

## **A303 Stonehenge consultation feedback from a consortium of Stonehenge experts**

**23 April 2018**

### **About us**

We, the signatories to this contribution to the consultation, are senior archaeologists who have carried out internationally recognised research within the Stonehenge WHS during the last ten years or more. Most of us are employed by UK universities; many were employees of various universities or of English Heritage when carrying out that research. Seven of us are members of the Scientific Committee of the A303 Stonehenge – Amesbury to Berwick Down scheme.

Together, we have been responsible for many of the major discoveries of recent times. We ask this submission be noted with the respect due to the large group of proven experts who have compiled it. This text has been jointly written; it represents our shared collective view.

In a public consultation, responses are often measured by counting: X respondents preferred option 1, Y preferred option 2. We ask that this submission not be treated in that way. In constructive spirit, we have made a collective expert group and make this submission, which we respectfully ask be considered in its own right, not just as another view, informed or not, to be counted amongst the Xs or the Ys.

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The major negative consequences of the proposed tunnel are:

1. The creation of new sections of dual carriageway and slip roads (and temporary roads during works) beyond the tunnel but still within the boundary of the WHS would entail large-scale destructive development within this WHS, potentially threatening its status and integrity and setting a dangerous precedent.
2. The westerly section of new road would cut through the densest concentration of Neolithic long barrows in Britain, thus compromising the integrity of this unusual and nationally important group of burial monuments belonging to the millennium prior to Stonehenge.

3. The westerly section of new road would also destroy part of a major Bronze Age settlement of national importance. Only part of this settlement is statutorily protected as a scheduled ancient monument but that part which is not scheduled is of equal value.

4. At its eastern end, construction of the tunnel portal here may have an effect on groundwater conditions which could detrimentally impact the survival of nationally important Mesolithic remains at Blick Mead. It would have adverse effects on the settings of the Stonehenge Avenue and Vespasian's Camp and would further damage the setting and integrity of a Bronze Age cemetery through which the new road cutting would pass.

#### **THE WESTERN SECTION: Winterbourne Stoke bypass to Longbarrow junction**

**Q1. Please provide us with any comments you may have on our proposals for the viaduct crossing of the River Till valley.**

**Q2. Please provide us with any comments you may have on our proposals for the A303/A360 Longbarrow junction.**

**Q3. Do you have any other comments about our proposals for the western section of the scheme (Winterbourne Stoke bypass to Longbarrow junction)?**

#### **THE CENTRAL SECTION: Within the World Heritage Site**

**Q4: Please provide us with any comments you may have on our proposals for the green bridge (No.4) at or near the western boundary of the World Heritage Site.**

Whilst this is an attempt to join up the north and south halves of the WHS they would be even more fully severed by the road cutting. This situation is inadequate both in terms of the lack of recognition of the importance, setting and integrity of relevant archaeological remains including the long barrows, round barrows and ancient fields within the WHS. Whilst the cut will require an unacceptable level of destruction within the WHS (see Q5), the green bridge at Longbarrow, restricted to

the line of the present A360, is an unsatisfactory, low-budget attempt at a cut-and-cover solution which does nothing to improve the setting of monuments and sites in this part of the WHS. The tunnel should simply be longer, so that no such green bridges are required.

From an archaeological perspective the benefit of a tunnel or new route is to reunite the northern and southern parts of the WHS, which are split by the present surface A303 – a road so busy it is dangerous to try to cross it on foot. While satisfying this for the section adjacent to the stones, it does so at the expense of greater damage to the west, where archaeology is just as important or further east. It is definitely desirable to re-unite the western part of this landscape so that one could walk between the important Winterbourne Stoke Crossroads and Lake barrow groups that fringe what appears to be an early entry into the Stonehenge area. But the present proposal would only allow a single point of access across the road i.e. along the route of the present A360, leaving no possibility of circumnavigating the Crossroads barrow group or appreciating it from a distance and would leave a far larger blot on the landscape than exists at present. Ultimately, surface roads leave little lasting damage on the landscape. For example, two earlier roads cut across the Stonehenge Avenue hardly noticed by most visitors. In contrast, the proposed huge deep cutting will be an eyesore for ever.

**Q5: Please provide us with any comments you may have on our proposals for the cutting on the western approach to the tunnel.**

This south-western approach to Stonehenge was important not only during the Bronze Age, after the stones of Stonehenge were put up, but much earlier – before the age of Stonehenge.

This westerly section of new road would cut a c.40m-wide swathe through the densest concentration of Neolithic long barrows in Britain, thus compromising the integrity of this unusual and nationally important group of burial monuments

belonging to the millennium prior to Stonehenge. It is becoming apparent that the unusual density of long barrows in this area of the WHS to the west of Stonehenge is unparalleled anywhere else in Neolithic Britain, an observation enhanced by confirmation of one and the discovery of another new long barrow in this area during survey and evaluation in 2016-2017 for the road scheme. The presence of such a remarkable cluster of such monuments in a restricted area immediately west of Stonehenge raises important questions about the significance of place concerning prehistoric people's decision to locate Stonehenge where it is.

Important visual components of this part of the landscape are two famous barrow cemeteries, specifically those at Winterbourne Stoke Crossroads and on Lake Down and each incorporating the largest Neolithic long barrows within the WHS. Together standing sentinel over the southwestern approach to Stonehenge, they would have been significant to those occupying the intervening valley. Their prominence a full two millennia after construction – a length of time equivalent to a Roman construction being still of compelling significance to ourselves in the 21<sup>st</sup> century – is evident from the construction of a Late Bronze Age linear ditch that runs between them.

There are other, vitally important examples of these singular and archaic long barrows here: another is extant to the north of the woodland known as The Diamond; a now-levelled example is in the field system close to the A360. Additionally within view is yet another, the superb and well-preserved long barrow on the southern flank of Normanton Down, with a mysterious and now-levelled 'mortuary enclosure' alongside. There is another at Normanton Gorse, and recent evaluations have encountered another two. So we have as many as eight of these Early Neolithic long barrows across that part of the valley where the cutting would be placed. Such a grouping of long barrows in a small area is *unique* in the world, not just unusual. It shows that this area was of out-of-the-ordinary significance during

the Early Neolithic period. We can expect that the fast-evolving techniques of field archaeology will lead to major revelations here – *if* the monuments *and* their precious setting are not wrecked.

The existence of Bronze Age settlement remains in this western area has been established for some time, and their survival, character, extent and date may be better understood as the result of forthcoming field evaluations for the road scheme. Only part of this settlement is statutorily protected as a scheduled ancient monument but we consider those parts of it which are not scheduled to be of equal value. In addition to settlement remains, there are important prehistoric features that formed Bronze Age field boundaries. All these features are integral to understanding later stages of the construction and subsequent use of Stonehenge.

Previous archaeological research reveals this area to have some of the highest densities of archaeological finds in the whole of the WHS, with finds from particularly the Neolithic and Bronze Age. Even if archaeological excavations were to be conducted to the highest standards along this c.40m-wide, c. 1.2km-long cut (which we hope that they would), this represents an unacceptable loss of nearly 5ha of prehistoric remains, the greatest single loss of area to any modern development within the WHS.

The approach cutting to a western portal here – deep and wide – would inflict a vast gash on the landscape. With the western portal here, this new gash is not in a peripheral or archaeology-free zone, but in one which is, in a different way, as genuinely unique, just as the famous stones are at Stonehenge itself.

Lastly, tall and highly strengthened fences may be required for reasons of safety at the ends of the cutting or the supposed green bridges. These would have an adverse

impact on visual appreciation of the landscape and on the settings of monuments within their vicinity.

**Q6. Please provide us with any comments you may have on our proposals for the western entrance to the tunnel.**

As covered by the answer to Q5, the western entrance should be positioned at least 1.2km further west and outside the WHS boundary so as not to cause an unacceptable loss of nearly 5ha of prehistoric remains.

The portal and approach road will also be a visual blemish when seen from round barrows right along the flanks of Wilsford Down valley and including parts of the Lake and Winterbourne Stoke Crossroad groups.

Our comments about the 'green bridge' at Longbarrow are the same in respect of the proposed 'canopy' at the western tunnel portal.

**Q7. Do you have any other comments about our proposals for the central section of the scheme within the World Heritage Site?**

At its eastern end, construction of the tunnel portal here may have an effect on groundwater conditions which could detrimentally impact the survival of nationally important Mesolithic remains at and around Blick Mead on both sides of the carriageway. This archaeological site has the longest dated sequence for a settlement of Mesolithic date (the era well before the time of Stonehenge) yet found in Britain, its dates spanning the 8<sup>th</sup>–5<sup>th</sup> millennia BC. This long-term use of the area by Mesolithic hunters may explain why the Stonehenge area became a significant focus for the Neolithic people who built Stonehenge just over the ridge from Blick Mead. The site has produced well-preserved organic remains of beetles, pollen, fungal spores and ancient DNA that can shed light on the Mesolithic palaeoenvironment in a way that is exceptional in the UK. This strengthens the case for maintaining this resource in the long-term.

Before any decision can be made about construction within this part of the proposal, there is a requirement to monitor variations in the water table in the immediate vicinity of the site over at least twelve months duration to cover seasonal variations. After that, the Highways Agency and its Scientific Committee would need to be satisfied that the construction methods used on the road sector past Blick Mead would have no deleterious impact on archaeological remains. This would include modelling and further field testing to ensure that archaeological deposits would not suffer from compression beneath any works or from dewatering or oxidisation as a result of piling or other ground works. The full extent of these archaeological deposits still need be established on both sides of the existing carriageway.

There are also important archaeological remains within the vicinity of the eastern tunnel portal – deposits currently being evaluated have produced fragments of two Neolithic axes, suggesting that this is part of a dense distribution of prehistoric activity extending along the east side of King Barrow Ridge.

The proposed eastern portal will badly damage the visual setting of the prehistoric hill-fort of Vespasian's Camp and affect its extra-mural archaeological deposits, including remains of a likely palisade extending northwards from the hill-fort's entrance. Any works here will impinge on this and any other features immediately outside the hill-fort's entrance, its natural access point.

The present A303 divides a Bronze Age barrow cemetery between Vespasian's Camp and King Barrow Ridge, an extensive feature which would be further severed and adversely affected, both in its integrity and setting, by the new cutting to the tunnel portal.

**THE EASTERN SECTION: Countess junction to just beyond the Solstice Park junction**

**Q8: Please provide us with any comments you may have on our proposals for the A303 flyover at Countess roundabout.**

As noted in the answer to Q.7, the impact of the scheme on preserved Mesolithic deposits in this area has yet to be established. There is no adequate information on the survival of archaeological deposits along the flyover area which runs east of the proposed portal as far as the Countess junction. Nor is there sufficient information on survival along the flanks of the Avon valley at this point.

Blick Mead is situated on the eastern edge of the UNESCO World Heritage Site and lies immediately to the south of the A303 and arguably to the north of it (see below). It will be adjacent to the proposed flyover. This area has started to yield an extraordinary record of both early post-Ice Age human society in the UK and of potential contact between Britain's last hunter-gatherers and the first farmers to arrive in this part of Salisbury Plain. Recent excavations have revealed substantial Mesolithic deposits that provide evidence for the people who built the first monuments on the Stonehenge knoll in the 8<sup>th</sup>–7<sup>th</sup> millennia BC and for Mesolithic people continuing to live in the Stonehenge area until around 4000 BC when farmers and farming arrived in Britain.

Blick Mead is so far unique in Britain and Northwest Europe as a persistent place to which Mesolithic people returned for over four millennia. This unusual long-term use may help to explain why the area of the WHS became a pivotal focus for the Neolithic people who built Stonehenge. Blick Mead is an archaeological site without parallel nationally.

One of the reasons why archaeological remains are so well preserved at Blick Mead is that the local underlying water table keeps organic matter deoxygenated thereby preventing decay. We are therefore deeply concerned about the impact on the local water table of the compaction caused by the huge amount of additional weight on

the road as a result of the flyover (planned to be at least 8m high on a road width of 45m) which will extend 800m from the roundabout to the Eastern Portal. A massive and deep cutting outside the Eastern Portal (c.400m long, up to 10m deep and c.75-55m wide at the portal entrance) would likely to add to the compaction.

No assessment of the local water table and its seasonal fluctuations has been carried out at Blick Mead during either of the recent periods of consultation. We know from the case of the Mesolithic site of Star Carr, a nationally important Mesolithic site in North Yorkshire, that a drop in the local water table may lead to irretrievable archaeological loss. To prevent this being repeated at Blick Mead, all potential effects on the local water table must be evaluated before any impact can be properly assessed.

**Q9: Do you have any other comments about our proposals for the eastern section of the scheme (Countess junction to just beyond the Solstice Park junction)?**

### **PART 3: The environmental effects of the scheme**

**Q10: Do you have any comments on the preliminary environmental information provided for the scheme?**

### **PART 4: Additional comments**

**Q11: Do you have any other comments you would like to make about the scheme?**

**1) *Radical and continuing changes in our understanding of Stonehenge, its landscape and archaeology***

Archaeology, like so many scientific studies, is radically changing in its methods. New technologies, such as the 3-dimensional radar method of LiDAR, have transformed our ability to detect traces too faint for the naked eye. Old techniques of excavation and field survey have been transformed by hi-tech innovations. So our knowledge of the Stonehenge landscape has been radically changed in the last 20 years: too many new and astonishing finds to state here, they fill many recent books. Already we are asking new questions about the ancient landscape and future

generations will increasingly focus on features that were formerly considered of little interest. Recognition that Neolithic people lived in a landscape of periglacial features unsmoothed by centuries of cultivation or erosion, or that historic cultivation has truncated much of the ground surface means that new and different techniques are required to obtain the evidence. The extraordinary and unique Blick Mead site (above) is a new find, and so are astonishing new aspects to Durrington Walls, a long-known site within the WHS that continues to yield new information about the Neolithic people of Stonehenge. We can anticipate that these new discoveries will continue to be made. It is dangerous to plan on the basis that what we know now of the ancient landscape is all that exists.

## ***2) The short term and the very long term in planning the future of Stonehenge***

The standing stones and structures – the famous part of Stonehenge – are well over 4,000 years old. Other parts, less obvious to the untrained eye, are many centuries older. Other monuments in the WHS landscape are yet older still, by many more centuries. The Blick Mead Mesolithic site is twice as old as the stones at Stonehenge! Where planning normally deals with the short term, of decades extending perhaps into a century or so going forward, and often must notice the medium-term surviving traces such as 18<sup>th</sup>- or 19<sup>th</sup>-century or even medieval buildings, planning in the Stonehenge landscape must deal with a long term, indeed a very long term of several thousands of years.

It follows that *planning at Stonehenge must be cautious and always propose minimal intervention*. There is no area in the WHS where we can say, 'We know that it is *safe* to place a tunnel portal or major new surface road *here* because there is *nothing there which is important* now or *will be seen as important* in the future.' Therefore the whole of the present short-tunnel option is misconceived.

### *3) A history of soon-regretted, short-term errors in caring for the Stonehenge landscape*

In the century since Stonehenge came into public ownership at the end of the First World War, there have been several big buildings put into its landscape. Each was seen as sensible at the time. Yet within as short a time as a *decade* (!) each was seen as a mistake, so grave a mistake it was not just regretted but demolished. So each of these modern structures has now disappeared from visible view. Yet the scars left, irretrievably wrecking the archaeology, will never be repaired. Here are three of them.

- Immediately after the then Ministry of Works began to care for Stonehenge, it was obvious that houses for its custodial staff should be built nearby, so the stones would always have guardians close by: within 15 years, the houses were demolished as a hideous and wrong intrusion, leaving earthworks that obscure earlier features.
- At much the same time, it was obvious that visitors needed refreshment and facilities, so a Stonehenge Café was built close by: again, within 15 years, the café was demolished as a hideous and wrong intrusion and similarly leaving earthworks that obscured those of a more ancient past.
- In the 1960s, it was obvious that the car-park was too small, the working buildings for custodians too small and the refreshment facilities were poor. And it was dangerous for visitors to walk across the fast and busy A344 road to reach the stones. So in 1969/70 a large car-park, semi-underground buildings, and access tunnel under the A344 were built. This was uncontroversial, an obvious improvement. Yet, within 15 years, the head of English Heritage declared their abolition to be its highest priority, and MPs called these facilities a 'national disgrace' which must be removed. Now they

have been, leaving a wrecked area so close to Stonehenge covering several hectares.

Consequently, aside from the stones themselves the most noticeable archaeological features at Stonehenge are those of the last century.

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#### ***4) The integrity of the Stonehenge World Heritage Site***

Until a century ago, it was only the stones themselves which were seen to constitute precious prehistoric Stonehenge. First World War photographs show artillery field guns being hauled through the very monument – ‘safe’ as long as they did not hit the actual stones. Increasingly, we have come to understand that Stonehenge is not only the stones, not only the eroded earthworks immediately near the stones, but a whole landscape extending to the horizon in most directions and even beyond. This fact was recognized when the WHS was defined as an area extending several kilometres from Stonehenge in each direction.

The integrity of the WHS was respected when new visitor provision was designed in the 2000s. Sites for a visitor centre were considered outside the WHS: and a visitor centre on its margin was built. Further access paths and roads to and from Stonehenge should not cross the WHS and interfere with its archaeology: so a scheme was devised which uses the former A344 line for access, a choice which intended minimal new impact within the WHS.

The A303 proposal is, however, a sad and retrograde step. Instead of respecting the WHS as defining the area to be protected, it recognizes only the land which is visible from the stones themselves – a throwback to the limited ideas of a century ago! It seeks to protect archaeological remains along the 2.9 km across the WHS which lies above the line of the tunnel, but cheerfully destroys everything within (and, in places, beside) the road’s footprint along a length of over 2 km – nearly as long – of

the WHS. And it inflicts within the WHS two enormous and deep approach cuttings to the tunnel portals.

The UK has an international reputation for the quality of its heritage protection and enhancement; that reputation can only be maintained – setting the bar high enough to encourage others to reject large-scale damaging developments in other WHS sites around the world – if the length of the proposed tunnel is more appropriate to the 5.5km-width of the WHS which the road line would traverse, or if the southern surface route is chosen. We note that UNESCO appears to be in full agreement with our view.

The WHS and its OUV (Outstanding Universal Value) need to be protected. We believe that the A303 proposal places the UK in breach of Articles 3 and 4 of the 1972 World Heritage Convention. Having identified and delineated the site of Stonehenge as an archaeological site of OUV, the State Party should recognize its duty to protect, conserve and transmit to future generations this cultural heritage, doing ‘all it can to this end, to the utmost of its own resources...’. We believe that this would place the UK government's proposed scheme for a short tunnel scheme, with its cuttings, portals and a flyover inside the WHS, to be in breach of the 1972 Convention.