



**National  
Trust**

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Your ref: A417 Missing Link  
Our ref: A417 Missing Link Consultation Feb.-Mar. '18

28<sup>th</sup> March 2018

A417 Missing Link Project Team  
Highways England  
Temple Quay House  
2 The Square, Temple Quay  
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BS1 6HA

Dear Sir/Madam

### **A417 Missing Link Proposed road improvement**

Thank you for the opportunity to respond to the Highways England consultation on the proposed A417 Missing Link road improvement.

The National Trust is Europe's largest conservation charity with over five million members. Established over 120 years ago, our primary purpose is to promote the preservation of special places for the benefit of the nation. To achieve this aim we own and manage places of historic interest and natural beauty and have become the UK's largest private landowner. In South West England, this includes over 57,000 hectares of countryside, over 1300 listed buildings and nearly 300 miles (19%) of the coastline. Given the range of our activities, we are in a position to comment both from the perspective of a landowner and as a major conservation organisation responsible for safeguarding the nation's natural and historic assets.

Our ownership includes part of Crickley Hill which lies adjacent to the current A417 and on the Cotswold scarp within the Cotswolds Area of Outstanding Natural Beauty (AONB). Crickley Hill is jointly managed and owned by the National Trust and Gloucestershire Wildlife Trust (GWT) (see enclosed map) and is a nationally important site for archaeology (including an Iron Age hill fort, which is a Scheduled Ancient Monument, the first battle site in the country with evidence of human activity going back to 4000 BC) as well as for its limestone grassland and woodland, supporting a range of nationally important habitats (including four designated Sites of Special Scientific Interest (SSSI)). It is also actively used and enjoyed by the surrounding population with over 150,000 visitors per year.

The calcareous grassland on both sides of the Cotswold scarp is extremely rich in wild plants, which in turn support a large variety of invertebrates, butterflies, moths, bees, snails and other protected species including adders, bats and many species of birds. The amount of fungi found in the wooded areas of Crickley Hill (including the woodland that runs down to

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the edge of the current A417) – over 600 varieties – puts the site in the top six in the county and is of huge biological importance alongside a large number of veteran trees on the Ancient Tree Inventory. There are also three ancient woodlands, a traditional orchard and extensive wood pasture within the area of the proposed road development.

Crickley Hill is currently accessed from the A436/A417 Air Balloon roundabout which for many years has suffered with severe congestion and is a bottleneck not only for the local road network, but also as part of the A417/A419 strategic road network between the West Midlands and Thames Valley and as an alternative to the M5/M4 route via Bristol. The National Trust are aware of the longstanding challenges of highway access from the West Midlands to the South West and the important benefits for local communities, visitors and the wider economy that could arise from road improvements.

In response to the current consultation, we agree that measures are needed to address the issues associated with the 5km stretch of single carriageway between Brockworth bypass and Cowley roundabout. We do however note that – in the National Policy Statement (NPS) for National Networks – there is a “strong presumption against any significant building of new roads” in protected landscapes such as AONBs, unless it can be shown that there are compelling reasons for the enhanced capacity and with benefits outweighing the costs “very significantly” (para 5.152). There are also requirements for “high environmental standards”, to have regard to the purposes of the AONB designation, and to avoid compromising the purposes of the designation and for projects to be “designed sensitively” (para’s 5.153 and 5.154).

In light of the above, we consider that it is essential that the proposed highway scheme is a genuinely “landscape-led” solution, and we support the emphasis on this in the vision statement. We also agree with the aims of conserving and enhancing the special character of the Cotswolds AONB, reconnecting landscape and ecology, bringing about landscape, wildlife and heritage benefits, and enhancing visitor enjoyment. From our perspective, we would also stress the importance of protecting the views and setting of heritage assets, and bringing about substantial benefits for the Cotswolds landscape and environment, including a clear net gain to wildlife and habitats, as well as delivering high quality mitigation.

Turning to the consultation options (two surface dual carriageway routes); we are very disappointed that none of the tunnel options considered at earlier stages are part of the current consultation. As the consultation acknowledges, the tunnel options “would bring greater environmental benefits” – and they are also likely to involve a lower level of environmental impact, for the lifetime of the upgraded road. Although the tunnel options would exceed the “cost range” allocated for the scheme, the AONB status of the landscape, the necessity for a landscape-led scheme and the challenging topography all require a highway solution of highest standards. It is also noted that tunnel option 3 would produce a better ‘return on investment’ than the surface option 12 that is being consulted on.

Given the above, we do not feel it is appropriate at this stage to express a preference for either of the surface route options when we have not seen evidence of how either can deliver Highways England’s own vision for the scheme within the current cost envelope; instead we have made a range of comments to respond to the consultation questions and inform the process of achieving a solution that does meet the scheme vision and objectives.

## **Question 1: To what extent do you agree with our proposed Option 30?**

Option 30 involves a new surface dual carriageway through the AONB, with associated junctions and links to the local highway network, and with an indication that a small land bridge would be part of the proposals. We are extremely concerned about the scale of new highway infrastructure being proposed within the AONB landscape and affecting the setting of Crickley Hill as an important landscape, heritage and ecological asset. Allied to this, we are concerned that there are insufficient measures to reduce or mitigate the likely impacts, and offer environmental improvements. Overall, we would not be able to support this option as presented. Beyond this fundamental concern, some of our additional issues and concerns are set out below:

- We would want to understand the calculation of land take required for this option and the resulting habitat loss. We would then want to understand the potential for the creation of an equivalent amount of new habitat (as a minimum). We would expect the scheme to aim for an increase in biodiversity and specifically a significant net gain in calcareous grassland. The assessment of what mitigation is required should take into account habitat loss across the whole length of new road tarmac, fringe infrastructure and build disturbance.
- The likely removal of trees along new sections of the road or through upgrading of existing surface route will be very damaging for visual setting of Crickley Hill, Barrow Wake and the wider Cotswold landscape. It is likely to increase the audible noise from the road at key areas used by the public and result in loss of associated habitats. We would expect to see significant replanting, with particular attention to native species for the local area.
- Where the road is in a cutting, we would want to see the cutting successfully planted with calcareous grassland species and concrete infrastructure should be avoided wherever possible. Earth bunds would look artificial in the landscape and placement of lighting will be crucial on junctions to ensure it is sympathetic to the landscape but sufficient to meet the Highways design standard for safety requirements.
- The junctions and associated link roads are neither well represented in the visualisations, nor explained in the consultation documentation sufficiently well enough for us to determine their impact. We ask Highways to provide this detailed information in the next phase of development to be able to inform our thinking.
- We are extremely concerned about the impact of five lanes of traffic beneath Crickley Hill as well as the infrastructure associated with the new junction and the access to Cold Slad Lane. Beyond the very obvious visual intrusion into the landscape we do not yet have sufficient information to assess the visual, noise and settings impact for Crickley Hill and the impacts on access for motorised users and non-motorised users between Crickley Hill and Barrow Wake.
- With this road network being the main access point for the Cotswolds, we are still concerned about the volume of traffic and future capacity of the A417 junctions and A436 link road to the local network. The junctions will need to cope with the volume of traffic from Gloucester via M5 to the north Cotswolds as well as traffic from Swindon to north Cotswolds without running the risk of increasing the use of existing local

network. We would want to see further evidence that traffic during the commuting period will be sufficiently managed to avoid localised rat running from the junctions through villages. Due consideration must be taken for future proofing the capability of this road scheme and its integration with the local network.

- From a historic environment perspective option 30 appears to have less of an impact on Emma's Grove Scheduled Ancient Monument and given its shorter length is less likely to have a direct impact on unknown archaeology. Further landscape impact assessment work is needed and this should include an assessment of the impact on the accessibility of historic sites and the connectivity between the sites e.g. the impact of option 30 on severing current walking routes and the potential to provide meaningful alternatives. It will be important not to neglect the heritage significance of the landscape and show evidence of how sites can be re-connected, not least options to maintain and improve the connections to and from the Crickley Hill SAM. This could and should be done in mutual consideration of landscape and ecological gain.
- We are pleased to see the provision of a green bridge, however, as with all details in this scheme the specific approach to design will be critical to its success and we have provided further details on this in Question 4.

## **Question 2: Do you have any comments to make in relation to Option 12?**

As with option 30, option 12 involves a new surface dual carriageway through the AONB, with associated junctions and links to the local highway network, and with an indication that a small land bridge would be part of the proposals. Again, we are extremely concerned about the scale of new highway infrastructure being proposed within the AONB landscape and affecting the setting of Crickley Hill as an important landscape, heritage and ecological asset. With option 12 this issue is amplified by its increased length. Allied to this, we are concerned that there are insufficient measures to reduce or mitigate the likely impacts, and offer environmental improvements. In addition, we are very aware that this route has been previously discounted and see no reason as to why this route should now be consulted on. Overall, much like option 30, we would not be able to support option 12 as proposed. However, in this case it feels implausible that this route could be mitigated sufficiently to provide an acceptable solution, even with bigger cost envelope. Beyond this fundamental concern, some of our additional issues and concerns are set out below.

We understand that this option was published in 2014 as Gloucestershire County Council's solution to the longstanding issue for the Air Balloon roundabout. We are also aware from engaging with Highways England during the last eighteen months that this option was discarded during the sifting process and not considered as a potential solution in the final five (four tunnels and one surface) options. We are very concerned that a tunnel option (likely to be the best option in landscape terms) has been discounted on cost grounds at this stage in the process, and that option 12 has been re-introduced shortly before the current consultation particularly as it is poorer value for the tax payer than the shortest tunnel, only achieving a return on investment of £0.68p for every £1 spent (as oppose to £0.79 for the shortest tunnel). We believe that to properly consider the range of options and their merits (including on landscape and cost grounds), a tunnel option should have formed part of the current consultation.

**Question 3: As part of identifying route options, we've assessed over 30 options, including 6 as part of our further appraisal work. Do you have any comments on any of the other options included in the assessment?**

As a key stakeholder in this scheme, we have been engaged in the assessment work to date. We have already made comments in this response about the lack of a tunnel option as part of the current consultation. In respect of option 12, our main comments are outlined in question 2. However, if option 30 continues to be the preferred option, there would need to be significant improvement to the proposed scheme to reduce its impacts on the landscape and provide sufficient mitigation measures and environmental enhancements to make the solution appropriate for a road scheme within an AONB.

We also want to understand the breakdown of costs to deliver this scheme, as initially it was due to exceed the budget envelope of £500 million, but is now indicated as being just below this figure at £485 million. Whilst both option 30 and option 12 are considered as being "affordable" (page 18 of Technical Appraisal document), we are concerned that the detailed design, mitigation and environmental enhancements that are necessary as part of the scheme may not be incorporated within the current budget.

Should a surface option be progressed, we believe (based on the limited information Highways England have made available about potential mitigation) that a solution that contains appropriate mitigation will cost more than £500 million. While we believe Highways England have the ability to deliver the right scheme, we remain extremely concerned that Highways England will not be able to deliver the right solution with the current budgetary limitations. Again we would stress the significance of the landscape and historic environment in the vicinity of Crickley Hill.

**Question 4: Is there anything further you would like us to consider in relation to improving the A417 Missing Link?**

Should Highways England design a suitable solution for the AONB, we would expect the mitigation they propose to include a commitment to enrich and enhance the existing calcareous grassland and to work with key stakeholders to identify and nurture new areas of calcareous grassland (in the 1930s, around 40% of Cotswolds was covered in calcareous grassland, yet today it is less than 1.5%). There should be a net gain as a result of the road improvement scheme for well managed land under wildlife or habitat conservation criteria to help protect the future of this part of the Cotswolds AONB. In particular we would stress the importance of ensuring that plans are in place to continue the management of the downland characteristics and to improve habitat connectivity.

Any surface scheme must improve public access between the Cotswold Way and Gloucestershire Way across the A417 between Crickley Hill and Barrow Wake to maintain and improve people's enjoyment and understanding of the wider landscape. Currently, the routes presented will have a significant negative impact on the visitor experience at Crickley Hill, in particular those areas of the site close to the proposed dual carriageway, new infrastructure and junctions. We urge Highways England to ensure that the extent of these areas currently enjoyed, are not compromised and be discussed with the Trust and GWT in the next stage of design.

## **Provision for landscape links - Green Bridges**

As indicated above, we have serious misgivings about the two surface routes that are part of the current consultation. However, we note that provision would be made for a green bridge of up to 50 metres in width that could link the Crickley Hill landscape to that of Barrow Wake. On one hand we are encouraged by this provision, but on the other we consider that such a structure would be significantly below the level of mitigation and enhancement that we would expect should a surface route be taken forward.

The fly-throughs of the surface route options indicate three lanes up and two lanes downhill from Crickley Hill, plus the retention of access to the cottages at the foot of Crickley Hill, the A436 link road and as in option 12, a broad central reservation. This would pose an impossible barrier to wildlife and people and would be significantly worse than the current situation. We believe that a substantial landscape link is a fundamental requirement to ensure this major infrastructure project includes elements that reconnect the landscape.

Such a landscape link would need to be of significant width and we would strongly advocate more than one green bridge, individually substantially wider than the current proposed green bridge to provide an ecosystem level of connection as recommended by the Landscape Institute. This would provide a green bridge as the main connectivity for landscape, people and wildlife, with a further green bridge for any local road crossing of the dual carriageway in the Air Balloon vicinity. Please note we initially recommended a 400 metre cut and cover tunnel for the 'loop' (option 12) route promoted by Gloucestershire County Council in 2014, so this represents a considerable reduction in scale, albeit one we may be able to accept subject to detailed design and other considerations.

The benefits of a substantial landscape link as described above would be many-fold. It would reduce the visual impact of the road as well as reducing traffic noise and would create a route for the public to walk both on the Cotswolds Way and connect to the wider Cotswolds landscape. It would provide an ecosystem level of connection that will provide benefits for wildlife that would otherwise be unable or unwilling to pass the multiple lanes and infrastructure. The green bridge(s) would need to be seeded with native provenance wildflower seed, vegetated with native trees, shrubs, grasses, along with the creation of amphibian habitat (i.e. ponds) and erection of wildlife fencing as part of the design to guide wildlife to utilise the structure and allow a range of species including mammals, reptiles and insects to move over the reconnected habitat. The exact position of the green bridges would need to be carefully considered and we recommend Highways England carries out an accessibility study in consultation with the Trust, GWT and key stakeholders.

## **Conclusion**

In conclusion, this letter represents the National Trust's initial response to the proposed road improvement. Our view on proposals for new or enhanced transport infrastructure is guided by our statutory purpose which, in broad terms, seeks to protect special places for ever for everyone and the design of both new and existing infrastructure needs to be of high design quality, respecting its setting and the spirit of the place where it is located.

We agree that the A417 between Brockworth bypass and Cowley roundabout is unable to successfully accommodate the volume of traffic, causing congestion and associated problems such as air pollution. We accept the need for a solution to address these issues,

and as we have set out, are very disappointed that a tunnel option is not part of the current consultation proposals, in order to engender a wider debate. Our position is that we would oppose a surface scheme that would have significant and detrimental impacts on the landscape and heritage assets in this location. We have not yet seen evidence that an acceptable surface solution could be delivered within the current budgetary constraints.

We strongly advocate the need for a sensitively designed scheme that is respectful to the landscape it sits within, with substantial mitigation to reduce its impacts on the natural and historic environments within the Cotswolds AONB to an acceptable level, and with significant environmental enhancements. At present we consider that the two surface options that form part of this consultation fall considerably short of meeting the scheme's vision.

We look forward to engaging further with Highways England, its consultants and other stakeholders in an attempt to find an appropriate solution for this special place.

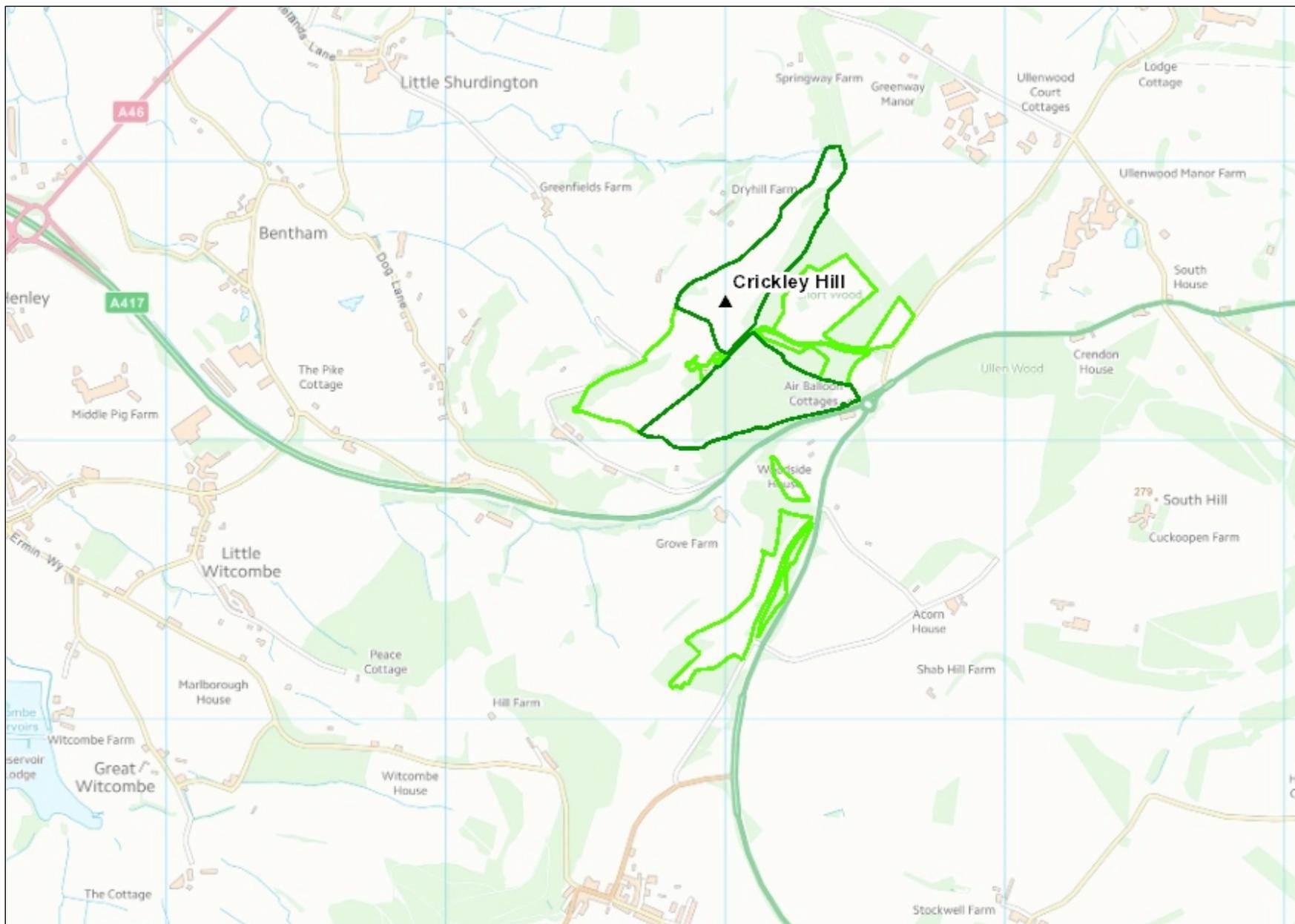
Yours faithfully,



Ian Wilson  
Assistant Director Operations



# Crickley Hill & Barrow Wake



## Legend

- ▲ Definitive Properties (GB)
- NT Ownership (GB)
- NT Leasehold (GB)

1: 20,000



0.8 0 0.40 0.8 Kilometers

British\_National\_Grid

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# Crickley Hill & Barrow Wake



## Legend

- ▲ Definitive Properties (GB)
- NT Ownership (GB)
- NT Leasehold (GB)

1: 20,000



0.8 0 0.40 0.8 Kilometers

British\_National\_Grid

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