

Although a green bridge can refer to just a layer of vegetation on top of a standard bridge, the National Trust helped secure green bridges on the Weymouth link road in the Dorset AONB that incorporated green flanks to assist migration of all manner of wildlife, fungi, fauna etc.



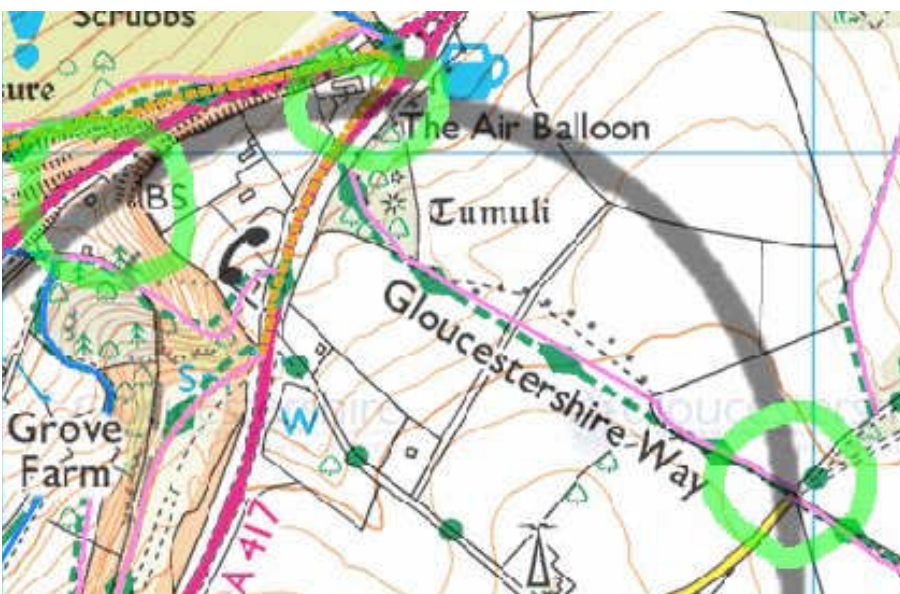
National Trust property at Hindhead in the South Downs AONB, threatened by a bypass, was saved by dual tunnels passing underneath.



Imagine the Air Balloon pub on top of a green embankment with the new road underneath.

A 150 metre green bridge could pass below the car park instead of the Highways England proposal to cut through the Air Balloon site.

The image shows how much green there is around the pub (images courtesy Google).



At least three locations can be proposed for green bridges.

a) The Cotswold Way next to the Air Balloon site, the new road passes 25-30 metres below the car park

b) A Bridleway link over the road to connect National Trust sections of protected land.

c) The Gloucestershire Way and other paths and tracks pass over the new road 25-30 metres below.

Collisions

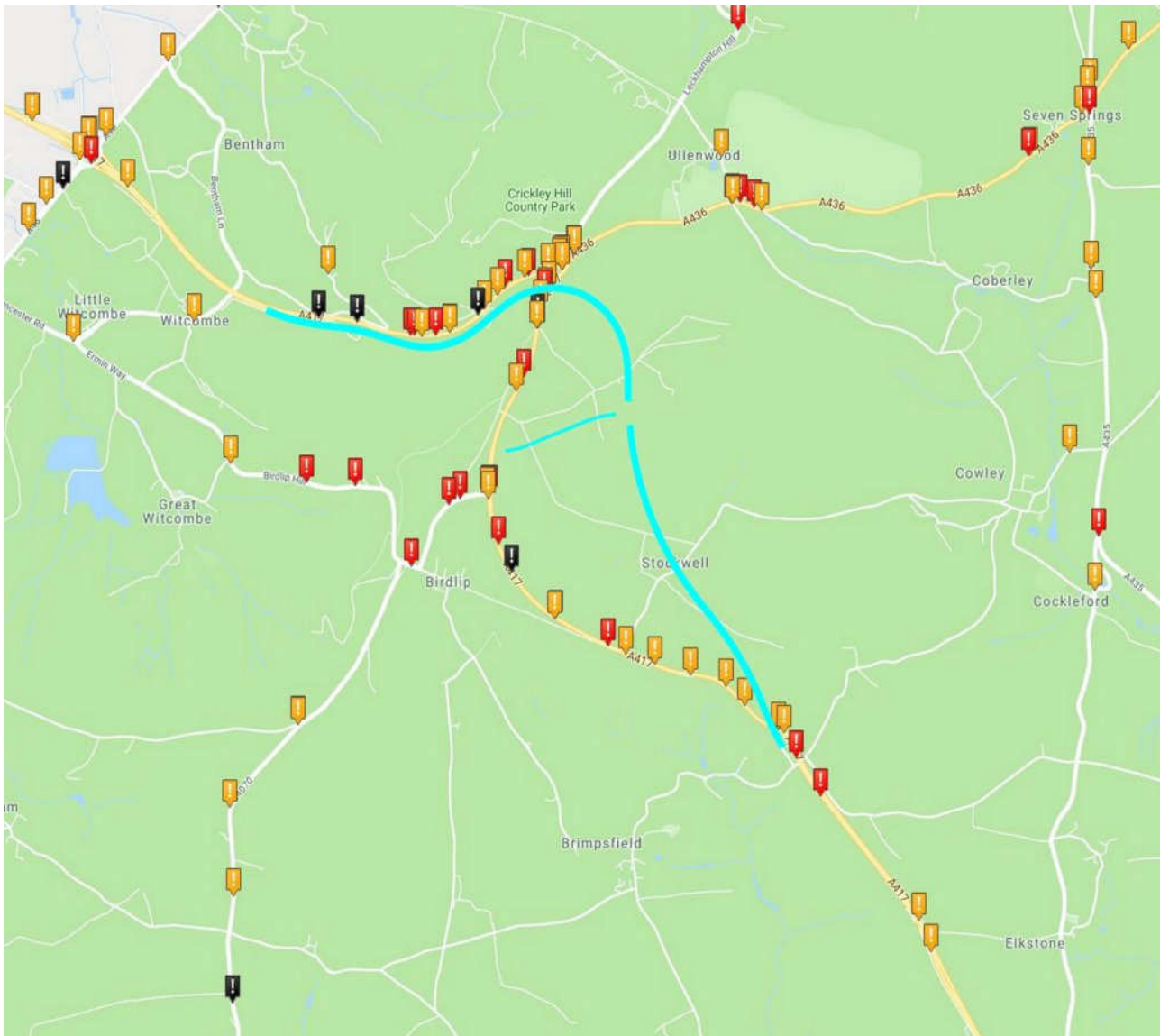
Sadly, a week before the year end, a fatal collision was reported on the single carriageway section of the A417 between Nettleton Bottom and Cowley Roundabout.

Some early reports suggested that one of the drivers may have thought they were still on a dual carriageway. Whatever comes out, it's likely to support the view that something needs to be done to improve this route for travelling from one side of the Cotswolds AONB to the other.

Collisions like this can, perhaps understandably, lead to calls to permanently close a road. Crash Map below shows collisions on this and surrounding roads for 2013-2017 the most recent reported 5 years (black fatal, red serious, orange slight).

There is already some pressure to permanently close the present A417 Birdlip bypass due to a past fatal collision there. Local traffic would have to use the proposed new dual carriageway (blue) via the Option 30 link road (thin blue).

Rather than close a road, usually it's enough to investigate & install any safety improvements.



Ramblers have campaigned since 2001 for a new road to take the through traffic off local roads so that they're usable again for walking, cycling, horseriding and for local traffic. There should be no need to use the new busy dual carriageway to travel from one local place to another.

Proposals to completely close local roads would drain some of the limited landscaping funds. These funds could be used for minimising the environmental impact of the new road in this Area of Outstanding Natural Beauty – the Cotswolds. Installing short green bridges would allow footpaths, bridleways and tracks to cross the new dual carriageway in this unique landscape.

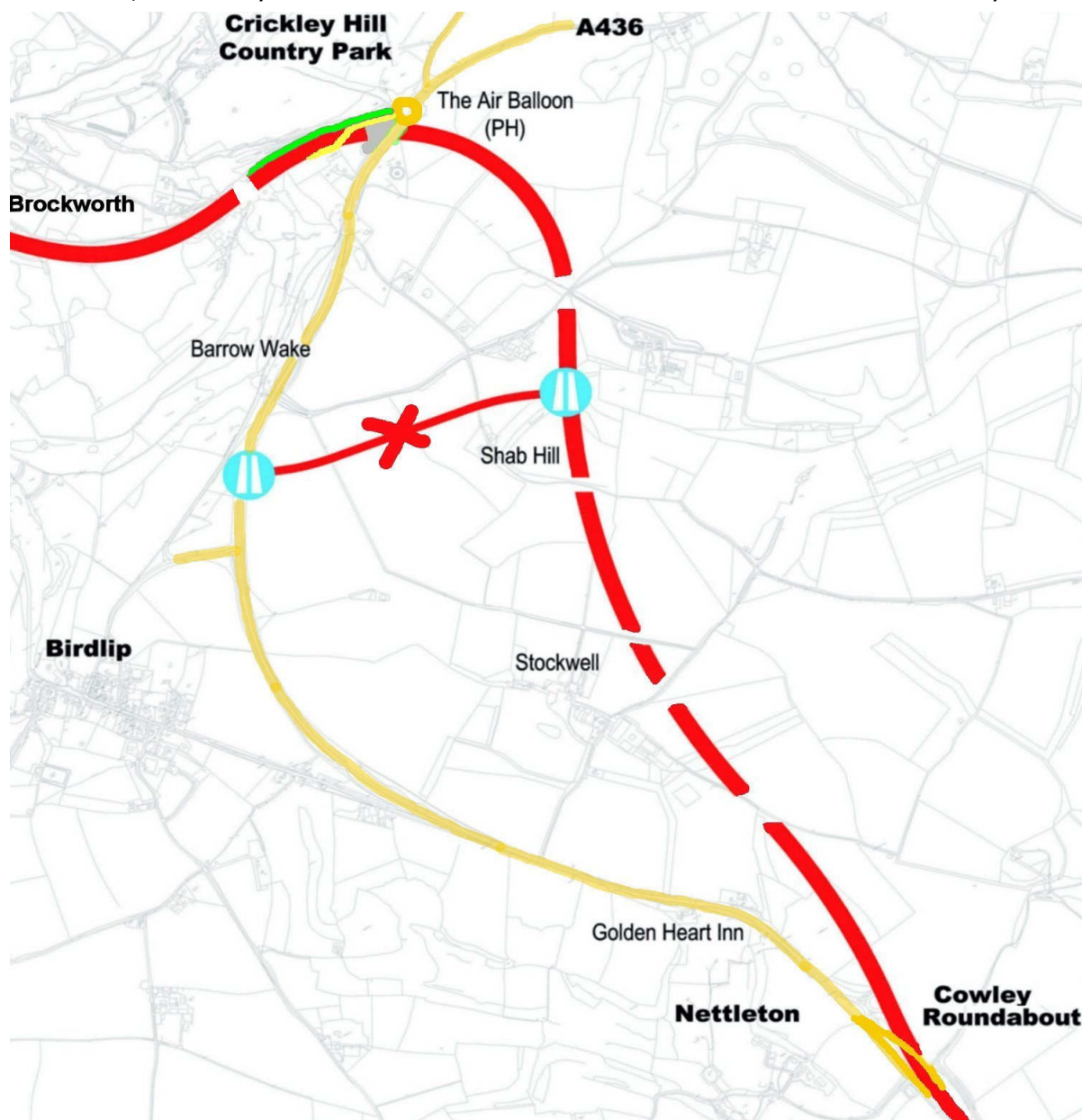
Informal Discussions

November/December saw informal meetings with various other interested bodies.

It became clear that the current accident record has been driving demands to have the current road closed completely to traffic. Closing the road would require the link road to the new dual carriageway. The link road has an extra impact on landscape and rights of way. Cost and other implications mean demolition of the Air Balloon site. Oxford to Gloucester traffic has to circle an extra 2 mile loop using the link road – environmental disbenefits. As well as the loss of The Air Balloon Inn, the Golden Hart at Nettleton Bottom might suffer due to loss of passing trade.

Rather than completely close the current road, discussions included the advantages of keeping it open for local people, business and tourism. Saved funds could be used to 'green up' the new road. If safety improvements were required these could be incorporated as necessary, but a major safety improvement should be the shift of most traffic to the new road.

One suggestion was that ramblers could consider applying to list the Air Balloon to try to keep it from demolition. It was noted that drivers, wary of going under the green bridge if it looked like a tunnel, could stay on the surface & use the current road & roundabout as they do today.



Highways England Option 30 (red without gaps) demolishes the Air Balloon Inn. Simplified Option 30 saves funds by keeping the pub and deleting the cross link. It uses the current road as an up-slip (green) to the roundabout & needs a new down slip (yellow) to the new road. The money saved pays for taking the new road under the pub car park. The outcome should be the Cotswold & Gloucestershire Ways are kept on their authors line in countryside largely as today.

Cost of Option 3

When Highways England published its short list of schemes in 2018, only two options 12 and 30 (the preferred option) fell within the budget of £500m made available by government. Ramblers shared the disappointment of the National Trust & Gloucestershire Wildlife Trust that no tunnel option was included.

The methods described gave the cost of the shortest tunnel Option 3 as £875m – too high.

*all prices in millions	Option 3 Tunnel	Option 12 Surface	Option 21 Tunnel	Option 24 Tunnel	Option 29 Tunnel	Option 30 Surface
TOTAL	£875	£465	£1,625	£1,210	£1,240	£485
Adjusted BCR	0.79	0.68	0.47	0.54	0.56	1.04

However the costs at this stage are purely budgetary. It's not known what costs are included. With no need for the link road, the purchase of the Air Balloon or the construction of bridges & the cutting at the site, would it be possible to bring Option 3 within or close to budget?

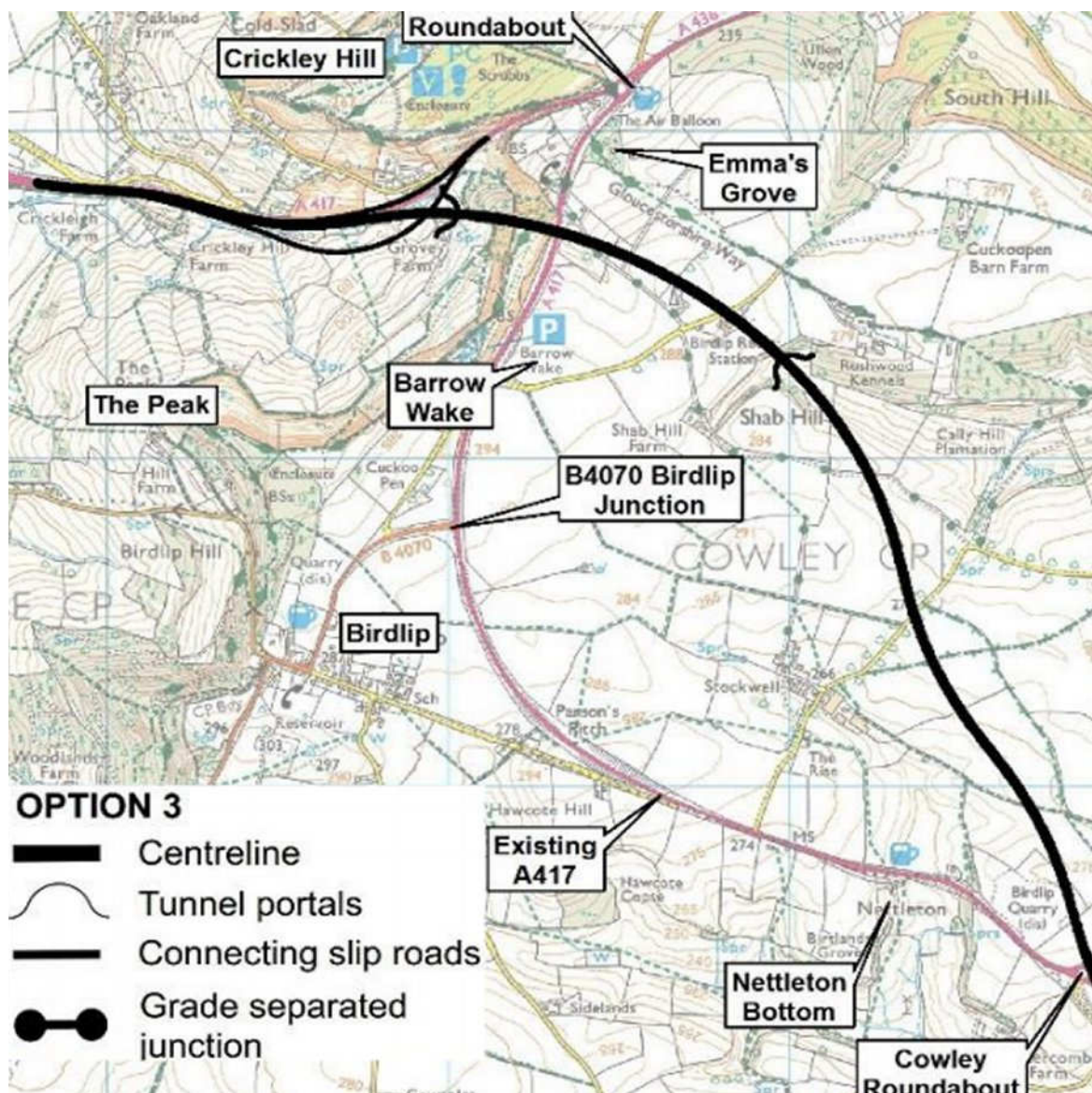
In discussions, Highways England was asked for a breakdown of costs for Option 30, for example an estimated cost of the link road, but none was forthcoming.

In previous times for road building a government may have gone to tender to find out whether any bidders could offer to complete the scheme for say here, the budgeted £500m.

If it could be affordable, Option 3 would satisfy many of the aims of ramblers and other bodies.

- minimise impact as it passes through the edge of the AONB
- remove through traffic from local roads
- reduce traffic levels at road crossings including the Cotswold and Gloucestershire Ways
- keep the historic Air Balloon Inn - a meeting place for walkers

In addition it has a relatively smooth alignment for the new road through the tunnel.
(the arrangement of slip roads at the west (Brockworth) end may need further consideration)





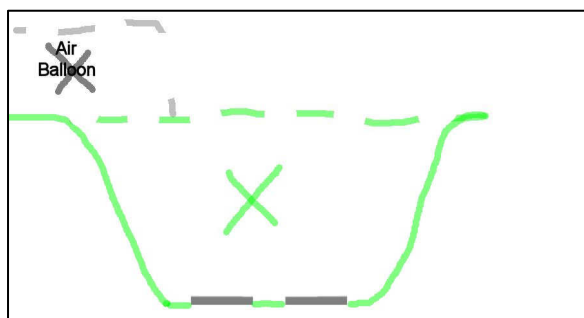
Frequently Asked Questions

Some Questions that have cropped up during the project.

Couldn't the congestion issues at the Air Balloon roundabout be solved by traffic lights?	Traffic lights might help but Highways England and other bodies have determined that a new through road is required. Rambles aim is to try to improve any proposal to minimise the effect on footpaths and the places we like to walk.
Isn't a tunnel very expensive?	A tunnel is more expensive per metre than a surface road, but depending on length could be affordable in the scheme.
What is the difference between a bridge and a tunnel?	A tunnel of less than 150metres in length is referred to as a bridge and has less onerous design criteria.
When road pricing comes in, won't it reduce traffic levels so that a new road is not needed?	Highways England has decided that the road is required. If in future traffic levels reduce significantly, at least the simplified Option 30 (and Option 3) retain much of the landscape.

Wouldn't a tunnel affect the underground aquifers?

An aquifer is a layer of water bearing rock between other layers. Highways England proposes a 25-30 metre deep cutting through the Air Balloon site to the back of Shab Hill, a distance similar to that for the Option 3 tunnel. The sketch shows that a tunnelling method requires much less removal of rock than a cutting and, in turn, should have a lesser effect on aquifers.



Sketch: 30 metre deep cutting at the Air Balloon vs. Dual tunnel type bridge under its car park

Summary

Highways England Option 3 with its 1 km tunnel would satisfy many criteria, minimising impact on the landscape and no requirement for green bridges or a link road. It meets local ramblers aims to keep the Cotswold and Gloucestershire Ways on their authors intended line, ensure safe road crossings, and retain the landmark Air Balloon Inn - a meeting place for walkers. It was discounted by HE due to its £875m projected cost. However with a suitable tendering process it may be possible to bring a version of Option 3 within or close to the £500m budget.

Highways England Option 30 takes a 30metre (100ft) deep cutting through the Air Balloon site demolishing the pub and uses a link road between Shab hill and Barrow Wake severing two rights of way. Rather than adding funding green features on the new road, it funds removal of the Air Balloon roundabout and closure of part of the current road (perhaps keeping it as a cycleway) so that local farm and other traffic has to use the new dual carriageway.

Simplified Option 30 could be said to be a variant of Option 3. With the tunnel reduced to less than 150 metres it becomes a green bridge below the Air Balloon car park & current road. In the same way as Option 3, it keeps local roads for local traffic so they become more suitable for walking, cycling and horse riding again. With no tunnel it uses green bridges along the route e.g. to the east for the Gloucestershire Way, to the west for a bridleway and access to Grove Farm. In losing the link road, overall costs should be similar to Option 30 .

A proposed intermediate option to save the pub site but retain the link road, is unable to use funds from losing the link road to pay for the bridge under the pub. However because there are other savings (no purchase of the pub) it could just be possible to bring it within budget.

Conclusion

Simplified Option 30 appears to be affordable and a better fit within the AONB landscape than Highways England Option 30. Option 3 or similar, if somehow fundable, could be best of all.