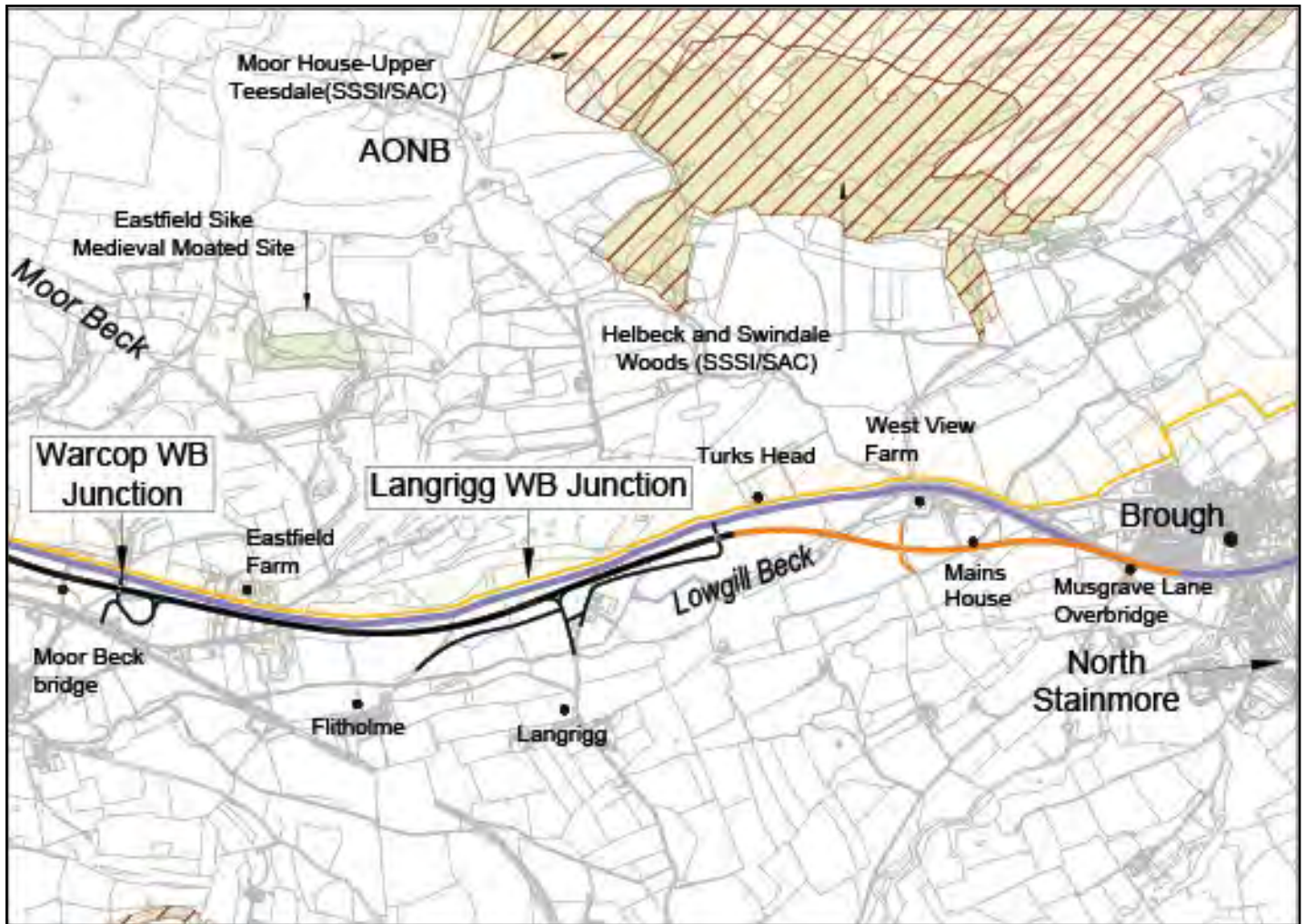
Warcop westbound



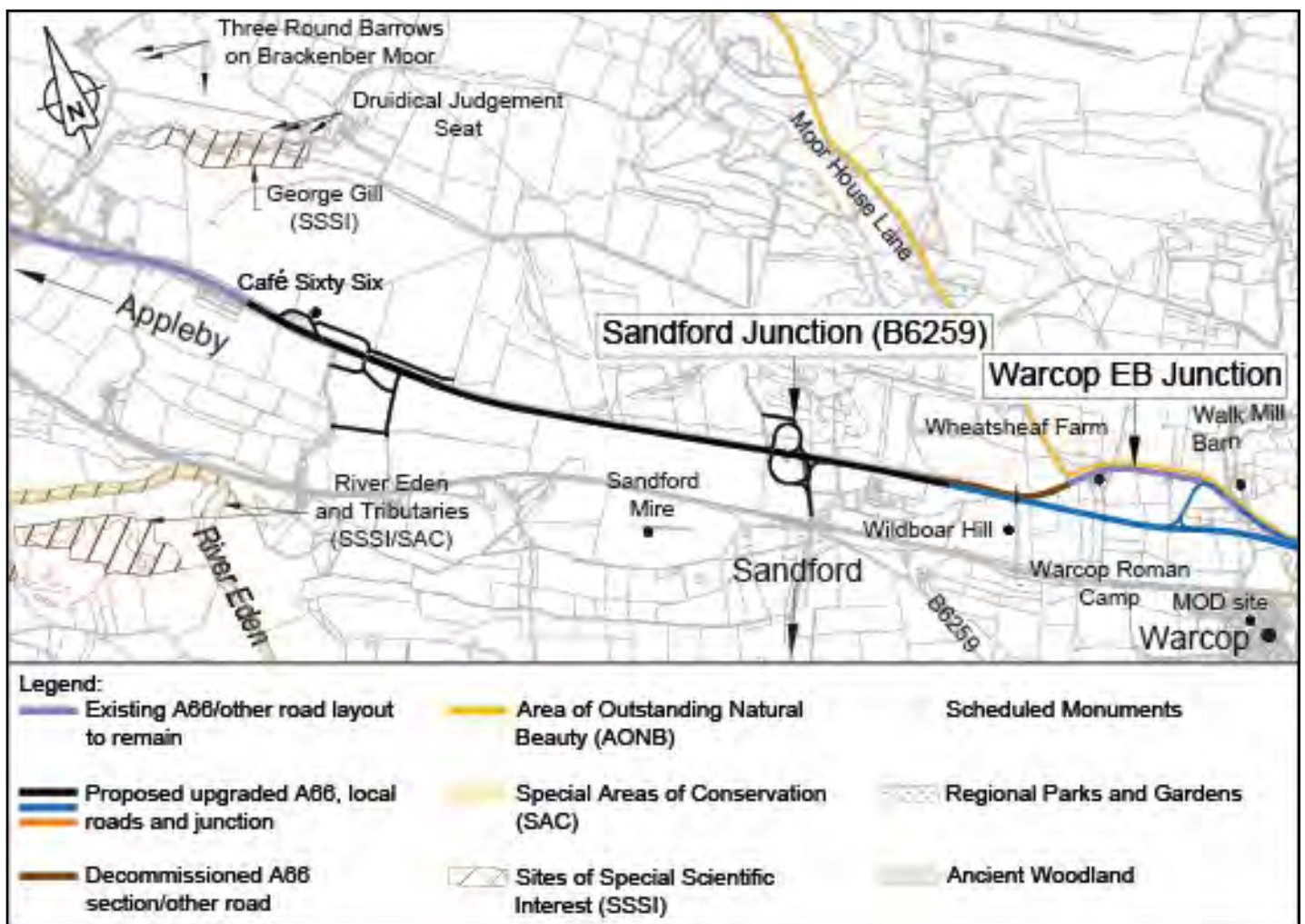
Langrigg westbound

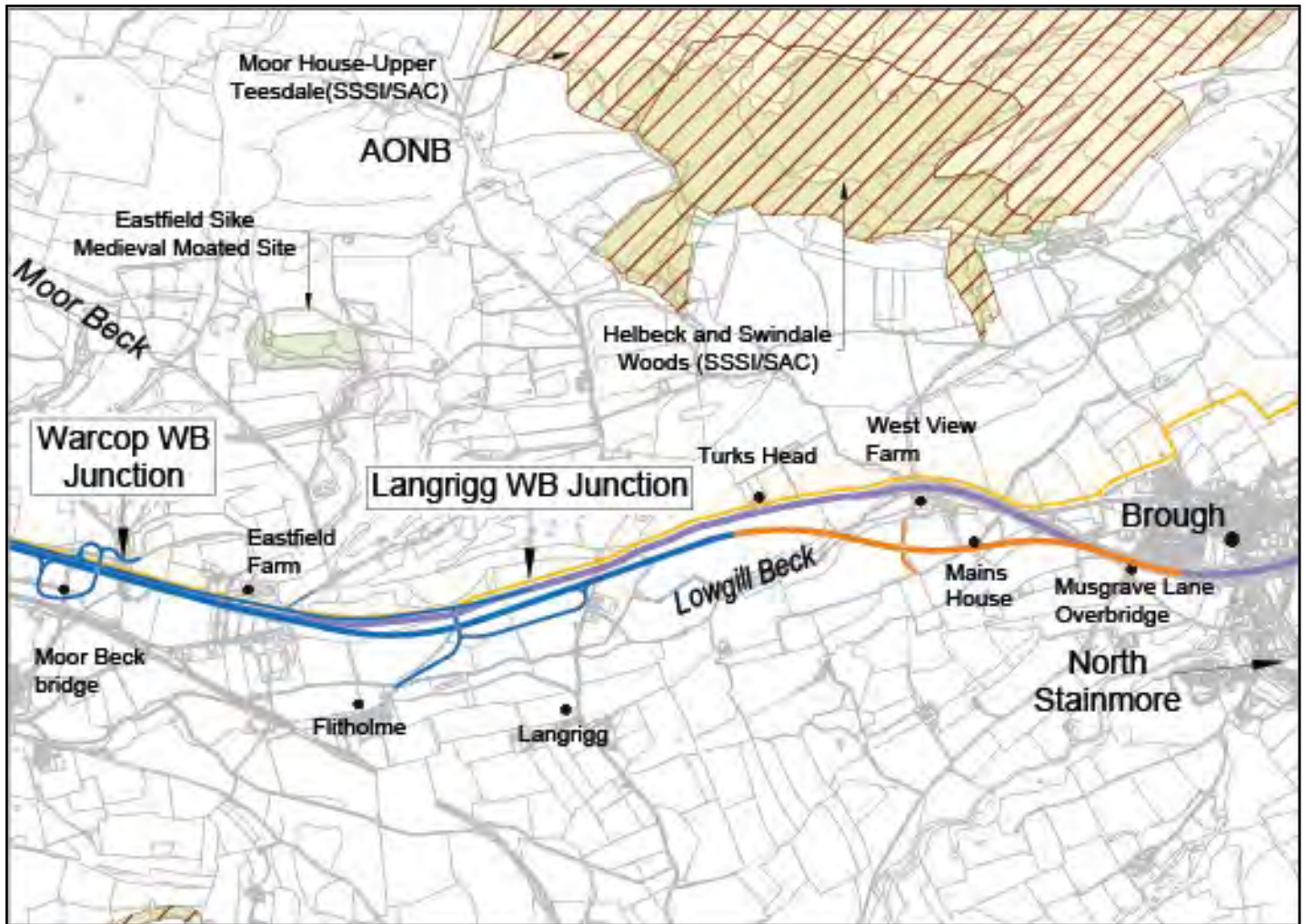
Black-Black-Orange Route





Black-Blue-Orange Route





Bowes Bypass

This is a 1.9-mile single carriageway section which is sandwiched between existing dual carriageway sections to the east and west. A key feature of this route is the current junction with the A67 which is currently only accessible to traffic to and from the west.

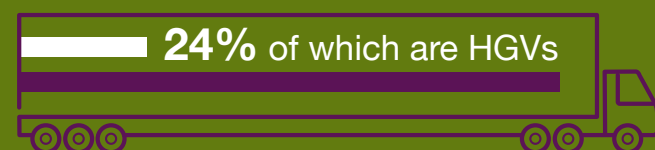
Eastbound traffic approaching may not be aware that one lane at this junction is used for the A67 which reduces capacity and leads to last minute lane changes and slowing traffic on the A66 that present safety issues.

We are proposing that:

- At the junction with the A67, an underpass would carry the new eastbound carriageway with two new slip roads accommodating traffic travelling to and from the east. These new slip roads would provide access to and from the A67 and Bowes
- The route would closely follow the existing road alignment to the north of Bowes Village, with a new eastbound carriageway to the north; the new carriageway would begin to the east of the Clint Lane Overbridge. The old A66 would be converted to carry westbound traffic

- Further design work is required to be undertaken on the Clint Lane Bridge structure in order to retain the existing structure in-situ. The design team are currently progressing this and will potentially need to consider alternatives following statutory consultation
- To the east of the A67 junction, we will need to demolish some derelict buildings to accommodate the proposed eastbound junction slip road. In addition, we will demolish the house at Low Broats Farm and associated farm buildings. We are in ongoing dialogue with all affected landowners
- The Roman road, known as The Street, will be closed and access between Bowes Village and the A66 provided by the improved Bowes junction instead, making access to the A66 safer for local traffic

This section carries approximately
16,300 vehicles per day



Environmental considerations

During construction noise and vibration and air quality could affect residential, commercial and community buildings located throughout the scheme. Effects will be temporary and localised, depending on the specific activity and construction stage and measures to reduce the effect will be included in the EMP. Our preliminary assessment predicts significant adverse noise effects to nine homes and one non-residential building.

We will need to acquire one business property and two areas of Bowes Moor may not be accessible during construction. There is also the potential for loss of access to the community allotment during construction.

During operation, through improved connectivity, we will improve access to community facilities and other services for rural communities, leading to a range of benefits on wellbeing.

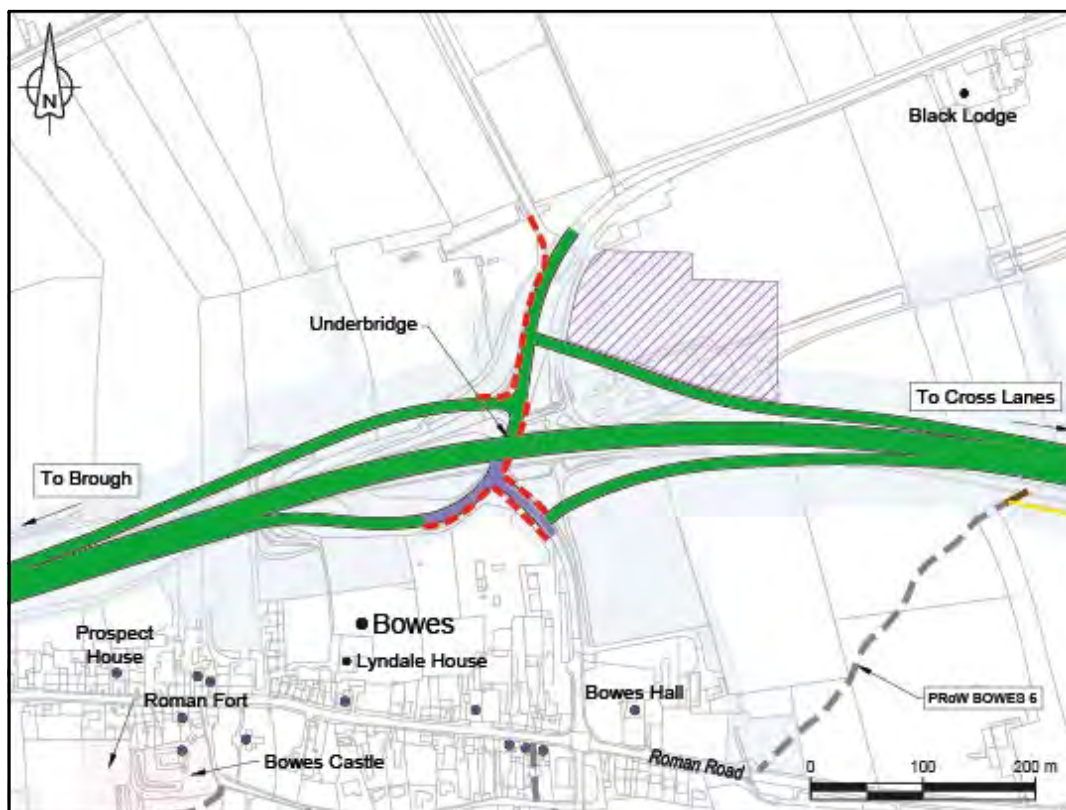
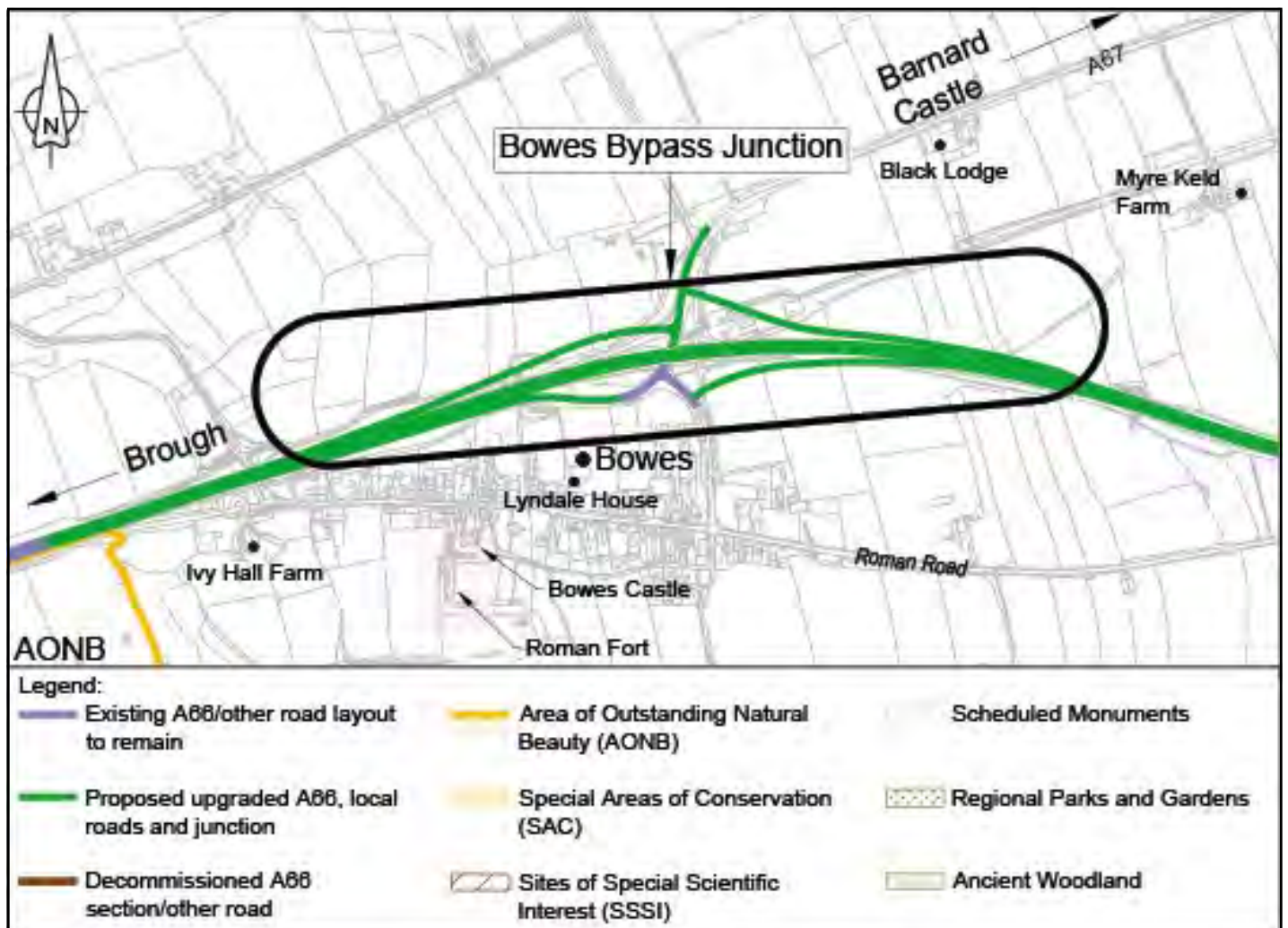
Our biodiversity assessment has identified potential impacts through air pollution on sensitive Priority Habitats and some habitat loss and fragmentation which could significantly affect various animal species at construction and operation. Our preliminary assessment identified no likely significant cultural heritage effects at construction or operation for this scheme.

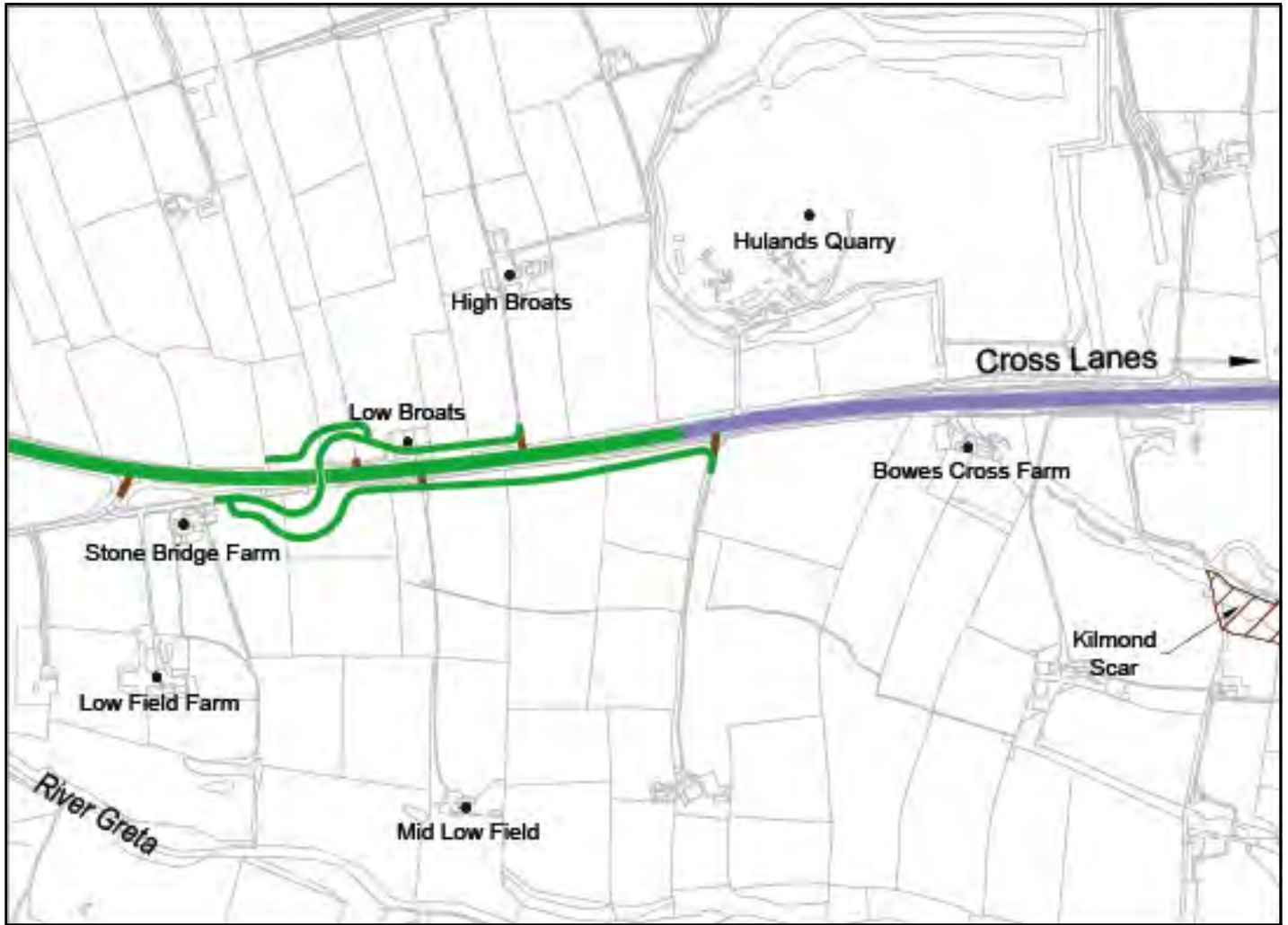
A number of potentially contaminated sites have been identified including a disused quarry, cemetery, railway land, farms and a landfill site. Risk assessments and method statements will be developed to prevent any release of contamination affecting allotments, a primary school, secondary aquifers and numerous surface watercourses.

There is some permanent land take and loss of high value agricultural land. We have identified an opportunity to enhance the UNESCO Global Geopark if we can permanently expose geology of scientific interest. There are no likely significant effects on the water environment, including tributaries of the River Greta, at this scheme.

Construction will have temporary visual effects for some residents of Bowes as well as significant effects on the landscape. Users of PRowS around Bowes and in the North Pennines AONB and a short section of the Pennine Way National Trail may also be impacted. We are developing mitigation for this scheme with planting and dry-stone walling on field boundaries planned.

Bowes Bypass





Legend:

- | | | |
|--|---|---|
| Existing A66/other road to remain | Existing Public Right of Way (PRoW) (footpath unless stated) | Listed Building |
| Proposed improvement to junction and road layout | Existing Walking, Cycling, Horse Riding provision to be removed | Area of Outstanding Natural Beauty (AONB) |
| Land required (inc. earthworks, drainage and environmental mitigation) | Existing Walking, Cycling provision | Special Areas of Conservation (SAC) |
| Decommissioned A66/other road | Proposed Walking, Cycling, Horse Riding provision | Sites of Special Scientific Interest (SSSI) |
| Proposed compound, storage area | Proposed Walking, Cycling provision | Scheduled Monuments |
| Proposed borrow pit (excavation of material for use as fill) | Proposed Walking provision | Regional Parks and Gardens |
| | Uncontrolled crossing | Ancient Woodland |
| | Controlled crossing | |

Cross Lanes to Rokeby

This is a 1.8 mile stretch of single carriageway, sandwiched between existing dual carriageways to the east and west. There are two major junctions at each end of this section and five private farms which access the A66 directly, as well as other private access points.

These private access points pose a considerable safety risk due to fast and slow-moving vehicles meeting on this busy section of the A66. By improving the Cross Lanes to Rokeby section of the A66 to dual carriageway, we can create a consistent road standard that helps minimise the risks to all road users.

When we announced our Preferred Route back in 2020, we proposed junctions in principle at Cross Lanes and Rokeby to mirror the level of existing provision. Those junctions were presented in more detail at the Winter 2020 update and in the engagement sessions in summer 2021.

We have continued to carry out environmental and ecological studies and traffic modelling and have held regular meetings with landowners, members of the local community, local authorities and strategic environmental bodies to help inform the design and approach to construction of this part of the project.

The alignment of the A66 is fundamentally unchanged since the Preferred Route Announcement from May 2020 and as part of this work, we are still proposing two new junctions: one at Cross Lanes and another at Rokeby. However, our transport models have shown that the interaction between

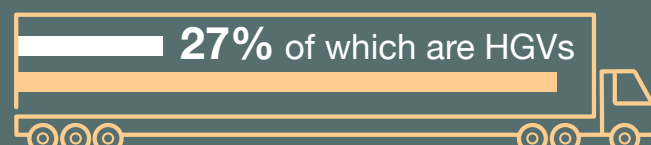
the junctions is such that they need to be considered together because the location of the junctions can affect how traffic uses the local roads. In all alternatives the route for HGVs to Barnard Castle, along the C165 Barnard Castle Road, will not change.

We have identified two junction alternatives at Cross Lanes (west and east of the existing junction) and two alternatives at Rokeby (west and east of St Mary's Church) to serve the local area. Traffic modelling determined that where the junctions were closest together (Cross Lanes East and Rokeby West) the transfer of traffic between the junctions was too great. Therefore this combination of junctions was not considered to be viable and was not taken forward.

This has resulted in three end-to-end alternatives, depending on the combination of junctions. These have been colour coded for ease of reference and are summarised in the table below:

Cross Lanes	Rokeby	Route colour
West	West	Black
West	East	Blue
East	East	Red

This section carries approximately **16,900** vehicles per day



These alternatives are the same as those presented as part of the engagement sessions in summer 2021.

A sifting exercise has been carried out to compare these junction alternatives and how they work together in relation to impacts on people, the environmental and traffic as well as considering engineering challenges and policy compliance. We are recommending the Black Route, Cross Lanes West and Rokeby West be taken forward for the reasons outlined in more detail below.

Whilst we recognise the significant support for the Blue Route we could only take the Blue Route forward if there is evidence that there is sufficient public benefit in the route to outweigh harm on the heritage interests and it complies with national policy and hence would be supported by Historic England. This is presented in greater detail below.

If you require further information about the sifting process undertaken to determine the Black Route as the preference, please refer to the Route Development Report and the Preliminary Environmental Information Report (PEIR) both of which can be found online via the A66 webpage or in deposit points and at event locations. Further details on events and deposit points can be found in this brochure.

Cross Lanes junction alternatives

At Cross Lanes there are two junction proposals. The Preferred Route alignment at Cross Lanes is the western junction which forms part of the Black Route.

Cross Lanes west

The western junction alternative provides for a more direct link between Rutherford Lane and the B6277 Moorhouse Lane. An all movement junction, west of the existing Cross Lanes junction with a structure over the A66 will serve this busy local route. This removes an existing right-left stagger across the A66 for local traffic.

The Western alternative will provide access to the B6277 (Moorhouse Lane) for Barnard Castle, Cross Lanes Organic Farm Shop and Café, the Grade II listed Cross Lanes Farmhouse and other local farms and residential properties via connecting roads from the junction.

Cross Lanes east

The eastern junction at this location is an all-movement junction which would be provided east of the existing Cross Lanes junction.

The B6277 Moorhouse Lane would be realigned to connect to the junction overbridge. This will help to maintain and improve access to the B6277 (Moorhouse Lane) for Barnard Castle, Cross Lanes Organic Farm Shop and Café, the Grade II listed Cross Lanes Farmhouse and other local farms and residential properties.

Rokeby junction alternatives

At Rokeby there are two junction proposals. The Preferred Route alignment at Rokeby is the western junction which forms part of the Black Route.

Rokeby west

The western junction at Rokeby is an all movement junction to the west of St Mary's Church and the Old Rectory. This avoids any direct impact on the Registered Park and Garden and The Old Rectory. The junction would be an underpass arrangement, providing access to Barnard Castle Road for all westbound traffic and diverging eastbound traffic via the old A66, which would form part of the local road network. Eastbound merging traffic will join the new A66 via a slip road at the existing Rokeby junction with the C165 Barnard Castle Road.

Rokeby east

An all movement junction is proposed to the east of St. Mary's Church and west of the existing Rokeby junction. The compact connector road directly impacts the Registered Park and Garden, crossing at its narrowest point. The junction would be an underpass arrangement beneath the proposed alignment of the A66, the de-trunked A66 and the Registered Park and Garden and underpass.

Westbound movements are via the underpass enabling access to and from the new A66.

Eastbound merging traffic will join the new A66 via a slip road at the existing Rokeby junction with the C165 Barnard Castle Road. Diverging eastbound traffic will connect to the existing A66 local St Mary's Church continuing to the existing Barnard Castle Road junction.

Environmental considerations

During construction noise and vibration and air quality could affect residential, commercial and community buildings located throughout the scheme. Effects will be temporary and localised and measures to reduce the effect will be included in the EMP. Our preliminary assessment predicts that, during operation, there will be potential significant noise impacts on:

- **Black Route** – 195 homes and eight non-residential buildings with significant beneficial effects on 219 homes and 65 non-residential buildings as a result of the change in traffic movements local to Barnard Castle
- **Red Route** – 14 homes and one non-residential building with significant beneficial effects on 39 homes and four non-residential buildings
- **Blue Route** – 16 homes and one non-residential building with significant beneficial effects on 32 homes and four non-residential buildings

There may be impacts during construction to Cross Lanes Organic Farm Shop due to permanent loss of land (for all junction alternatives). There may be both negative and positive health impacts during construction and operation from the change in environmental conditions (such as noise), which would be the case for all alternatives.

Our biodiversity assessment has identified potential for indirect air quality impacts on a number of protected sites and direct loss of mature tree habitats for Rokeby Park and Mortham Wood Local Wildlife Site. New discharges to Tutta Beck have the potential to adversely affect watercourse habitats.

There are the potential impacts on a number of species relating to habitat loss and severance. These effects apply to all junction alternatives, although the Blue Route would affect additional potential bat crossings and additional potential otter habitat loss.

For both the Black Route and Blue Route, permanent significant adverse cultural heritage effects are anticipated to affect the Ring Ditch, 120 metres north-east of Poundergill. Mitigation is proposed in the form of archaeological investigation prior to construction. For both the Red Route and Blue Route we envisage effects at construction, a permanent significant adverse effect is anticipated to affect the Grade II* Registered Park and Garden (RPG) at Rokeby Park due to the partial loss and fragmentation of the RPG, and ongoing setting impacts. Some key views could be mitigated through careful landform design and reinstatement.

Some contaminated sites have been identified including potential fly tipping, a poultry house, discharge consents, farms and potential scrapyard. Risk assessments and method statements will be developed to prevent any release of contamination affecting properties.

There is permanent land take and loss of high value agricultural land. These effects apply to all alternatives. There no likely significant effects on the water environment, including tributaries of the River Tees, at this scheme.

For the Black Route, during construction we would expect some effects on landscape, and visual effects for some residents at nearby farms to the west of Tutta Beck Farm, east of Tutta Beck Farm, and on PRow users west of Cross Lanes, to the north of the A66 and to the south of the A66, as well as on visitors to the Church of St. Mary and Cross Lanes Organic Farm.

The Blue Route has the potential for significant effects on similar receptors to the Black Route (with the exception of the Church of St Mary and some different PRowS). For the Red Route, there is the potential for significant effects compared to the other alternatives, although no effects are anticipated for visitors to the Church of St. Mary and Cross Lanes Organic Farm. Some effects are predicted for visitors to Rokeby Park Registered Park and Garden during construction and early operation.



Comparison of Cross Lanes junction Routes

The junction to the west of Cross Lanes provides a more direct link between Rutherford Lane and the B6277 Moorhouse Lane, which is a busier local route, in comparison to the eastern. The western junction removes an existing at-grade right-left stagger across the A66 which is the predominant local movement (for both vehicles and walkers, cyclists and horse riders) and is recognised as being a safety concern. This is a significant benefit over the eastern junction that leaves this junction unchanged.

Two additional direct accesses are removed from the A66, re-routing to the western junction which improves the standard of the A66 compared to the eastern junction.

The western junction structure is more complex than the eastern junction. There are greater earthworks associated with the western junction as well as more complex drainage requirements and hence the potential for greater cost overall when compared with the eastern junction. The additional structure

length and larger footprint results in further impacts for drainage, buildability and cost, which is considered worse overall than the eastern junction. Although through further design work there is potential for a design for the western junction to emerge which would be similar in cost and how it will be constructed for the eastern junction.

The western junction takes more land than the eastern junction, meaning more habitats and agricultural land are affected and it would have a bigger impact on the existing landscape. It is expected, though, that this could be reduced through further design to make the junction smaller. The western junction provides opportunities to improve access for walkers, cyclists and horse riders with better connectivity, and is further away from important heritage assets than the eastern junction.

On the balance of impacts, it is our conclusion that the western junction at Cross Lanes is to be progressed.



Comparison of Rokeby junction Routes

The eastern alternative junction sites the proposed Rokeby Junction closer to the location of the existing junction, ensuring the primary flow of westbound vehicles travelling to and from Barnard Castle uses this junction and not the Cross Lanes junction. This traffic behaviour improves journey times, negates possible issues at The Sills and Barnard Castle Bridge and is considered safer for walkers, cyclists and horse riders using the B6277 Moorhouse Lane. Conversely the Western Junction changes traffic movements local to Barnard Castle increasing the number of areas impacted by noise. However noise modelling shows that slightly more people would benefit from reduced traffic disturbance than would experience an increase.

The alternative eastern junction also provides a safer crossing for cyclists travelling to and from Greta Bridge when compared to the baseline junction, however there is a further diversion for walkers using the Public Rights of Way north and west of St. Mary's Church.

The eastern alternative junction though is a more costly structure than the western junction involving the construction of an underpass. Similarly, landscape, visual, noise and air quality impacts are considered to be worse for the eastern junction than for the western junction, although there are opportunities for some of these impacts to be mitigated.

The eastern junction has a marginally larger area of land take compared to the western junction, however, the singular landowner affected by both alternatives has indicated a preference for the eastern junction for a range of reasons (as set out in the Route Development Report).

We recognise the support for the eastern junction from the local community and Durham County Council. However, Historic

England, an important statutory body, do not favour the eastern junction due to the impacts and potential for harm on the Registered Park and Garden.

The principal consideration in our preference for the Western junction is the impact on the Grade II* Registered Park and Garden (RPG) at Rokeby Park. The Eastern junction will create harm to the Grade II* Registered Park and Garden (RPG) at Rokeby Park. Whilst some key views of the Eastern Junction could be mitigated through careful landform design and reinstatement, the impacts cannot be completely avoided as the eastern junction would still lead to additional fragmentation of the site. National policy requires a very strong justification for any harm to a nationally designated asset, and evidence to show that there is not a viable alternative. The western junction is not anticipated to lead to harm to the RPG.

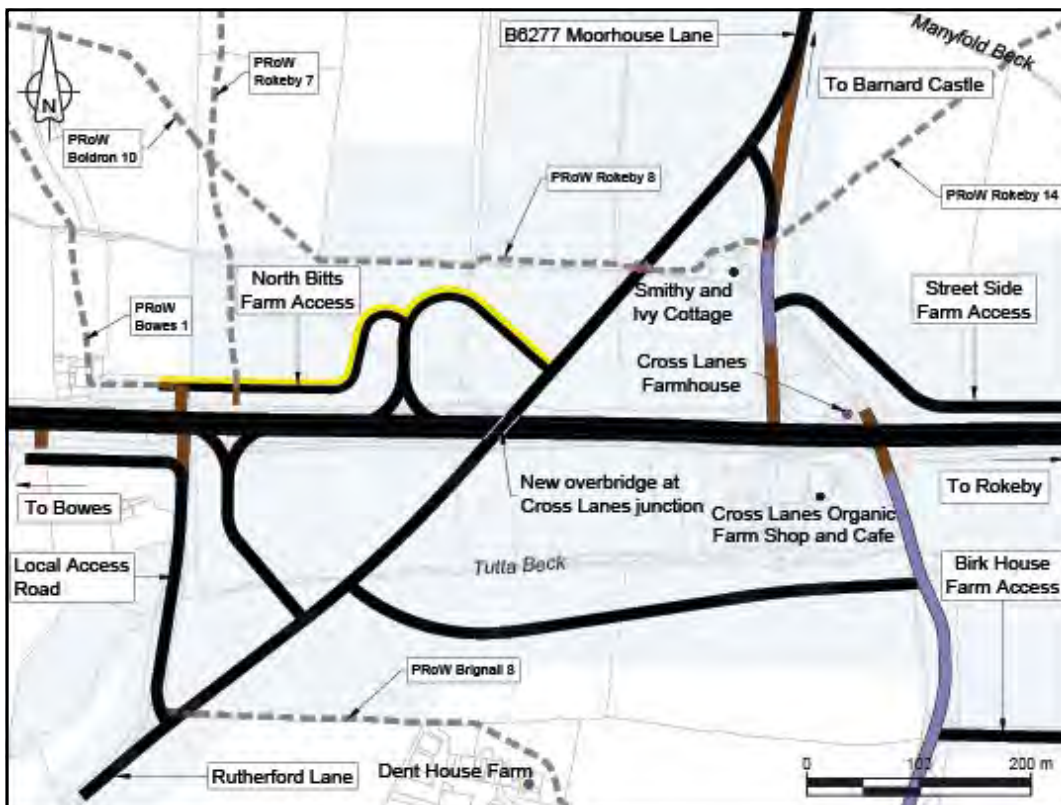
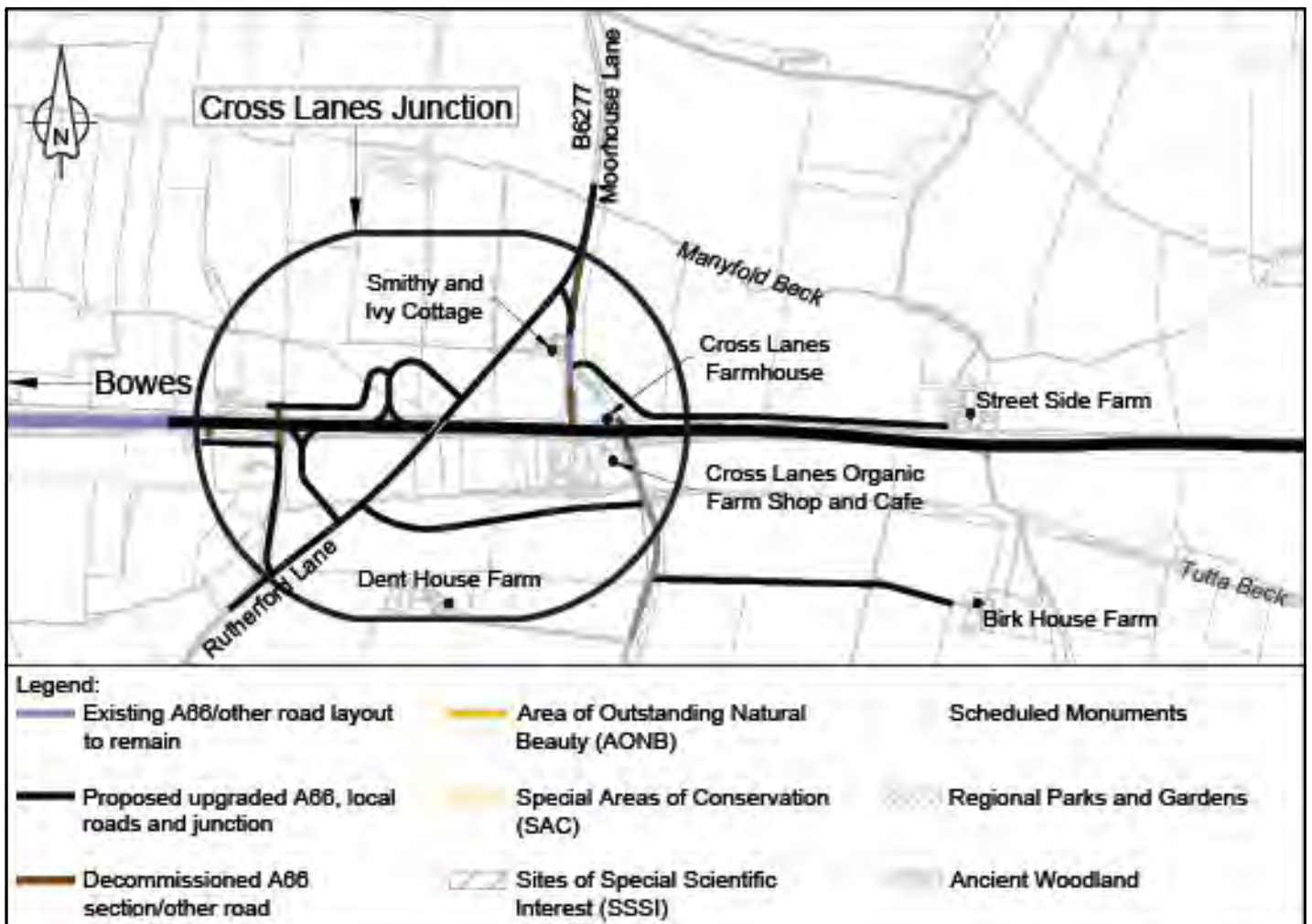
On the balance of impacts it is our conclusion that the western junction at Rokeby is to be progressed.

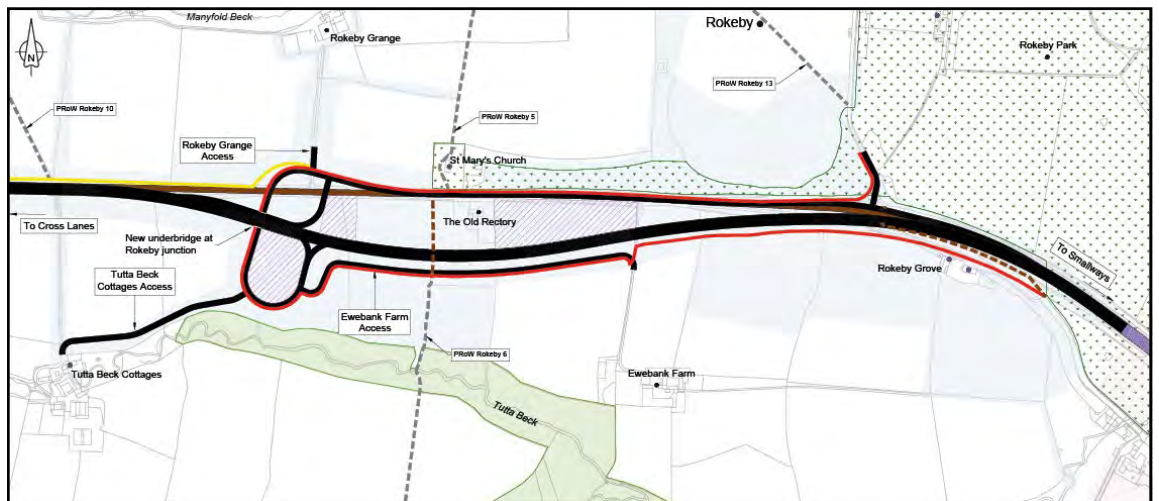
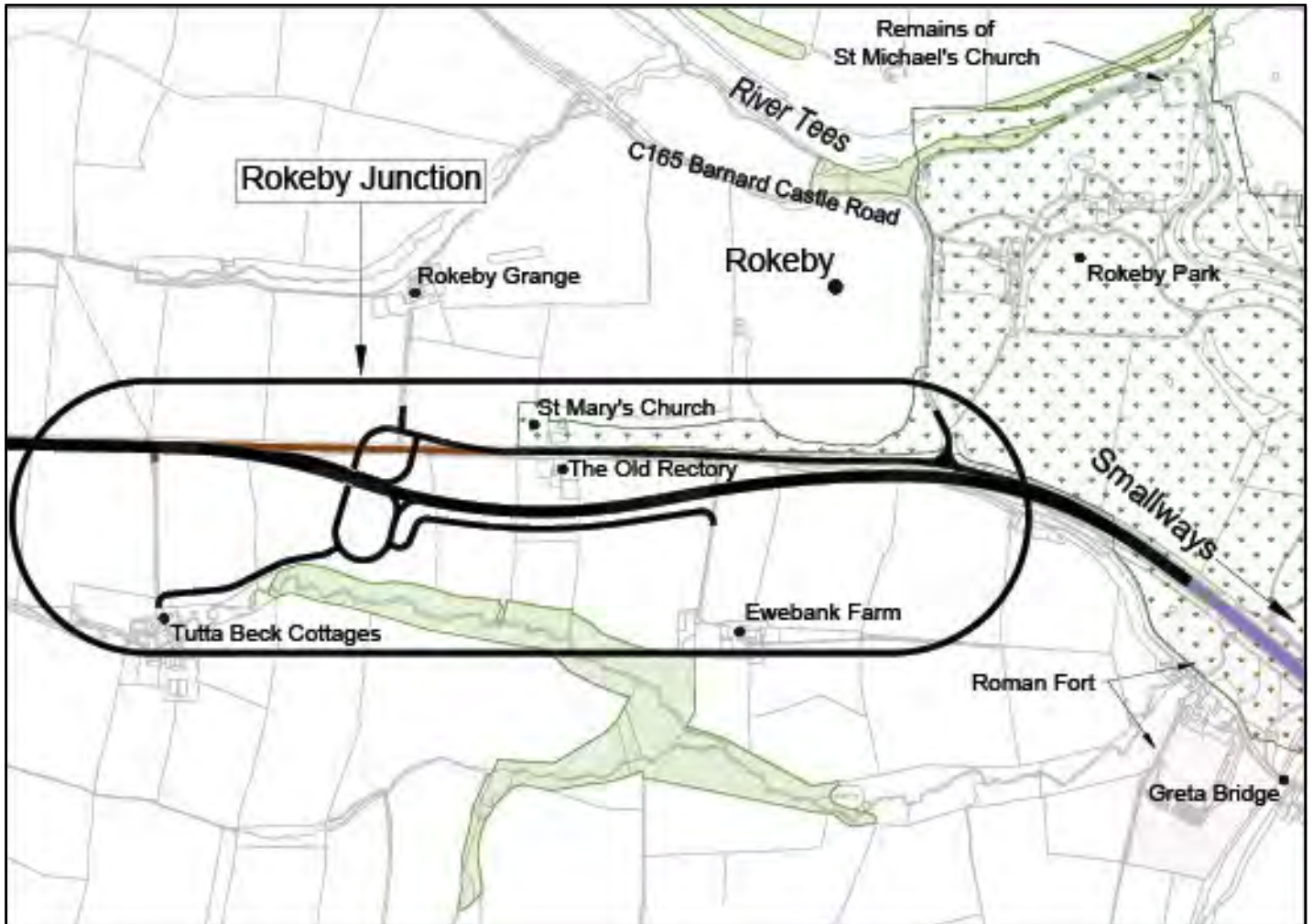
Scheme comparison

Based on the assessment above the junctions to be taken forward are the western junction at Cross Lanes and the western junction at Rokeby. Combined, this leads to the Black Route as our preference.

However, the project team will continue to consult and listen to justifications as to why the Black Route should not be progressed. For this reason, the land required to implement the eastern junction at Rokeby will be included in the proposed draft Development Consent Order boundary and views will be sought regarding any wider public and traffic benefits of this junction during the consultation that may lead to the team reconsidering the preference expressed.

Black Route (our preference)

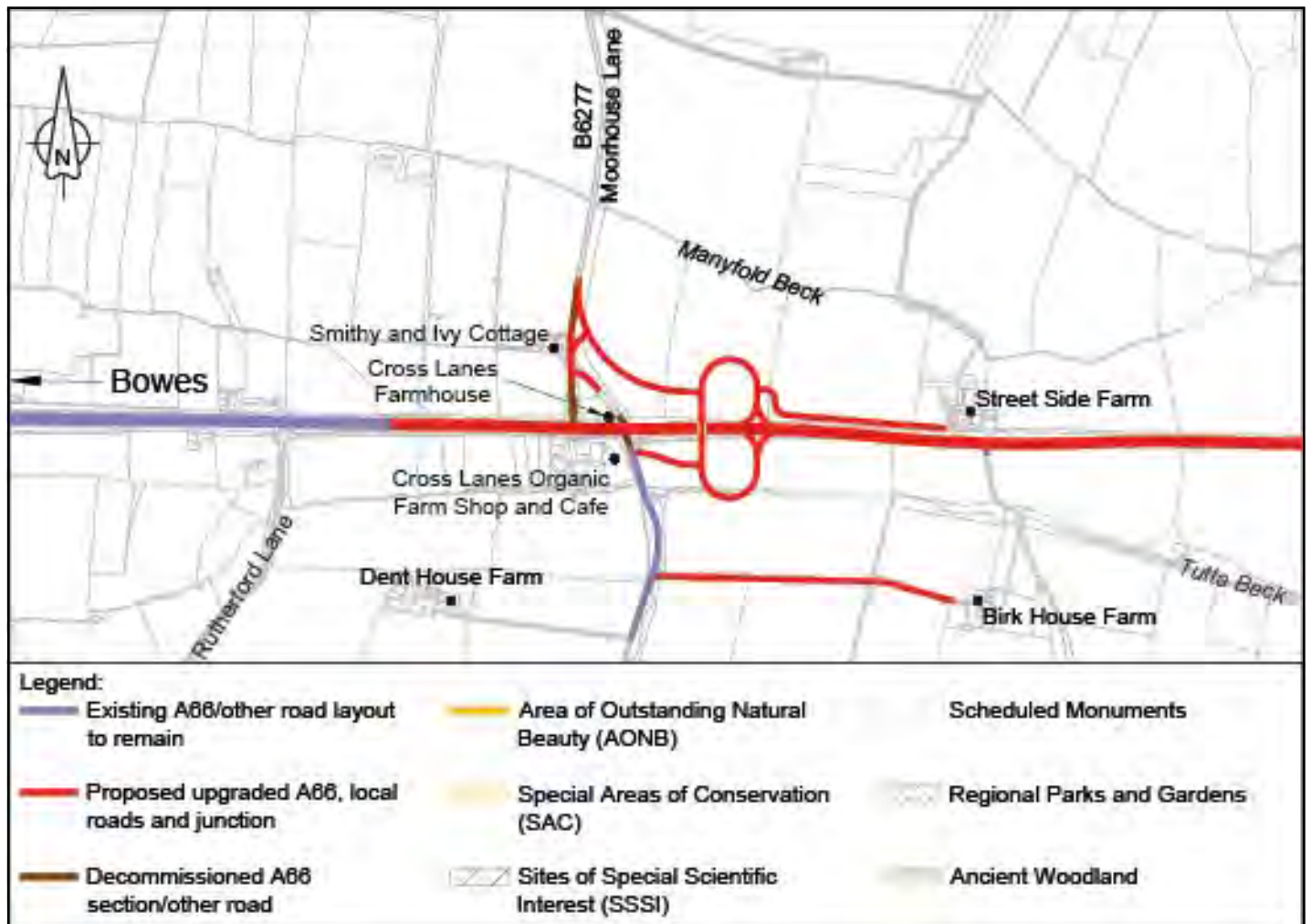


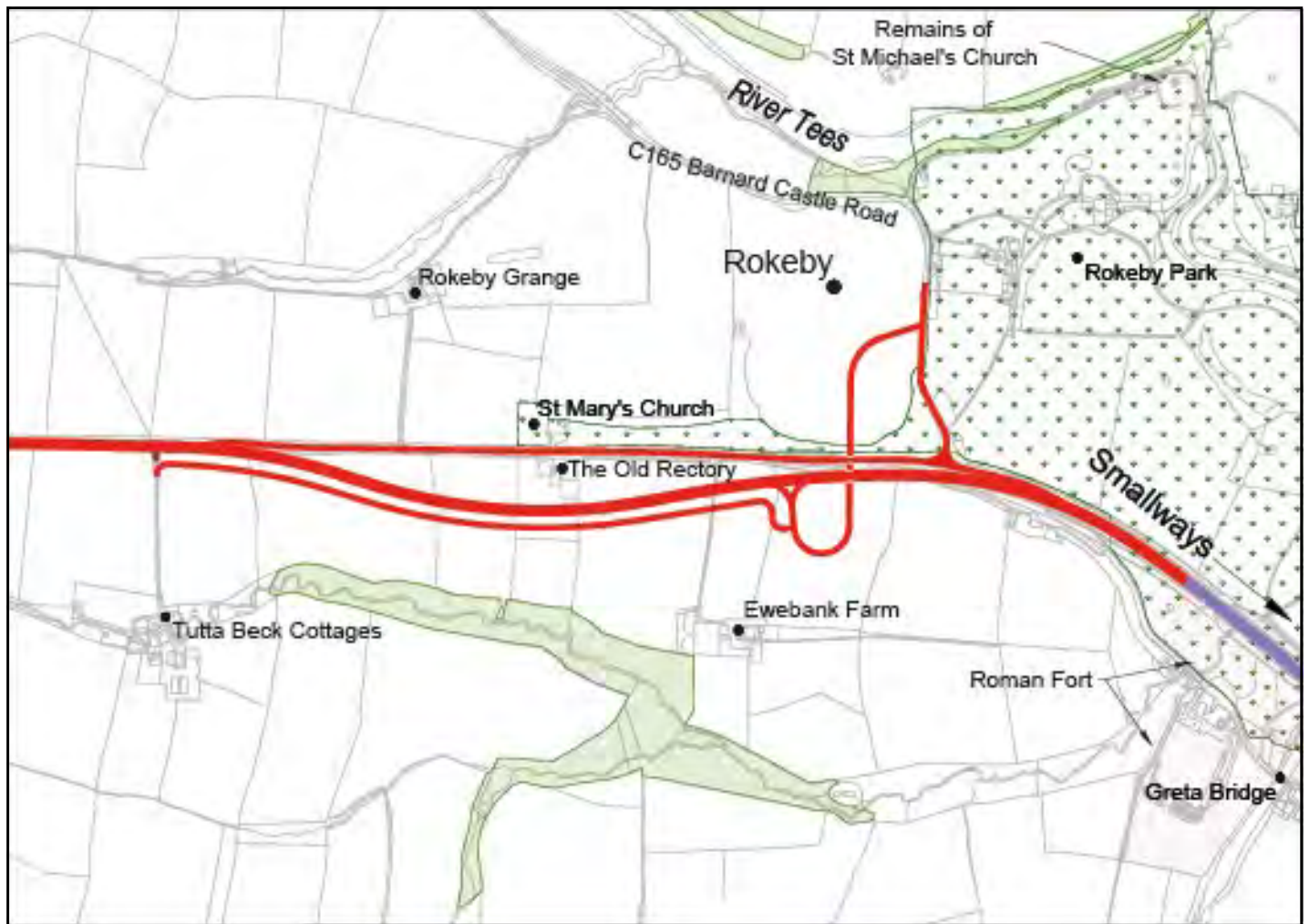


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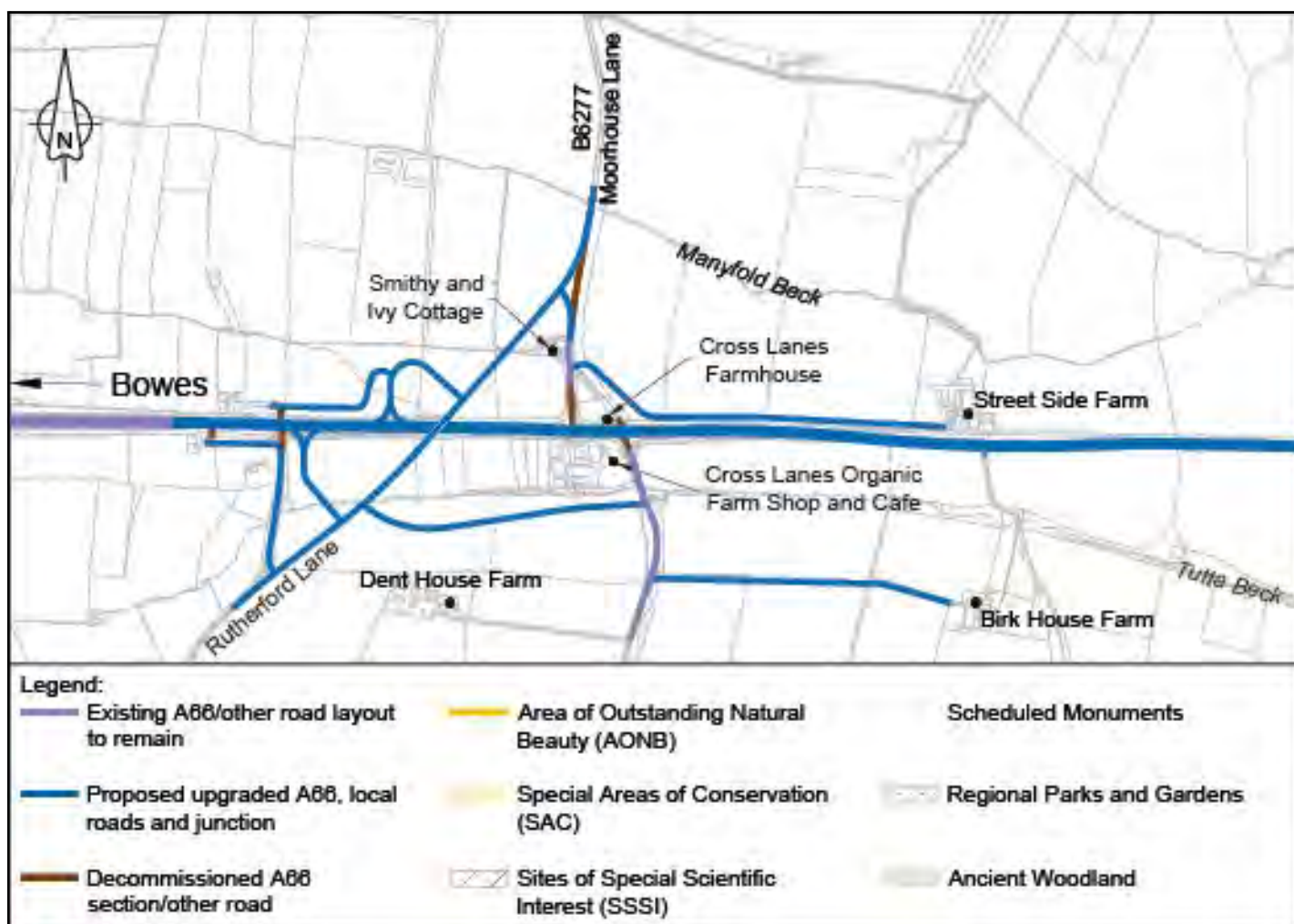
- | | | |
|--|---|---|
| Existing A66/other road to remain | Existing Public Right of Way (PRoW) (footpath unless stated) | Listed Building |
| Proposed improvement to junction and road layout | Existing Walking, Cycling, Horse Riding provision to be removed | Area of Outstanding Natural Beauty (AONB) |
| Land required (inc. earthworks, drainage and environmental mitigation) | Existing Walking, Cycling provision | Special Areas of Conservation (SAC) |
| Decommissioned A66/other road | Proposed Walking, Cycling, Horse Riding provision | Sites of Special Scientific Interest (SSSI) |
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| Proposed borrow pit (excavation of material for use as fill) | Proposed Walking provision | Regional Parks and Gardens |
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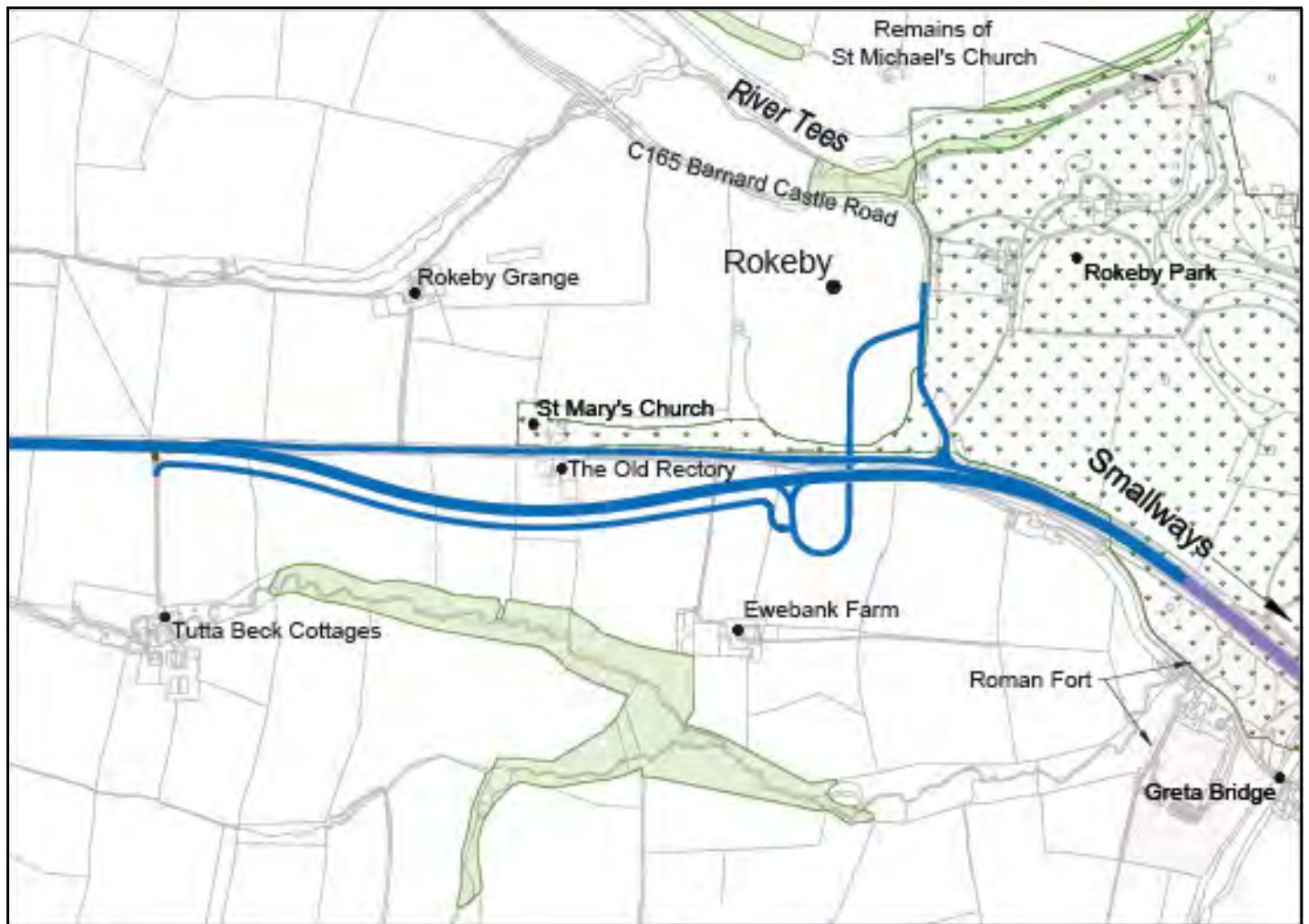
Red Route





Blue Route





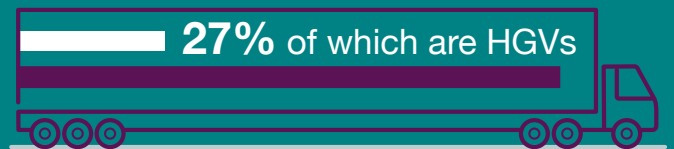
Stephen Bank to Carkin Moor

There are four miles of single carriageway on this section of the A66 in need of improving to dual carriageway to improve safety, ease congestion and provide better access for local communities. While the road is relatively straight, it rises and falls in areas, causing visibility issues and requiring HGVs (HGVs) to accelerate to navigate steep inclines.

Multiple access points present serious safety issues where vehicles attempt to join the single lane A66 at high speeds. Additionally, drivers are put in a vulnerable position when attempting to slow down and leave the A66, particularly when turning right.

Our proposals would see a new dual carriageway section created between Stephen Bank and Carkin Moor Farm. The new dual carriageway will be to the north of the old A66 and the properties at Fox Hall and Mainsgill Farm. The new A66 would then rejoin the old A66 to the east of Mainsgill Farm.

This section carries approximately
17,100 vehicles per day



We are proposing to:

- Widen the A66 between Stephen Bank to Carkin Moor to dual carriageway
- Raise the new A66 as it passes through the cutting next to the Carkin Moor scheduled monument. This will help us better accommodate the retaining walls to the north and south of the new A66 and reduce any impact on the scheduled monument itself
- Use the old A66 to the south of the new A66 route for local road access and non-motorised users. This will provide access to Dick Scott Lane, Old Duns Bank and Mainsgill Farm Shop
- Provide a new underpass to the north of Dick Scott Lane to allow for access to land north of the new A66
- Provide an overbridge to link Collier Lane to the old A66. The grade separation at Collier Lane means the new A66 will pass under Collier Lane, reducing the visual impact on the landscape
- Create a new compact, grade-separated junction to the west of Moor Lane to provide safe and easy access to the old A66, the villages of East Layton, West Layton, Ravensworth and Mainsgill Farm Shop
- Moor Lane will be realigned to connect to Moor Lane junction, allowing access to the new A66 and the old A66
- The existing junction from the A66 on to Warrener Lane will be closed and removed. Traffic will join the new A66 via a link road to Moor Lane junction

Environmental considerations

During construction noise and vibration and air quality could affect residential, commercial and community buildings located throughout the scheme. Effects will be temporary and localised, depending on the specific activity and construction stage and measures to reduce the effect will be included in the EMP. Our preliminary assessment predicts that, during operation, noise will affect 26 homes and one non-residential building. There will be benefits for eight homes.

There may be effects during construction due to a footpath and bridleway being severed. An improvement in traffic flows will result in better access to shops and services and will have a positive impact on wellbeing.

There are likely to be significant effects to some sites due to air quality changes. Seven potential bat crossing points will be affected by the scheme at construction and at operation and there is likely to be temporary loss of hedgerow habitats. Habitat loss will be experienced for various animal species, including mammals and birds.

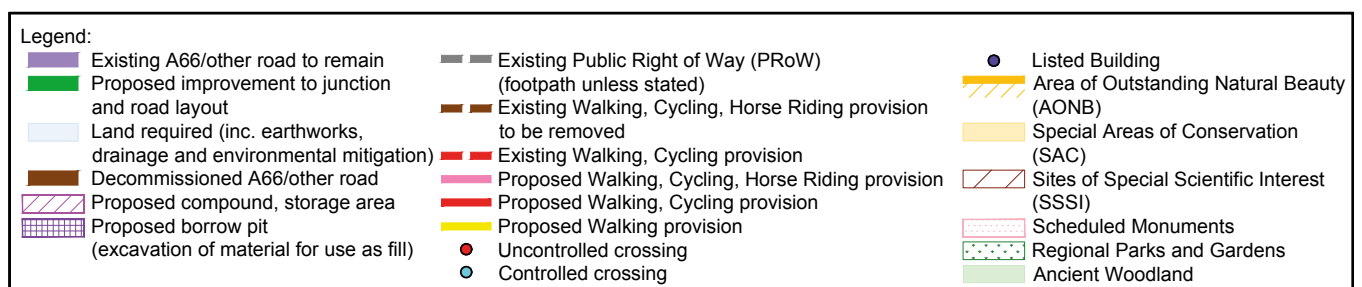
Our Cultural Heritage Assessment identified that, at construction, there would be impacts on the Roman Fort and prehistoric enclosed settlement 400m west of Carkin Moor Farm.

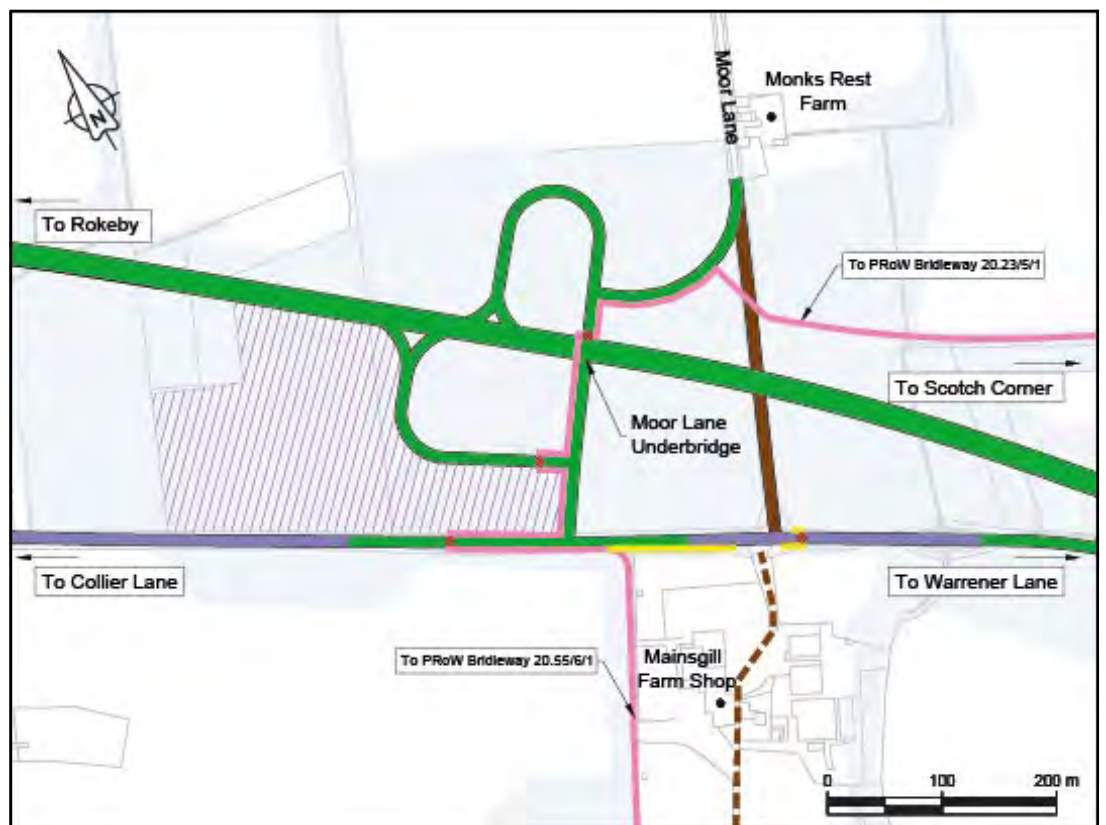
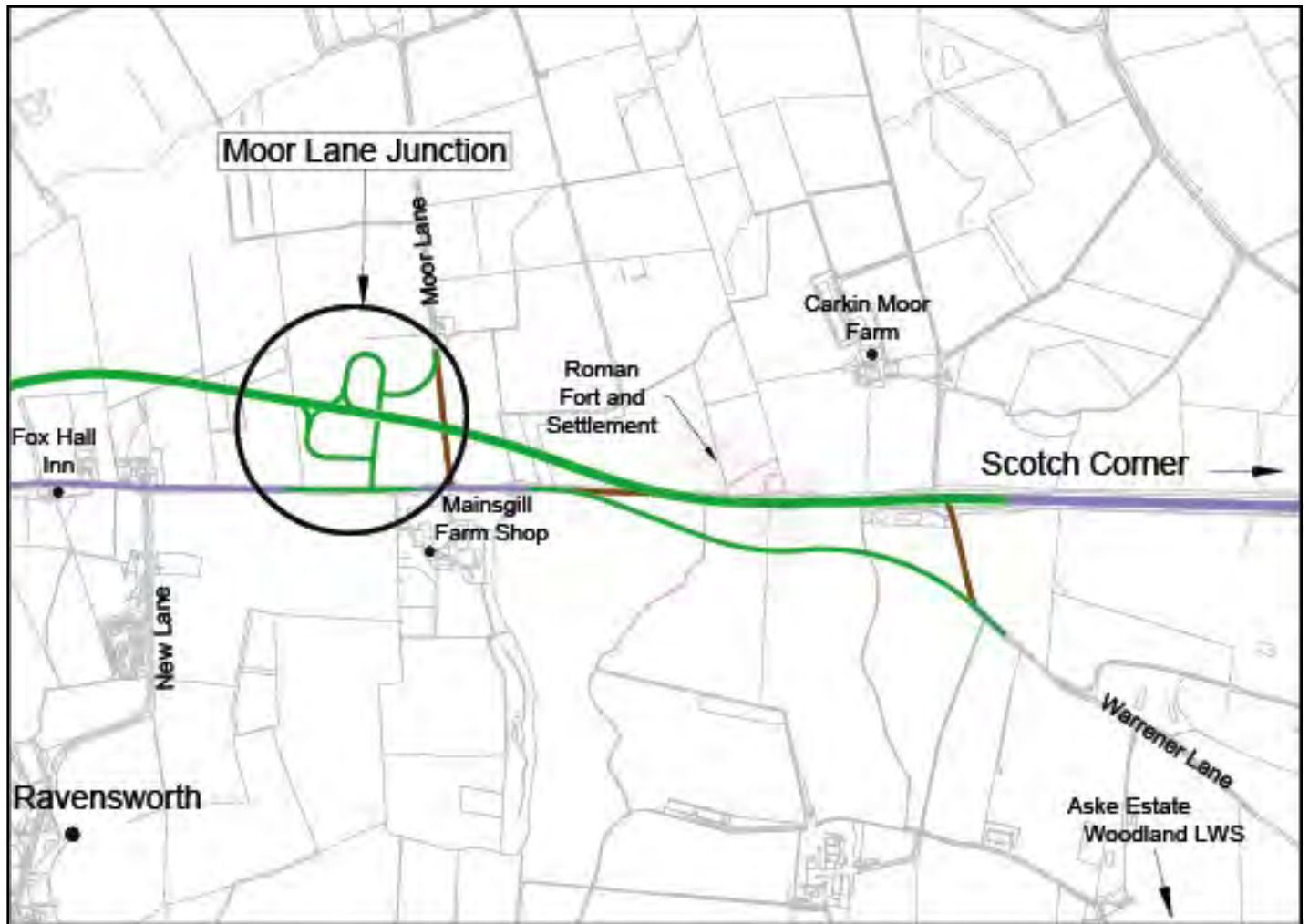
The existing route passes through the site, and the widened road will be constructed within the existing cutting. The design will aim to avoid excavation within the scheduled monument, but as yet this cannot be ruled out. Should excavation be required, a mitigation programme of archaeological investigation would be put in place, to ensure we record and preserve findings. Effects are also anticipated at construction stage on the Roman vicus at Carkin Moor Fort.

A number of potentially contaminated sites including disused quarries, farms, tanks and an anaerobic digestion facility. Risk assessments and method statements will be developed to prevent any release of contamination. There is some permanent land take and loss of high and medium value agricultural land. There are no effects on the water environment, including groundwater source protection zones, at this scheme.

Construction activities have the potential to effects landscape with visual effects on local residents and users of PRow in the area of the scheme, as well as on visitors to Mainsgill Farm Shop and Fox Hall Inn. Overall mitigation planting would be expected to reduce the effects over time.

Stephen Bank to Carkin Moor





A1(M) junction 53 Scotch Corner

A1(M) junction 53 Scotch Corner is an existing grade-separated junction on the A1(M) to the south of Darlington. The signalled roundabout junction serves the A1(M), the A66 and the A6055 and provides access to Scotch Corner Motorway Service Area.

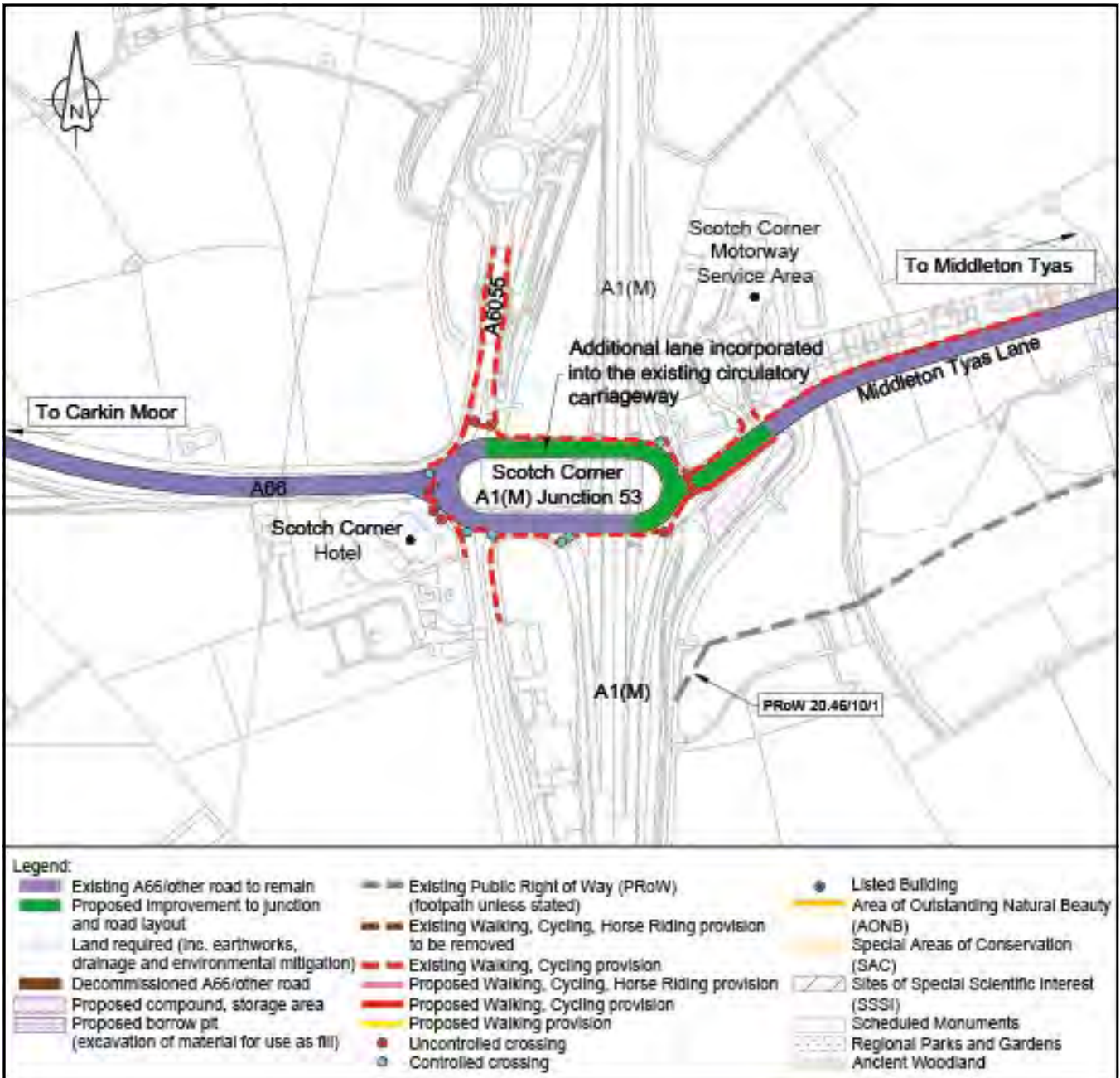
The existing layout is considered to have sufficient capacity to accommodate future traffic growth. As such we will only need to provide additional lane widening on the Middleton Tyas Lane approach to the roundabout, with some revisions to the road markings on the roundabout.

These minor improvements at the A1(M) junction 53 Scotch Corner would ensure that it meets the future needs of the area for years to come and can cope with the increased capacity of the new A66 once the project has been completed.

We are proposing:

- To widen the Middleton Tyas Lane approach to the A1(M) junction 53 at Scotch Corner roundabout from one lane to two lanes. This will result in better access to the roundabout at this priority approach
- Relocate an existing footway, bus stop, signage and lighting columns onto the southern verge of Middleton Tyas Lane to accommodate the additional carriageway lane
- Add an additional lane within the extents of the northern bridge cross section on the circulatory carriageway with amended lane road markings on either side of the bridge





Environmental considerations

The proposals for this scheme are of a smaller scale and affect a much smaller area than other schemes. No likely significant effects have been identified for cultural heritage, landscape and visual, geology and soils or road drainage and the water environment.

There are a small number of commercial and residential properties located near Scotch Corner. Given the context of the

existing junction, effects on population and health are expected to be limited during both construction and operation. The noise and vibration assessment has, however, identified 12 homes and one non-residential building that may experience effects due to changes in traffic flows. There is potential for effects on biodiversity and protected species if present, through the loss of a small area of woodland.

Land acquisition

Over the course of the project, we will have to survey, access and acquire land to construct the project. We have contacted all those affected landowners about both permanent acquisition (where we may need to acquire land for the project) and temporary occupation (where we might need to use land temporarily for construction compounds, for example).

We will continue to engage with affected landowners and those with an interest in land, as the project progresses and will continue to be clear and transparent in our interactions with all stakeholders and communities.

Our aim is to achieve the permanent acquisition and the temporary use of all land needed for the project by negotiating voluntary agreements with individual landowners.

We will be shortly writing to all affected parties to invite them to enter into negotiations for the sale of their lands to us, or for the use of their lands by us, by agreement. While we will seek powers to allow us to acquire land compulsorily and to use and occupy land temporarily as part of our planning process, our preference will always be to acquire or use land by voluntary agreement where it is possible.

Please get in touch if you haven't heard from us but think your land or property might be affected. You can contact us either by email: A66NTP@highwaysengland.co.uk, or by phone: 0333 090 1192 (local call rate applies).





Gypsum Works	1 1/4
Newbiggin	2 1/4
Milburn	3
Knock	4

Planning for construction

For the first few months the main focus will be on preparing the area for the main construction works to begin, such as archaeological work, moving utility pipes and cables and environmental protection work.

Throughout construction, there is likely to be a short-term effect on the way people access and enjoy the area. We would like to assure you that longer term, the A66 improvements will improve safety and journey times, which will benefit the local and regional economy, making the area a more attractive place to live, work and explore.

Consideration will be given to construction access and crossing points to ensure safety for our workers and other road users. In some locations, a dedicated haul road will be built alongside the new A66 to keep construction vehicles off local roads and to ensure that our construction teams can continue to safely

access and exit the project site. We will set up several site compounds to accommodate our team during construction.

As part of our consultation, we want to hear from local farmers to understand where private utilities which might serve cattle troughs and outbuildings are located. We will look to maintain supply continuity throughout construction and operation of the new road. If you are a landowner and would like to discuss how utilities diversions might impact you, then please get in touch.

For more information, please see our Construction Method and Management Statement.

Our construction programme is currently being developed which may lead to the delivery of schemes changing in order that we can optimise the sequence.



We expect the main construction developments to begin in 2024 should our Development Consent Order application be successful and continue for five years until 2029. We are committed to the following measures to help minimise impacts:

- Protecting air quality by implementing a Dust Management Plan
- Reducing risk of accidental harm or disturbances to historically sensitive sites
- Preserving the local landscape by preventing damage to trees and roots
- Reducing the visual impact of lighting on the project site by ensuring that, where possible, all artificial lighting avoids natural areas such as woodland and nearby residential properties
- Protecting biodiversity by complying with all relevant UK and European Union legislation

- Complying with all relevant guidelines relating to soil and geology and reusing materials, where possible, to minimise the impact of HGV movements
- Reducing the impact of noise on local communities throughout construction and adhering to best practice wherever possible

We are committed to maintaining an ongoing conversation about construction with local people, businesses and organisations. We regularly monitor the safety of our network and work throughout the year to ensure our motorways and A-roads meet all required safety standards.



Building the A66: How we do it

1. Topsoil stripping, levelling and capping

Around 100-300mm of topsoil will be cleared from the proposed route. The route will then be levelled by heavy machinery such as hydraulic excavators, dump trucks and self-propelled vibrating rollers. With these earthworks activities complete, we'll apply a layer of materials to create the road's foundation.



2. Drainage

We will install different types of drainage measures along the route using hydraulic excavators; narrow filter drains and concrete 'V' channels. The highway concrete drainage channel will be slip formed using specialist equipment after the road surfacing has been placed.



3. Cement Bound Granular Material (CBGM)

This is the bottom layer of the new carriageway. The material is spread on site to the correct depth by hydraulic machinery before being compacted using vibrating rollers. CBGM typically uses recycled stone and provides significant carbon savings over the use of new aggregate materials.



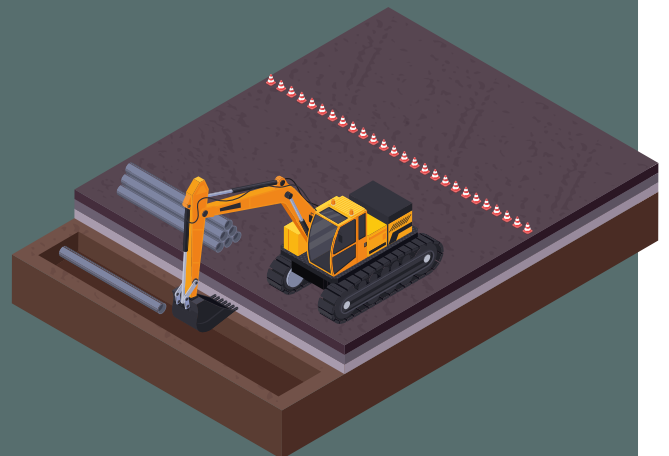
4. Surfacing

There are three layers to the new A66 carriageway, base course, binder course and the surface course. These are all laid using paving machines and then compacted by vibrating rollers to provide a sealed road surface with skid resistance that ensures a smooth ride for road-users.



5. Ducting

This will be installed along the length of the verge, on one side of the new lengths of the A66, to accommodate communications cables.



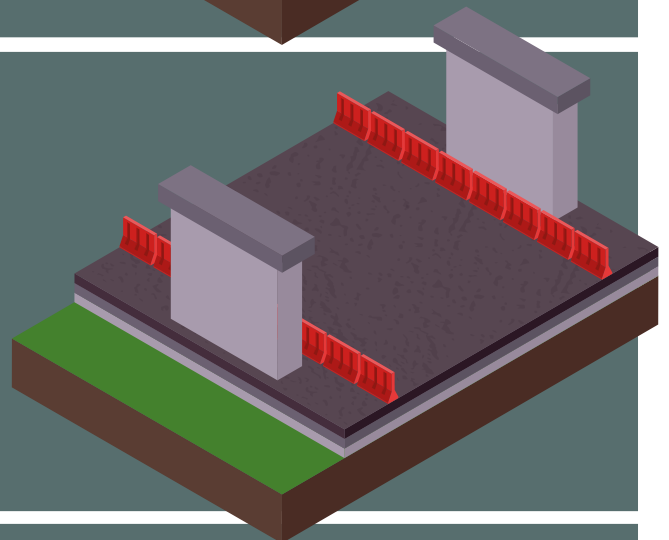
6. Vehicle Restraint System (VRS)

To ensure the safety of road users, we will install, where required, a corrugated beam system within the new sections of the A66, which is in keeping with the existing dualled sections of the road. These will be installed using post driving equipment.



7. Structures

Four types of structures will be constructed along the new A66 that include overbridges, underpasses, retaining walls and culverts. Each new major structure will typically require its own site compound to minimise traffic movements in the area.



8. Minor underpasses and culverts

We will use prefabricated sections, made off-site and then install on location. This reduces the need to construct or store additional equipment and materials on site.



Find out more

To find out more about our project proposals you can:

- Visit our website at www.highwaysengland.co.uk/A66-NTP
- Come along to one of our public information events where you can talk to members of our team. See page 5 for a full list of events.

Deposit points

Address	Hours of operation
Penrith Library, St Andrews Churchyard, Penrith, Cumbria, CA11 7YA	Monday to Friday, 9.30am-12.30pm and 1.30pm-5pm
St Michael's Church, 2 Church Gate, Kirkby Thore, Penrith CA10 1UR	Monday to Sunday 10am-4pm
The former Llama Karma Kafe, Brougham CA10 2AB	Monday and Friday, 12pm-6pm and Thursday, 2pm-8pm
Kirkby Stephen Library, Old Grammar School, Vicarage Lane, Kirkby Stephen CA17 4QX	Monday and Wednesday, 10am-12pm and 1pm-3pm; Saturday, 10am-1pm
Brough Castle Ice Cream Parlour and Tea Room, Brough Castle Farm, Brough, Kirkby Stephen CA17 4EJ	Monday to Sunday, 10am to 5pm until 10 October
Brough Memorial Hall, New Road, Brough, Kirkby Stephen CA17 4AS	Tuesday, Wednesday and Friday, 1pm – 6pm from 11 October
Barnard Castle Library, Witham Building, 2 Hall Street, Barnard Castle DL12 8JB	Monday, Tuesday and Friday, 9.30am -4.30pm; Wednesday, 9.30am – 5.30pm, Saturday, 9.30am-12.30pm
Cross Lanes Organic Farm, Cross Lanes, Barnard Castle DL12 9RT	Monday, Wednesday and Thursday, 9am- 4.30pm, Tuesday, closed, Friday and Saturday, 9am-5pm, Sunday, 10am-4pm
Mainsgill Farm Shop, East Layton, Richmond DL11 7PN	Monday – Sunday, 9am – 5pm
Richmond Library, 10A Queen's Road, Richmond DL10 4AE	Monday to Friday, 10am–1pm and 2pm–5pm, Saturday, 10am – 1pm
Clayport Library, 8 Millennium Pl, Durham DH1 1WA	Monday, Thursday to Saturday, 9.30am-4.30pm, Tuesday and Wednesday, 9.30am-5.30pm

How to have your say

This is your opportunity to give your views on our proposals before we submit our Development Consent Order application. There are various ways that you can respond to the consultation.

- Completing the feedback form online at www.highwaysengland.co.uk/A66-NTP
- Posting your feedback form to **Freepost A66 NORTHERN TRANS-PENNINE**. You do not need a stamp.
- Leaving your completed feedback form with us at the consultation events.

If you do not want to complete a feedback form, you can:

- Email us at A66NTP@highwaysengland.co.uk
- Write to us marking your envelope **Freepost A66 NORTHERN TRANS-PENNINE**. You do not need a stamp.

For any questions, please contact us:

Email: A66NTP@highwaysengland.co.uk

Call: 0333 090 1192 (local call rate)

Follow:

- Twitter – @A66NTP, @HighwaysNWEST and @HighwaysNEAST
- Facebook – **A66 Northern Trans-Pennine project**

If you would like any further information on the Development Consent Order application process, please visit the Planning Inspectorate's website: infrastructure.planninginspectorate.gov.uk/application-process/the-process/

The Planning Inspectorate's website may also provide some updates on the application process and once the project has been formally accepted for examination, will provide access to the submitted application documents.

Please submit your responses by 11.59pm on 6 November 2021.

Keeping you safe during COVID-19

We have been working hard to ensure that our statutory consultation on the A66 Northern Trans-Pennine project is COVID-19 safe and where possible, reduce the need for you to travel and interact with others.

Whilst we have made every effort to ensure that physical venues are available for you to view our statutory consultation and speak to us if you have a question, we may, if government guidelines dictate, have to cancel these events in line with the latest COVID-19 advice. Information will always be available online on our website.

COVID-19 secure venues

We will be providing hand sanitisers and masks which you can wear if you want to and we will ensure that the venues are well ventilated.



HANDS



FACE



SPACE



What happens next?

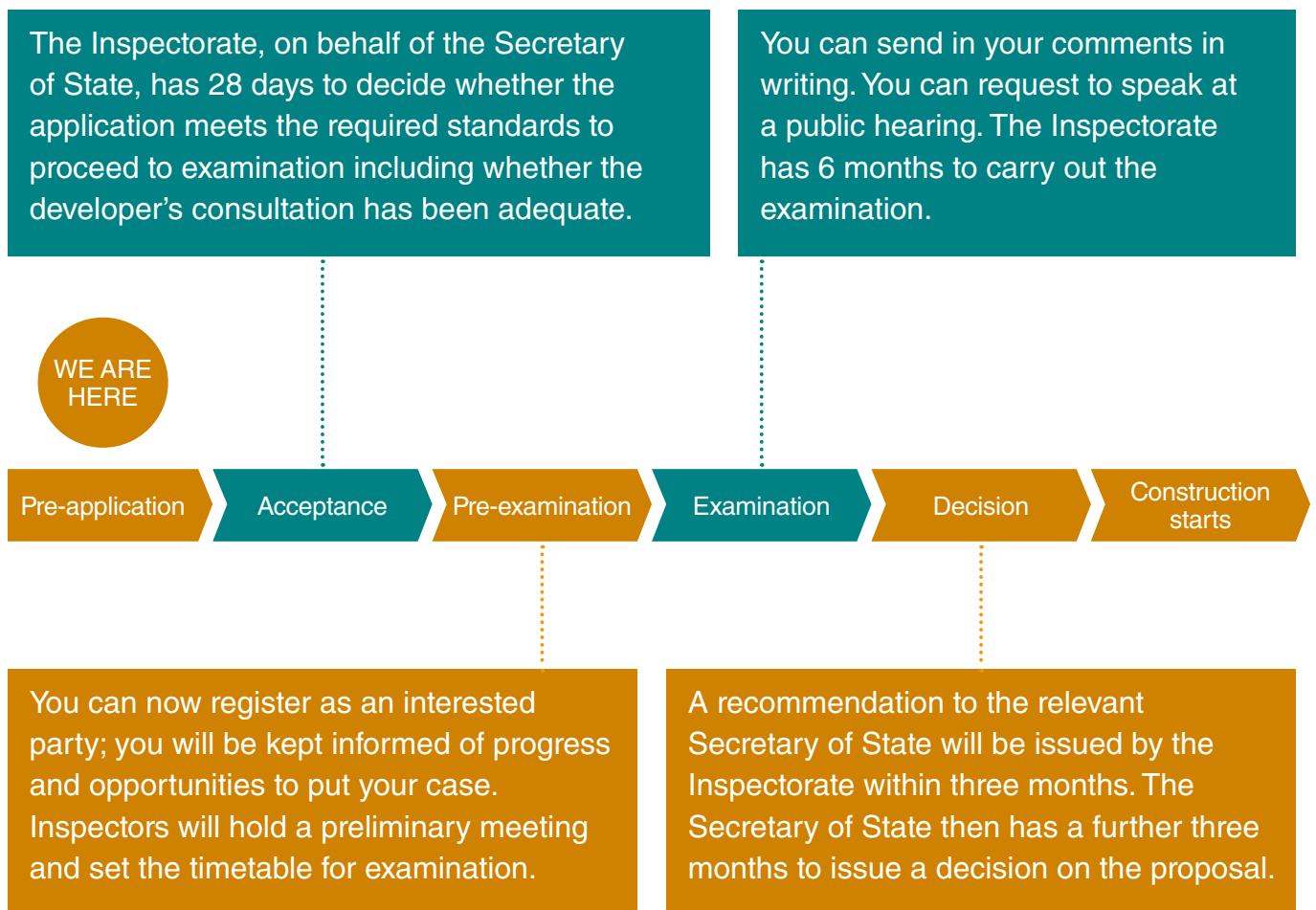
If our application for a Development Consent Order is accepted by the Planning Inspectorate, there will be an examination of the application in which the public can participate. This examination will take a maximum of six months.

An Examining Authority (made up of independent experts, normally from the Planning Inspectorate) is appointed to examine the application on behalf of the

Secretary of State. The Examining Authority then has three months, after the close of the Examination, to make a recommendation to the Secretary of State, who then has a further three months to make a final decision on whether or not to grant the Development Consent Order for the project.

If our application is approved, work on the project is planned to start in 2024 as indicated on the illustrated timeline.

The application process



Based on information from the Planning Inspectorate website

Your data, your rights

On 25 May 2018, the General Data Protection Regulations (GDPR) became law. The law requires Highways England to explain to you – consultees, stakeholders and customers – how your personal data will be used and stored.

Highways England adheres to the government's consultation principles, the Planning Act 2008 and the Highways Act 1980 as required, and may collect personal data to help shape development of highways schemes.

Personal data collected by the project team will be processed and retained by Highways England and its appointed contractors until the scheme is complete.

In some instances consultation responses may also be sent to the Planning Inspectorate. To view the Planning Inspectorate's information relating to GDPR at Examination events please visit: **infrastructure.planninginspectorate.gov.uk/help/privacy-notice/**

Under the GDPR regulations you have the following rights:

- Right of access to the data (Subject Access Request)
- Right for the rectification of errors
- Right to erasure of personal data – this is not an absolute right under the legislation
- Right to restrict processing or to object to processing
- Right to data portability

If, at any point, Highways England plans to process the personal data we hold for a purpose other than that for which it was originally collected, we will tell you what that other purpose is. We will do this prior to any further processing taking place and we will include any relevant additional information, including your right to object to that further processing.

You have the right to lodge a complaint with the supervisory authority, the Information Commissioners Office.



If you'd like more information about how we manage data, or a copy of our privacy notice, please contact: DataProtectionAdvice@highwaysengland.co.uk

On 20 August it was announced that Highways England would be changing its name to National Highways. The name change reflects the role of the strategic road network – to connect the nation's regions – and the part it plays in setting Highways standards across the UK.

We have continued this consultation under the Highways England branding to avoid confusion but will be rebranding this project as of 8 November.

The remit of the organisation has not changed and we will continue to operate and maintain England's motorways and A roads.

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This document is also available on our website at www.highwaysengland.co.uk/A66-NTP

For an accessible version of this publication please call **0300 123 5000** and we will help you. Those with questions, queries and feedback to consultation should use the contact details set out on page 107.

If you need help accessing this or any other Highways England information, please call **0300 123 5000** and we will help you.

If you have any enquiries about this publication, email info@highwaysengland.co.uk or call **0300 123 5000***. Please quote the Highways England publications code PR149/20. Designer's code DT/9/21.

*Calls to 03 numbers cost no more than a national rate call to an 01 or 02 number and must count towards any inclusive minutes in the same way as 01 and 02 calls.

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