

A27 Arundel Bypass – Supplementary Consultation

Response from West Sussex County Council, December 2022

Introduction

1. West Sussex County Council (WSSC) welcomes the opportunity to comment on the supplementary consultation that National Highways is undertaking for the A27 Arundel Bypass scheme. This is understood to be in response to further design evolution, informed by the statutory consultation held in early 2022.
2. This response is not on behalf of other Districts and Boroughs within the County, and only addresses the elements of the scheme that are subject to the non-statutory supplementary consultation. Continued dialogue will be sought by WSSC on the technical feedback raised during statutory consultation in early 2022.
3. Details on the approach to this supplementary consultation was discussed with National Highways in May 2022 (see technical and community engagement section). Consultation materials published consists of a Supplementary Consultation Brochure and a Walberton Traffic Mitigation Assessment Technical Note. It is acknowledged by WSSC that at the launch of supplementary consultation, National Highways also published a short summary of the comments received in response to the statutory consultation held in early 2022.
4. WSSC Officers have reviewed the consultation materials and a summary is given below. The key areas raised in this response relate to the following topics:
 - Technical and Community Engagement.
 - Traffic and Transport.
 - Biodiversity.
 - Cultural Heritage.
 - Landscape and Visual Impact (LVIA).
 - Population and Health.

Technical and Community Engagement

5. WSSC notes that MHCLG guidance on the pre-application stage of the Development Consent Order (DCO) process emphasises the benefits that the early involvement of local authorities (and communities and statutory consultees) can bring. WSSC welcomes the technical engagement held since statutory consultation in early 2022 about the suitability of some elements of the evidence base gathered. WSSC would request further engagement prior to the DCO submission on concerns raised through the Section 42 response.
6. Details on the approach to this supplementary consultation was discussed in May 2022 with National Highways. WSSC welcomed the choice of consultation methods, including holding both face-to-face and on-line elements to the

consultation, to allow greater flexibility in accessing consultation materials by the local community.

7. However, through these discussions, WSCC did encourage National Highways to broaden the scope of the consultation and use the opportunity to share additional technical information (either updated information to reflect the consultation or new information to reflect some of the missing baseline information, which was requested at the PEIR stage) to further outline the effects of the wider scheme to local communities and stakeholders. WSCC also requested more detailed analysis of how feedback from previous rounds of consultation has driven the updated scheme design. WSCC is disappointed that this has not been taken forward as part of the approach.
8. Local concerns raised to WSCC during the supplementary consultation with regard to methods for engagement will be considered as evidence for inclusion in the Adequacy of Consultation response, which will be submitted by WSCC during the acceptance phase of the DCO.

Traffic and Transport

Traffic Modelling

9. The traffic models that are being used to support development of the scheme use a simplified local highway network, which is typical for developing a strategic transport scheme. In using these models, it is necessary to have some knowledge of the traffic model network when interpreting outputs as it cannot show potential impacts on roads that are not included in the model network. Therefore, it is disappointing that more information about the traffic models has not been made available as part of the consultation to allow the public to interpret the results accordingly.
10. It appears that some roads, e.g. Wandleys Lane and West Walberton Lane, have not been included in the models. These roads perform similar connections to other roads, such as Eastergate Lane, that are forecast to experience an increase in traffic with the scheme. It is reasonable to assume that the impacts of the scheme will not be constrained to the roads that have been modelled and increases in traffic flow are likely to be experienced on other roads in the local area.
11. WSCC considers that the proposed design changes have the potential to create a rat-run on Wandleys Lane, which is not currently modelled. Wandleys Lane could provide a shorter westbound journey time between A27 to A29 Fontwell Avenue, which is facilitated by retaining the current configuration of the Arundel Road junction. This may disperse the impact of the scheme and affect communities living on these roads. Use of this unmodelled shortcut would also change the balance of turning flows at the A27/A29 Fontwell West junction, which could have further knock-on effects on traffic route assignment in the local area. Also, if the current configuration of the Arundel Road junction is retained, West Walberton Lane may also be used by traffic from the east with a destination in Walberton as it can be accessed using the proposed scheme rather than using the de-trunked section of A27 from Arundel. Although this is traffic with a local destination, it is nonetheless a likely increase in flow which is not being brought to public attention through this consultation because of the limitations of the model used by National Highways.

12. National Highways should consider whether there are other potential rat-runs that may be created by the scheme and undertake further assessments to understand the potential impacts of the scheme on roads that have not been modelled. The proposed design at the Arundel Road junction should be reconsidered in light of this further analysis. If necessary, further revisions should be made to the design before the DCO application is submitted.
13. The proposed design changes appear to be effective at reducing the attractiveness of using The Street – East in Walberton to avoid congestion. However, this is at the expense of other areas such as Arundel Road and Tye Lane – North, which will increase the impact of the scheme on these roads when compared to the design presented during statutory consultation. Furthermore, The Street – West in Walberton is likely to continue to experience significant adverse effects due to rat-running. In general, the proposed design changes appear to spread the problem across a wider area, so the impact of additional traffic on local communities remains a concern. This will also negatively impact the rural character of these areas.

Junction Performance

14. The information presented in the Consultation Brochure or Walberton Traffic Mitigation Assessment Technical Note about junction performance is limited and does not provide sufficient information to comment on the performance of junctions, impacts on the wider network, and the acceptability of the proposed design changes.
15. It appears that the proposed design changes at the A27/A29 Fontwell West junction will reduce delays for A27 traffic and make a contribution to minimising the amount of traffic that rat-runs to avoid congestion. However, WSCC is concerned that optimising the traffic signals for A27 traffic will increase queues on the side road entries and redistribute traffic across the local road network. Although it is not necessarily desirable to minimise queues on all the side road entries, as this could encourage use of Arundel Road, it is difficult to provide evidence-based comments about the acceptability of the proposed design changes without seeing this information. In particular, increases in northbound queues and delays on A29 Fontwell Avenue would be likely to encourage the use of Wandleys Lane as an eastbound shortcut to reach the Fontwell East junction via the eastern end of Arundel Road.
16. At the A27/A284 Crossbush junction, the proposed design changes appear to provide additional capacity. However, WSCC is concerned about the operational performance of the junction and its redistribution effect on the wider local road network. In particular, the entry flare to the southern roundabout from A284 Lyminster Road is short, allowing very little parallel queuing for traffic entering the junction from the south. The stacking capacity appears to be less than at the existing junction as the roundabout is located further south.
17. WSCC requests that junction models are provided for the A27/A29 Fontwell West and A27/A284 Crossbush junctions as part of the Transport Assessment. These should provide information about the impacts of the proposed scheme on the A27 and the local road entries. If necessary to accommodate future forecast traffic flows, further revisions should be made to the design before the DCO application is submitted.

Fontwell East

18. In July 2022, a development (APP/C3810/W/21/3278130) of 155 dwellings on Land West of Tye Lane, Walberton was permitted on appeal. The developer is required to implement a scheme at the A27/A29 Fontwell East junction that will introduce traffic signal controls. The decision was taken after the A27 Arundel Bypass scheme design changes were identified, so neither the development-related traffic or the associated highway changes were taken into account in the production of the Consultation Brochure or Walberton Traffic Mitigation Assessment Technical Note. The absence of an assessment of the cumulative effects of the scheme and the Land West of Tye Lane development means there is uncertainty about the effectiveness of the proposed scheme design changes.
19. The cumulative effects of the scheme and the Land West of Tye Lane development are likely to change the distribution of traffic on the network. Although this may benefit some areas, it could lead to a greater impact through rat-running traffic in others. WSCC is concerned about the impact that this could have on use of the A27/Arundel Road junction and the resulting traffic flows in Fontwell, as this will provide a route for traffic that avoids traffic signal controls at the Fontwell East and West junctions. Therefore, WSCC requests that an assessment of the cumulative effects of the scheme and the Land West of Tye Lane development is undertaken and, if necessary, further revisions are made to the design before the DCO application is submitted.

A29 Realignment

20. The proposed design changes appear to reduce the impact of the scheme on A29 Realignment and the reasons for this require further investigation. WSCC is concerned that this could be due to an increase in delay on the A29 Fontwell Avenue approach to the A27/A29 Fontwell West roundabout. Such delay could cause traffic from Barnham to destinations in the west to use Barnham Road and Nyton Lane to access A27 westbound, rather than joining the A27 at Fontwell.
21. The traffic flows sites map (page 19 in the Consultation Brochure) appears to include Phase 2 of the A29 Realignment scheme, which is part of the Arun Local Plan and West Sussex Transport Plan. However, it is not clear whether this has been modelled as the forecast traffic flows on Phase 1 of the A29 Realignment scheme appear low. As the planning application for Phase 2 of the A29 Realignment is awaiting determination by Arun District Council, the scheme is considered more than likely, so should form part of cumulative effects assessment or suitable sensitivity tests.

Future Traffic Growth

22. In line with Department of Transport (DfT) guidance on transport scheme appraisal, the traffic forecasts that have been used to inform the Consultation Brochure and Walberton Traffic Mitigation Assessment Technical Note are constrained to the DfT's National Trip End Model (NTEM). As there is a significant difference between the amount of development assumed in NTEM and the Arun Local Plan, WSCC remains concerned that the scheme is being designed to accommodate a traffic forecast that is low compared to what is planned to come forward. This is a concern for local stakeholders who see the lack of alignment with the Arun Local Plan as a fundamental shortcoming of the

economic appraisal. Therefore, WSCC requests that high growth sensitivity tests are undertaken and included in the Transport Assessment.

De-trunking

23. The assessments undertaken to inform the Consultation Brochure and Walberton Traffic Mitigation Assessment Technical Note appear to be based on assumptions about changes that will take place on the de-trunked section of A27, notably changes to the speed limits and carriageway narrowing. As such, National Highways seem to acknowledge that the proposed Bypass scheme is contingent on the de-trunking scheme (incorporating the changes outlined above). Accordingly, although WSCC has welcomed the opportunity to work with other key stakeholders to develop the de-trunking scheme, it is both confusing and disappointing that National Highways is continuing to take de-trunking forward separately through a Designated Funds application rather than taking it forward as an integral and essential part of the DCO scheme.
24. Furthermore, National Highways' approach raises questions about the deliverability of the Bypass scheme, for example, if the application for Designated Funds was unsuccessful or if funding was subsequently withdrawn for a successful application. It also fails to give confidence to local stakeholders and the public that the de-trunking will be delivered in due course.
25. Therefore, WSCC remains of the view that the de-trunking element of the Bypass scheme should not be taken forward separately and that it should be included within the DCO limits and examined as part of the DCO application, with delivery secured through the DCO process.
26. WSCC also would like clarity about when consultation on the de-trunking elements of the Bypass scheme will take place with local stakeholders and the public.

Non-Motorised User (NMU) Facilities

27. The proposed design for the A27/A284 Crossbush junction mentions that a footpath is to be provided. Suitable facilities that comply with latest design guidance should also be provided for cyclists to cross the junction safely.
28. WSCC is disappointed that its request to include an NMU connection to the A284 Lyminster Bypass, which is under construction, has not been included in the proposed design.

Enforcement Issues

29. The proposed A27/A284 Crossbush junction appears to be dependent on a ban for traffic turning right out of the service area. This traffic will need to turn left and u-turn at the southern roundabout of the dumbbell junction. To avoid potential safety issues associated with traffic ignoring the right turn ban, this proposed design would require enforcement, particularly at night-time when the flow of traffic into the service area is lower. Therefore, WSCC requests that National Highways proposes suitable enforcement measures as part of the design.

Biodiversity

30. The proposed bat crossing overbridge with integral hedgerow just east of Tye Lane is to be welcomed as a measure to mitigate habitat severance in an area

known to support bats. The detailed design of this overbridge and integral hedgerow and how it connects with the hedgerow network on both sides of the A27 Arundel Bypass, will be critical to ensuring that the overbridge serves its function as a bat crossing.

31. The bat survey information, notably the locations of known roost sites and flight paths, will need to be used to inform the location and design of the proposed mitigation. A co-ordinated approach is needed with the A27 de-trunking element of the scheme, which proposes a variety of measures to improve bat crossings both to the east and west of Tye Lane.
32. In drawing up the detailed design of the bat crossing, it will be important to address matters such as:
 - the design of the bridge to ensure it can support a thriving hedgerow;
 - the management of the hedgerow on the overbridge;
 - to ensure that the bat crossing overbridge is properly connected to hedgerows and other tree planting on both sides of the A27 Arundel Bypass, so that there is good habitat connectivity for bats across the wider landscape;
 - to ensure that there is no artificial lighting (street lighting), which may impact on bat flight paths; and
 - to consider whether the bat crossing overbridge should also serve as a bridge for other wildlife, such as dormice. If so, this should influence the bridge design and how it connects with vegetation corridors.
33. WSCC requests examples from other parts of the country where similar bat crossing overbridges have been used successfully. Further technical consultation on the detailed design as it evolves, would be welcome.
34. Avisford Park Golf Course is known to support a hazel dormouse population. The ongoing ecological impact assessment has highlighted the need for additional woodland to be created on the west side of the golf course as essential habitat mitigation for dormice. Closure of the golf club would provide the greatest opportunities for creating compensatory habitat for dormice through the planting of new woodland and hedgerows. It would also give greater flexibility in the location of the three replacement ponds to compensate for those lost within the road footprint.

Landscape and Visual Impact Assessment

35. With regards to the updated proposals for Avisford Park Golf Club (page 24 of the consultation brochure), whilst there is some commentary on the potential effects of closing the golf club with regards to 'Biodiversity' and 'Population and Human Health', there is no mention of the potential landscape and visual effects.
36. The change in land-use would inevitably have implications for landscape and visual amenity. Well considered change (managed woodland for instance), could sit comfortably within the landscape setting and could be beneficial to landscape and visual amenity. Alternatively, if the former golf club land were to be re-purposed or developed in some way, this may (or may not) be contrary to the landscape setting and may (or may not) be detrimental to landscape and visual amenity. However, if the land of the former golf club were to be left un-

managed, it would inevitably decline in condition and almost certainly become detrimental to landscape and visual amenity.

37. Therefore, WSCC requests clarification on what might replace the golf club if it were to be closed, and the mechanisms that would be put in place for ensuring ongoing land management. For instance, if it is planted (even partially) as woodland (as the table on page 24 of the consultation brochure suggests), then who would own the woodland and take responsibility for managing it, how would that be funded and secured, and what are the implications for landscape and visual amenity?

Cultural Heritage

38. The modelled reduction in increased traffic flow along the eastern section of The Street, Walberton compared to the design presented during the statutory consultation is welcomed. This will reduce the adverse effect of the proposed scheme upon the significance of this key element of Walberton Village Conservation Area and potentially upon the grade II listed buildings fronting onto The Street. Whether this reduction in harm will correspond to a meaningful decrease in significance of effect is not clear on the basis of the available evidence. Further assessment of Walberton Village Conservation Area will be required to fully assess the impacts of these proposals on the heritage assets in question. WSCC requests that Walberton Village Conservation Area be scoped back into the ongoing EIA assessment process to allow the required detailed assessment.
39. No additional impacts to archaeological features within the Tye Lane area are anticipated as the area is already proposed for detailed excavation. The proposed reduction in the height of the carriageway at Tye Lane as well as the reduction in the height of the proposed Tye Lane overbridge, are welcomed. The figure does not make clear the exact reduction in height of the Tye Lane overbridge and Bat Crossing and so it is not possible to state whether this will result in a reduction in effects to nearby designated heritage assets, in particular, including non-designated Berrycroft (BH422).
40. The consultation materials provide little information on the design of the additional proposed bat crossing at Tye Lane. Careful design is required to ensure the proposed overbridge structure does not result in additional harm to nearby designated heritage assets through changes to their setting.
41. Proposals to move the Avisford Park Golf Club to land to the north-east of the existing golf course are no longer being considered, which is welcomed. Trial trench evaluation within this area identified significant and complex concentrations of archaeological features, dating from the Middle Bronze Age period and including an Iron Age, a ring ditch enclosure, features clustered around a possible Middle/Late Bronze Age enclosure, a 200m+ Iron Age boundary ditch and a north-south trackway. The precise cultural heritage effects of the relocation of the golf course to this land parcel were not assessed but may have been high. The fact that the current consultation excludes this option is, therefore, welcomed.
42. The cultural heritage implications of the two current options for Avisford Park Golf Club (either conversion to a 9-hole golf course or closure) need to be robustly assessed. Closure of the golf course could potentially result in a beneficial change to the setting of Grade II listed Avisford Park Hotel, as well as

a reduction in the currently predicted *slight adverse* effect to the historic parkland associated with Avisford Park, an 18th century designed landscape centred on Avisford Hotel.

Population and Health

43. WSCC welcomes the reduction in the forecast increase in traffic flow along The Street (east of Tye Lane), Walberton from those presented at the last round of statutory consultation and the reduction in the potential effects to the local communities in this area. However, the design needs to ensure that the potential effects are minimised as much as possible for all communities that live and work in close proximity (including on the surrounding local road network highlighted in this response, which could be affected by potential traffic re-distribution not currently assessed). Due to the limitations of the traffic modelling, WSCC is not certain that all environmental effects have been transparently identified and robustly assessed.

Conclusion

44. Although the County Council continues to give 'in principle' support to the proposed scheme for an A27 Arundel Bypass, matters of concern were raised in the original Section 42 consultation response and concerns are raised in this response that need to be satisfactorily addressed by National Highways in advance of submission of the DCO application.
45. It is disappointing that the scope of the consultation was not broader to allow a more comprehensive evidence base, which was missing from statutory consultation earlier this year, to be presented to the public and stakeholders.
46. It is also disappointing that more information on the elements of the scheme subject to supplementary consultation, primarily the traffic model, has not been made available as part of the consultation to allow stakeholders to interpret the results accordingly.
47. It is reasonable to assume that the impacts of the scheme will not be constrained to the roads that have been modelled and increases in traffic flow are likely to be experienced on other roads in the local area. WSCC considers that the proposed design changes have the potential to create rat-runs on other roads that are not currently modelled. In general, the proposed design changes appear to spread the problem across a wider area, so the impact of additional traffic on local communities remains a concern.
48. If the de-trunking of the current A27 is essential to the success of the Bypass scheme, it should be taken forward and delivered as an integral part of the DCO scheme rather than being taken forward separately through a Designated Funds application.
49. A clear demonstration of the least impactful scheme needs to be made through the design evolution leading to a design fix for the DCO application.
50. National Highways must also outline to stakeholders and the local community, how the design development undertaken going forward will mitigate adverse effects and provide benefits through wide ranging enhancement measures that go above and beyond those required to mitigate the scheme.

51. WSCC will continue to engage with National Highways to seek to influence the design and to avoid and mitigate any adverse impacts. This dialogue will also aim to maximise opportunities and enable the best possible outcomes for the local communities and other sensitive receptors that would be most affected by the construction and operational impacts of the scheme.