highways england

A27
Arundel Bypass
Report on public consultation

Appendix D7.2

Spring 2018
Appendix D7.2 – Stakeholder responses
Community groups (part 2)

Arundel Bypass Neighbourhood Committee

ARUNDEL BYPASS
NEIGHBOURHOOD COMMITTEE

www.arundelbypass.co.uk

6 November 2017

Attached is ABNC Evidence Section D, which completes our A27 Arundel Bypass consultation response. Thank you for agreeing to accept this evidence section by 6 November due to its dependence on work by traffic consultants RGP, who awaited information from yourselves, and by Gerald Eve LLP.

The evidence consists of three reports, D1, D2 and D3. All three reports throw into question the Benefit Cost Ratio given by Highways England for Option 5A and show that this should be recalculated with a much higher cost and much less benefit.

Section D1: Faulty Benefit Cost Calculations for Option 5A on Mitigation, Compensation and Biodiversity Offsetting

As regards biodiversity, only the mitigation costs for the loss of Ancient Woodland appear to have been included in Highways England's calculation of Benefit Cost Ratios. However, the loss of biodiversity from Option 5A is even greater than for Option 3, as is shown by the comparative table of impacts on habitats and species at ABNC Evidence C1. Irreplaceable habitats which would be lost include wet woodland, a chalk stream, lowland fen communities, and veteran trees. All are Habitats of Principal Importance under the NERC Act 2006.

A list of 12 necessary mitigation measures is given in this section. Since these habitats are irreplaceable, as well as mitigation, compensation measures would be needed for Option 5A, such as planting large areas of new native woodland, for instance on farm fields made unusable by Option 5A. The destruction of the very special Binsted landscape within the National Park could not be moderated or mitigated, but such planting would also be needed to hide the intrusion of the road into the landscape as much as possible in the very long term. This evidence also makes suggestions as to compensation for other impacts on the National Park's Special Qualities.

The purpose of these suggested mitigation and compensation measures is not to put forward measures that would make Option 5A acceptable. There would still be an enormous net loss to biodiversity, landscape, communities, cultural heritage, and the Special Qualities of the National Park from Option 5A. The purpose of this section is to show that Option 5A has not been properly

costed, therefore the Benefit Cost Ratios are incorrect. The above mitigation and compensation measures should have been properly costed and included in a fully allocated and transparent BCR.

Section D2: Compensation for properties at Binsted for Option 5A

Section D2 is a report by Gerald Eve LLP, which estimates that the compensation liability to Highways England from Option 5A at Binsted alone, including compensation for agricultural land, buying some properties outright, and compensating for loss in market value of others, amounts to £11,522,500. Additional compensation costs would be incurred in Tortington and east of the Arun, which would be similar for Options 3 and 5A, therefore the £11.5m is the incremental compensation cost for 5A over 3.

It is not known whether such compensation costs are included in Highways England's Benefit Cost Ratios, but as they erroneously state in their consultation materials that Option 5A is 500m north of Binsted, it seems unlikely. Therefore this compensation claim would at a stroke make Option 5A more expensive than Option 3, since the 'most likely' cost of Option 5A is given as £249m and of Option 3 as £260m.

Section D3: Faulty Benefit Calculations based on inadequate traffic figures

Section D3 is a report by the Russell Giles Partnership Limited titled 'Highways England's TAR: Comment on Option 5A'. RGP's report points out (1.1.10) that Highways England's 'findings on the benefits of the A27 Arundel Bypass' should not be relied upon because they do not appear to take account of:

- Traffic changes due to the Shoreham air crash
- Road improvements on the A27 proposed by WSCC
- The Felpham Bypass and Bognor Regis Relief Road

It then shows that Highways England's Traffic Assessment Report has not properly considered the effect Option 5A would have on Yapton Lane, Walberton. It shows that if 5A were built, traffic in Yapton Lane would immediately exceed its design capacity, causing congestion and delays (2.4.1; 4.1.1). In 2041 flows would far exceed its design capacity.

On traffic in the National Park, it concludes that drivers that currently using alternative routes through the National Park to avoid the A27 would 'likely continue to use these routes to avoid peak hour congestion in Worthing unless any bypass at Arundel is combined with a bypass around Worthing and Lancing' (4.2.3.). This has been pointed out by many respondents to the consultation, but RGP have included an analysis of traffic using the Washington Roundabout on the A24 to support the argument.

Highways England has claimed that Option 5A would provide the greatest reduction in traffic in the South Downs National Park. On this point RGP states: 'in contradiction to Highways England's suggestion that Option 5A would result in a greater reduction in traffic through the SDNP compared to Option 3, RGP has deduced that the opposite is true. Not least because the addition of the north-south route between Yapton Lane and the B2132 would provide a convenient route for traffic travelling to/from the south of the A27 into the SDNP' (4.2.4).

Poor value for money of both offline options

These reports make it clear that the benefits of 5A have been overstated and the costs have been understated. The main comparison is with Option 3 and the present clear difference between their CBRs is likely to be much reduced if the above higher costs and reduced benefits were included for 5A. However, the table below shows that both offline bypass schemes are poor value for money in comparison with Option 1.

	Per Consultation			Incremental Basis vs Option 1	
	1	3	5A	= (3-1)	= (5A-1)
Present Value of Benefits from accident and travel time savings PVB (A)	£314m	£336m	£422m	£22m	£108m
Cost (most likely)	£135m	£260m	£249m	£125m	£114m
Present Value of Cost PVC (B)	£87m	£167m	£162m	£80m	£75m
Benefit to Cost Ratio BCR (= A/B)	3.6	2.0	2.6	0.3	1.4
Net Present Value (= A-B)	£227m	£169m	£260m	- £58m	£33m
% Achieved	87%	65%	100%	- 22%	13%

Source: Highways England Regional Investment Programme A27 Arundel PCF Stage 1 - Economic Assessment Report April 2017 pp53-55

The incremental BCR for 5A is 1.4 (circled red). A scheme should have a BCR greater than 2 to present good value for money. The additional expense on Option 5A fails this test.

The key point made by this table is that 5A is, incrementally, very expensive, marginally beneficial, has little capacity to absorb missed mitigation cost, as well as causing major environmental damage. In other words, the benefits of Option 5A are very slim, and are put under even greater pressure by the additional costs described in ABNC Evidence D1 and D2 below.

A proper consideration of the traffic figures, as in ABNC Evidence D3 below, reduces still further the supposed benefits of Option 5A.

Conclusion

Together these three reports show that the Benefit Cost Ratio for Option 5A, and its apparently better BCR than Option 3, are incorrect, and the whole consultation based on them has been misleading. Decisions such as those made by West Sussex County Council and Arun District Council (or any other respondents) to support 5A based partly on these BCRs are unsound, and Option 5A should be rejected.

Yours sincerely

ABNC Evidence Section D1

Faulty Cost Benefit Calculations for Mitigation, Compensation and Biodiversity Offsetting

1. Mitigation and compensation costs for Options 3 and 5A

The unexplained rise in the cost of Option 3 since the 2015 Feasibility Study, an increase of 38% overtaking the cost of Option 5A, has been justified at Highways England presentations as being the result of new legislation strengthening the requirements for mitigation and compensation for loss of Ancient Woodland.

This is now confirmed by a new table published by Highways England on 19 October 2017 ('A27 Corridor Briefing' Powerpoint), which states that mitigation costs for Ancient Woodland, calculated on a 7:1 ratio, are included in the costs for all the options:

ARUNDEL COSTS (£m)

	Option 1	Option 3	Option 5A
Minimum	£96	£208	£199
Most Likely (ML)**	£134	£260	£249
ML with 30:1 Land	£145	£289	£262
ML with 30:1 land and viaduct	NA	£591	£564
Maximum	£250	£853*	£772*

Budget Range - £100m - £250m
**includes for 7:1 ratio for ancient woodland compensation
*Maximum includes for viaduct

Yellow indicates a cost that is over budget.

This table appears to indicate that mitigation costs for Ancient Woodland have been included for Option 5A. However, the ABNC Evidence C1 report suggests that the loss of biodiversity from Option 5A would be even greater than the loss of biodiversity to Option 3, and would include other irreplaceable habitats lost in addition to Ancient Woodland.

ABNC Evidence C2, 'Potential mitigation requirements for Option 5A', points out that irreplaceable habitats impacted by Option 5A include not only Ancient Woodland but also lowland fen mosaic, chalk stream, wet woodland, and veteran trees. The need for mitigation for Option 5A is therefore of broader scope than for Option 3. It should be noted that Highways England's Environmental Study Report Para 8.6.6, summarising 'Protected and Notable Species and Habitat Mitigation and Compensation Measures', does not mention Option 5A at all. We take this to mean that

appropriate habitat mitigation costs – and compensation for irreplaceable habitats - for 5A have not been included in the calculated costs, apart from Ancient Woodland.

If the potential cost of the Ancient Woodland compensation has been factored into the quoted costs for both options, but the potential cost of appropriate other mitigation, compensation and biodiversity offsetting have not been factored into the quoted costs of Option 5A, this means the comparative Cost Benefit Ratios given in the 2017 consultation for Options 5A and 3, giving 5A a much better CBR than 3, are incorrect and need to be re-calculated.

2. Planning policy and 'moderation' of detrimental effects

The key planning policy in relation to the Arundel bypass is NPPF chapter 11, para 116:

'Planning permission should be refused for major developments in these designated areas [i.e. National Parks] except in exceptional circumstances and where it can be demonstrated they are in the public interest. Consideration of such applications should include an assessment of:

- the need for the development, including in terms of any national considerations, and the impact of permitting it, or refusing it, upon the local economy;
- the cost of, and scope for, developing elsewhere outside the designated area, or meeting the need for it in some other way; and
- any detrimental effect on the environment, the landscape and recreational opportunities, and the extent to which that could be moderated.

The SDNP have argued that HE have not shown convincingly that there is no scope for 'developing elsewhere outside the designated area' or 'meeting the need for it in some other way'. The National Policy Statement for National Networks (NPSNN) 5.152 states that there is a strong presumption against…new roads in a National Park…unless it can be shown that there are compelling reasons…with any benefits outweighing the costs very significantly.' Many of those objecting to Options 3 and 5A think that this has not been demonstrated, and that the supposed benefits do not outweigh the associated environmental, landscape and community impacts.

It is also possible that Option 5A would fail the test in the third paragraph above, since there is no effective 'moderation' for the effect on the South Downs National Park landscape of a new dual carriageway partially on a 7 to 9 metre high embankment.

If however these arguments are not accepted, and planning permission is given for either Option 3 or Option 5A, then every possible moderation, mitigation and compensation would have to be included in the plan. These would need to include effects on the environment, the landscape and recreational opportunities.

3. Biodiversity offsetting

Section 40 of the NERC Act states that all planning authorities have the duty to conserve biodiversity. The Government's 'Biodiversity 2020 Strategy' (DEFRA, 2011) states in its Executive Summary (para 20): 'We will pilot biodiversity offsetting, to assess its potential to deliver planning policy more effectively.' In para 18 it states 'This strategy …aims to ensure that the value of biodiversity is reflected in decision-making in the public and private sector. Developing new and innovative funding mechanisms to direct more funding towards achievement of biodiversity outcomes will be a key part of this.'

The 'biodiversity duty' is not optional or discretionary. P. 6 of the 'England's Statutory Landscape Designations: A practical guide to your duty of regard', NE 243, 2007, states that 'the duty requires

that this process [i.e. having regard'] should include consideration of potential impacts on AONB/National Park purposes – with the expectation that adverse impacts will be avoided or mitigated where possible.' This applies to any Minister of the Crown, any public body or any 'statutory undertaker'.

NPSNN also states at 5.25 that 'Development should avoid significant harm to biodiversity…Where significant harm cannot be avoided or mitigated, as a last resort, appropriate compensation measures should be sought.'

If the Arundel Bypass is given planning permission on route 3 or 5A, which would do irrevocable harm to biodiversity in the South Downs National Park, this will become a test case for achieving a genuinely sufficient amount of biodiversity offsetting, in the expectation that the 'adverse impacts' would be 'avoided or mitigated where possible', or, in the last resort, properly compensated for.

According to Highways England's own Biodiversity Plan of 2015, 'Our plan to protect and increase biodiversity', the Road Investment Strategy states that by 2020, the company must deliver no net loss of biodiversity, and that by 2040 it must deliver a net gain in biodiversity. This commitment requires the best possible mitigation and/or compensation for loss of biodiversity from the Arundel bypass plan.

4. Loss of irreplaceable habitats from the Option 5A scheme

No compensation / mitigation has been proposed for the loss of irreplaceable habitats such as the geological situation in Hundred House Copse / Little Danes Wood whereby unconsolidated gravels give way to seepages and springs with calcareous water originating from the South Downs. This gives rise to the chalk stream of the Binsted Rife Valley and the associated swamp and fen habitat. This would be likely to destroy the following habitats:

- Wet woodland mosaic – in Little Danes Wood / Hundred House Copse – supporting nationally notable invertebrates.
- A chalk stream – Binsted Rife with its associated aquatic vegetation (including Red Data Book species) and protected species.
- Lowland fen communities – with associated rare plants, protected species and nationally notable invertebrates.

Option 5A traverses a second chalk stream originating in Sandy Hole Pond. It flows through Lake Copse, maintaining a large pond and keeping the woodland humid. These wetter areas support a high number of invertebrates – some of which are nationally notable.

The Lag is another area of wet woodland with a braided stream, pools and flushes. This would be destroyed by Option 5A traversing through the middle, and is irreplaceable with woodland planting.

There are a high number of veteran trees which appear to be in the pathway of Option 5A in the Shaw, the Lag, a wooded shaw, Little Danes Wood and Hundred House Copse. These trees are responsible, in part, for the high diversity of bats in the area and the nationally notable beetles associated with the dead wood habitat.

There are a number of ponds and streams, some of which arise from springs and seepages, and are therefore irreplaceable. In the absence of efficient culverts, these irreplaceable habitats would disappear.

All of the above are Habitats of Principal Importance for the conservation of biodiversity in England, in Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006

5. The need for mitigation and/or compensation for loss of biodiversity for the Option 5A scheme

Judging by the planning policy documents quoted below, we suggest that at least the following mitigation and/or compensation measures would be needed for Option 5A:

1. Screening barriers for woodland to prevent damage from dust, pollution and noise.
2. Barriers to stop high numbers of animal deaths on the road, since there are so many legally protected and S41 species in the area. These include common toad, badger, hare, hedgehogs, grass snakes, adders, harvest mice and dormice.
3. Mitigation for the direct destruction of habitat for protected species such as the Badger sett in The Shaw, and breeding Dormice in The Shaw and Hundred House Copse.
4. A green bridge connecting Hundred House Copse and the main block of woodland, and a green tunnel or bridge near Binsted Park, connecting habitats south and north of Option 5A.
5. Another green bridge over the old A27 to re-connect the woodland south of the old A27 with that to the north.
6. All watercourses to remain viable for eels and water voles.
7. Converting all the necessary culverts under the new road into enlarged culverts for wildlife. NB Culverts would have to be so long that they would be very cold and have a distinctive microclimate – so it is debatable whether they would actually be of any use to some species – particularly reptiles.
8. Replacing the proposed embankments over the valleys at The Shaw and The Lag, either side of Binsted Park, with bridges, as both are stream valleys forming essential connecting corridors for wildlife and linking Ancient Woodland blocks. These areas of woodland need to be connected for bat foraging.
9. Planting up to 180 hectares of new native woodland – possibly partly on the fields in Binsted that would be severed by Option 5A and made unusable for farming
10. The continuing restoration of nearby PAWS (plantation on an Ancient Woodland site) at Tortington Common
11. A programme of removal of invasive species such as Rhododendron in Tortington Common and Binsted Woods
12. Soil translocation from the areas of destroyed woodland, possibly into the areas for new native woodland planting

The purpose here is to catalogue items requiring mitigation that must be included in a fully allocated and transparent BCR, rather than to describe a package that would turn opponents of 5A into supporters. Even if all the measures suggested above were put into effect, there would still be an enormous net loss for biodiversity, landscape, communities, and the Special Qualities of the National Park from Option 5A. NPSNN states at 4.10 'Planning obligations should only be sought where they are necessary to make the development acceptable in planning terms, directly related to the proposed development, and fairly and reasonably related in scale and kind to the development'. The above suggestions would contribute to fulfilling these conditions. They are explained further below.

6. Mitigation measures

Mitigation measures suggested by Natural England[1] include:

[1] www.gov.uk/guidance/protected-species-how-to-review-planning-applications.

- 'Putting up screening barriers to protect the woodland or veteran trees from dust and pollution'.

This would be necessary where Option 5A cuts through woodland at The Lag, The Shaw, Hundred House Copse, Little Dane's Wood and Barn's Copse.

- 'Connecting woodland and veteran trees that would be separated by the development, e.g. with green bridges or tunnels'.

The NPSNN at 5.36 states: 'Applicants [for major road schemes] should demonstrate that developments will be designed and landscaped to provide green corridors and minimise habitat fragmentation where reasonable' and 'that opportunities will be taken to enhance existing habitats, and where practical to create new habitats…for example…by the use of green bridges.'

At least one green bridge at Binsted alone would be needed to connect the habitats on the south side of Option 5A with the north side. The Highways England 'video' shows a bridge over Option 5A for Scotland Lane (though other materials show it as severed). As well as the lane itself, a separate green bridge for wildlife would be needed in the same area.

For the purposes of wildlife, another green bridge over the old A27 would be desirable, to connect the remaining woodland between the old and new A27s to the woodland north of the old A27. This connection is also sorely needed for NMUs. NPSNN states at 3.17 that the Government 'expects applicants [for major road schemes] to identify opportunities to invest in infrastructure in locations where the national road network…acts as a barrier to cycling and walking, by correcting historic problems.' The old A27 is such a barrier. The suggested NMU provision is mainly east-west.

For the many forms of wildlife that move about by means of wet areas such as ponds, ditches, streams, swamps and fens, not only green bridges but 'green tunnels' would be needed. All the culverts for Option 5A should be converted into wildlife accessible tunnels to keep connectivity as far as possible. A separate and larger 'green tunnel' should be provided where Option 5A is on a high embankment, e.g. at Binsted Park, but it would be better if the embankment was replaced by road bridges over The Lag and The Shaw, which are stream valley corridors linking Ancient Woodland blocks.

7. Compensation measures

Compensation measures are 'always a last resort' (Natural England, www.gov.uk.guidance/protected-species-how-to-review-planning-applications). If resorted to, as they should be in the case of Option 5A because of the damage to the National Park, they could include:

- **Planting new native woodland.** Planning authorities can accept large-scale woodland planting as a compensation measure.
- **Restoring or managing other Ancient Woodland.** 'Restoring PAWS, and improving the way nearby Ancient Woodland sites are managed, are acceptable ways to compensate for loss or damage to Ancient Woodland alongside other measures'.

If Option 5A was built, large areas of new native woodland would need to be planted as a compensation measure for Ancient Woodland. If a multiple of 7 was accepted, as appears from the new Highways England table, the needed new planting would be 42 hectares. Part of this planting could be in the five fields made unworkable for farming by severance caused by Option 5A. The planting should not just be seen as compensation per hectare for lost Ancient Woodland, but as

partial mitigation of the immense landscape loss caused by Option 5A to the National Park and local communities.

The National Policy Statement for National Networks states at 5.161 that 'It may be appropriate to undertake landscaping off site' for major road schemes, 'although…it would have to be included within the order limits for that application.' They suggest filling in gaps in existing hedge and tree lines as an example. However that would not be sufficient to hide the intrusion of Option 5A on a 7 to 9 metre high embankment into the fields of Binsted. Planting new woodland on the affected fields, or allowing them to regenerate into woodland from the adjacent Ancient Woodland remnants, where sufficiently close, would be preferable, and justified in the case of such a damaging intrusion into the National Park.

The continuing restoration of nearby PAWS on Tortington Common would be an additional way to partially compensate for the loss of and damage to woodland including Ancient Woodland at Binsted Woods. Selective removal of conifers, and an intensive programme of removal of invasive species such as laurel and rhododendron, which is badly needed in some parts of the Binsted Woods Complex LWS, should be included.

8. Soil translocation

For Option 5A, soil from destroyed Ancient Woodland (and other equally ecologically valuable destroyed woodland) in Hundred House Copse, Little Dane's Wood, Barn's Copse, the Shaw, and the Lag (affected woodland parcels in Binsted Woods) should be translocated,. e.g. to the fields made unusable for farming by severance, but this should not be regarded as mitigation, only as an incomplete compensation.[2] It might be an unsuitable place to transfer the soil as the field soil will be dryer and will have been transformed by many centuries of agricultural use, and might not lead to the expected outcome – e.g. nettles may grow under the trees rather than bluebells. A programme of continuing management over decades would be needed to sustain any value from the translocated soil.

9. Impact on cultural heritage

The above suggestions relate to impacts on biodiversity, habitats and species. NPSNN 3.4 covers other impacts: 'Some developments will have adverse local impacts on noise, emissions, landscape/visual amenity, biodiversity, cultural heritage and water resources. Whilst applications should deliver developments…in an environmentally sensitive way, including considering opportunities to deliver environmental benefits, some adverse local effects of development may remain.'

One way in which Option 5A would affect cultural heritage is in destroying the double section of the Iron Age earthwork, part of the earthwork known as War Dyke, in Hundred House Copse. This is not a scheduled monument, but NPSNN states at 5.124: 'Non-designated heritage assets of archaeological interest that are demonstrably of equivalent significance to Scheduled Monuments, should be considered subject to the policies for designated heritage assets. The absence of designation for such heritage assets does not indicate lower significance.' The section of War Dyke

[2] 'Habitats Policy' of 2003 states that 'Habitats translocation…have been portrayed by some as mitigation, whereas in reality they can only partly make amends for developments (as incomplete compensation)' (www.jncc.defra.gov.uk/pdf/habitats_policy.pdf, para 5).

from the top of the Downs to the river Arun is a scheduled monument. The section in Hundred House Copse is of equal, probably regional, significance, according to the professional archaeologists who have examined it.

The NPSNN states at 5.140: 'Where the loss of the whole or part of a heritage asset's significance is justified, the Secretary of State should require the applicant to record and advance understanding of the significance of the heritage asset before it is lost (wholly or in part). The extent of the requirement should be proportionate to the importance and the impact. Applicants should be required to deposit copies of the reports with the relevant Historic Environment Record. They should also be required to deposit the archive generated in a local museum or other public depository willing to receive it.' The earthwork at Hundred House Copse should be studied as fully as possible before being destroyed by Option 5A, proportionate to the complete destruction of the 'double' section and the regional importance of the asset.

Another heritage asset which would be destroyed by Option 5A is the historic parkland at Binsted Park, associated with Binsted House (recently replaced by a new house, Binsted Manor). This destruction is obscured in the Highways England consultation materials by an extraordinary collection of errors (see ABNC Evidence B), suggesting Highways England do not know where Binsted Park is. Highways England also state erroneously that it is outside the scheme area, so compensation or mitigation for its loss cannot have been considered.

The NPSNN states at 5.128 that 'In determining applications, the Secretary of State should seek to identify and assess the particular significance of any heritage asset that may be affected by the proposed development … taking account of …the relevant Historic Environment Record(s), and similar sources of Information'. The decision should also 'take into account the particular nature of the significance of the heritage asset and the value that they hold for this and future generations.' Binsted Park is very significant for this generation of people living in Binsted. A descendant of the family (the Staker-Reads) who created Binsted Park still lives in the Park (at Manor House) and holds a large but uncatalogued archive of historic photos of Binsted dating back to at least the 1860s, possibly earlier. He is related to the family who lived at Binsted Rectory in the late Victorian era and built the Rectory and restored Binsted Church in 1868, and the family who ran the Black Horse Pub in the 1960s, so the photos cover many parts of the village and many related families. His archive is likely to be removed from Binsted if Option 5A is built as his house would be 75m from the road on a high embankment and he would have to move.

Paragraph 5.140 should apply in the case of Binsted Park. If Option 5A goes ahead, a project to record the significance of Binsted Park to the village of Binsted and to properly conserve and record the large archive of photographs should form part of the scheme.

10. Impact on the landscape

The impact on the National Park landscape at Binsted from Option 5A would be very severe and not possible to compensate.

The following mitigations should be included:

- Making Option 5A lower if possible, as the embankment 7 to 9 metres high through Binsted Park and two fields would be very intrusive.
- Adding noise barriers at the side of the road, or earth bunds, even if this made the embankments wider.
- Full sound and light screening of the elevated road through Binsted.

If planting of 42 hectares of new native woodland, or more, is included in the scheme, as suggested above, this would partially mitigate the landscape effects of the new road in the very long term. What could not be mitigated is the loss of the special Binsted landscape, with ancient cultivated fields on the lowest slopes of the Downs partially surrounded by magnificent semi-natural woodland – a scene that has existed since Anglo-Saxon times.

11. Legal costs

Legal costs for possibly redefining the boundary of the National Park should also be included in the cost of the scheme, since the area with the new dual carriageway through it would no longer meet the National Park criteria.

12. Anomaly in the technical drawings for Options 3 and 5A

One anomaly in the technical drawings for Options 3 and 5A is that in Technical Appendix DE, p. 31, for Option 3, slip roads are shown at Ford Road. In Technical Appendix FG, p. 8, for Option 5A, no Ford Road slip roads are shown. This may just be a mistake, but if it has affected the Cost Benefit calculations, by making Option 5A look more cost effective, they should be adjusted so as to compare like with like.

13. Conclusion

Option 5A, estimated to cost £250m, is already at the upper limit of the available finance. None of the above costs have so far been included, as far as we know, apart from the mitigation costs for 6 hectares of Ancient Woodland.

If none of the above costs have been included in the figures given for 5A, but mitigation costs have been included for Option 3, the comparative Cost Benefit Ratios are incorrect and should be recalculated. This recalculation should make the CBR much less good for 5A.

The miscalculation has misled the whole public consultation. Decisions such as that by West Sussex County Council to support Option 5A were taken partly on the basis that it had the best Cost Benefit figures. The whole consultation is therefore null and void.

Since it is unlikely the whole consultation will be cancelled or re-run, the situation should lead to the rejection of Option 5A, whatever the responses to the consultation, since the CBRs presented at the consultation were misleading.

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[redacted]

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Our ref: AMC/CSL/G6860

[redacted]

A27 Arundel Bypass – Properties in Binsted
Preliminary assessment of compensation liability

We have been instructed by Arundel Bypass Neighbourhood Committee to provide advice on the basis upon which Highways England may be required to pay compensation to owner-occupiers of properties in Binsted, and the potential total quantum of such compensation, in the event that Option 5a of the proposed A27 Arundel Bypass were to be constructed.

The Section of Option 5a subject to this assessment is the section between its new junction with the existing A27 (Yapton Lane) to the west and the point at which it diverges from Option 3 (Tortington Lane) to the east.

We have been provided with a schedule, and plans showing the approximate location, of the properties which will be likely to be affected directly or indirectly.

We attach three maps for reference purposes as follows:-

- the proposed Option 5a route with a 50m construction zone and 300m corridor
- the location of dwellings relative to the route and a 300m corridor
- agricultural land severance resulting from Option 5a route

In brief summary our understanding of the principal features of the proposed Option 5a Road is that:

(i) it will be a dual carriageway road with a 70mph speed limit;

(ii) for most of its length it will be constructed on an embankment of up to 7 metres in height above the existing level of the land although the most northern part adjoining the proposed new junction with the existing A27 will be in a cutting;

(iii) the route will come through a rural area comprising primarily fields and trees, the quiet rural nature of the location being a key factor which attracts those living in the area to buy houses and live there.

Option 5a will have a significant adverse effect on the values of some 41 mainly owner-occupied houses and also on an agricultural holding, a public house and Binsted Nursery. The impact will be particularly severe having regard to the factors which we outline in point (iii) above.

We have assessed the compensation potentially payable under the following heads:

(i) the value of land potentially to be compulsorily acquired;

(ii) compensation for diminution in the value of retained land where part of a house or agricultural holding is acquired (split between severance and injurious affection);

(iii) the value of entire residential properties where we consider that there may be grounds (under the provisions of Section 8, Compulsory Purchase Act 1965) to require Highways England to purchase the whole property;

(iv) compensation for the physical effects of the use of the new road in accordance with Part I, Land Compensation Act 1973; and

(v) professional fees for preparing, submitting and negotiating the claims.

In arriving at our assessment of potential compensation we have been assisted by specialist residential and agricultural valuers in a local firm with knowledge and experience of property values in this locality. We have combined their opinions with our own judgement and experience as specialists in the field of compulsory purchase and compensation.

On the basis summarised above we have arrived at a total compensation estimate of **£11,522,500**.

Our clients have also asked us to point out their very considerable concern at the potential impact, on both this community as a whole and on individual property owner/occupiers, arising from the likelihood that, as the law currently stands, there are unlikely to be any compensation or other remedies for most of the owners in respect of:

(i) difficulties in selling, or indeed an absolute inability to sell, properties due to the prospect (or likelihood/certainty in the event that Option 5a were to become the selected route) of the bypass being constructed through the village; and

(ii) the very considerable disruption and difficulties likely to be caused during the construction period in the event that the scheme were to proceed.

In addition there is concern on the part of Binsted Nursery that its ability to continue to operate may be severely affected – to the extent that it may no longer be viable to continue to operate – in the event that construction of the road on the Option 5a route were to go ahead. Whilst statutory compensation remedies are available these may well be inadequate to compensate for the full extent of the difficulties and losses that may be suffered.

Whilst it is appreciated that the statutory ability to serve 'blight notices' applies in certain specific circumstances and that Highways England operates a discretionary purchase scheme, it is unlikely that most of those whose properties will be directly affected will qualify under either of these provisions for requiring their property to be purchased in advance of the scheme taking place.

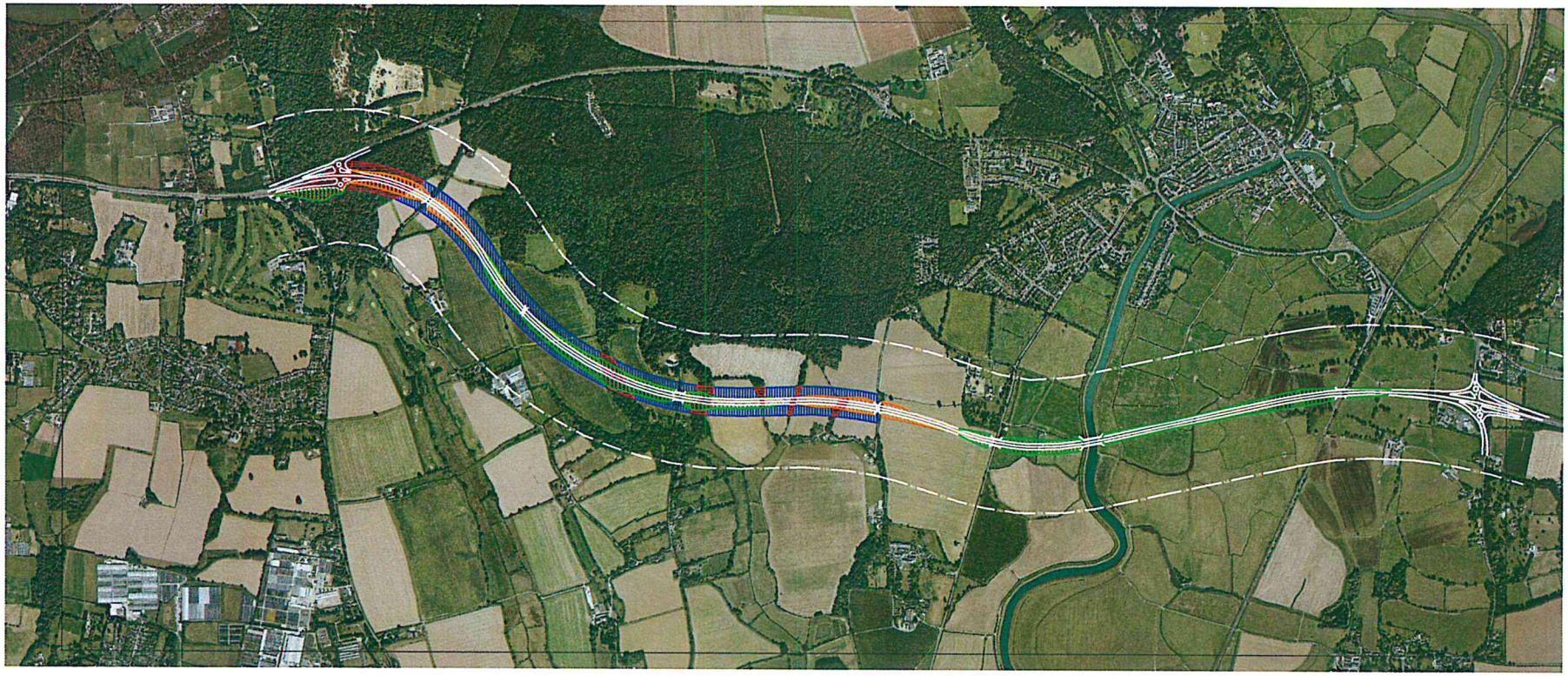
GERALDEVE

We request that, in assessing the route options for the proposed A27 Arundel Bypass, Highways England take into consideration this preliminary assessment of compensation and the detrimental effects of Option 5a on the residents and businesses of Binsted.

Yours sincerely

Partner
Head of Compensation

Encl.



LEGEND

OPTION 1
OPTION 3 ROUTES
OPTION 5A

- 300M LINE
- NATIONAL PARK
- WOODLAND
- FIELD
- EMBANKMENT
- CUTTING

CARRIAGEWAY WIDTH APPROX. 26m

LAND TAKE FIGURES

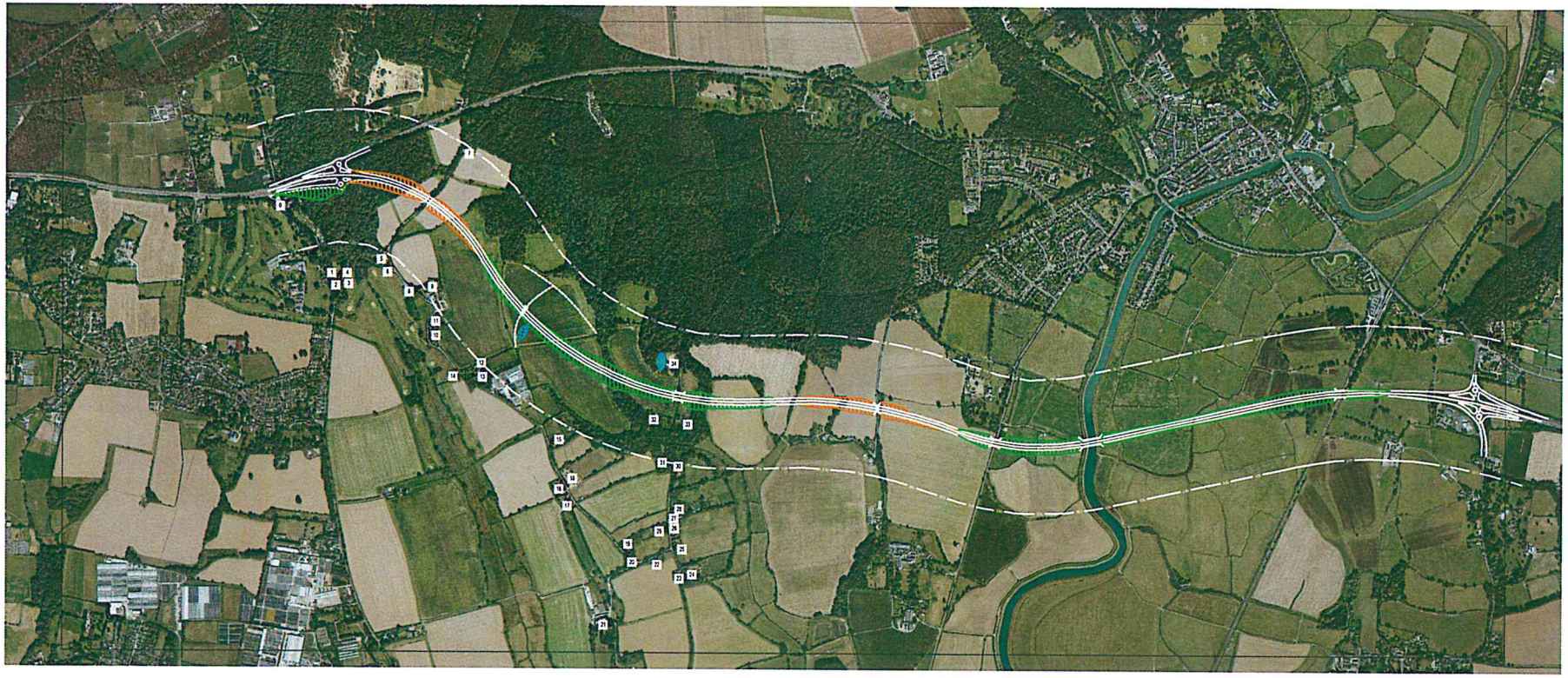
PERMANENT LOSS:
ROAD + EMBANKMENT = 14.9 Hectares
(WOODLAND = 3.5 HECTARES)
(FIELD = 11.4 HECTARES)

TEMPORARY LOSS:
ROAD + EMBANKMENT = 19.8 HECTARES
(WOODLAND = 2.9 HECTARES)
(FIELD = 16.7 HECTARES)

2017 HIGHWAYS ENGLAND ARUNDEL A27 BYPASS ROUTES - OPTION 5a

Land Take with 50m Construction Zone

SCALE
1:2000 @ A3



LEGEND

OPTION 1
OPTION 3 ROUTES
OPTION 5A

- 300M LINE
- NATIONAL PARK
- ATTENUATION BASIN
- NEW FOOTPATH
- EMBANKMENT
- CUTTING

CARRIAGEWAY WIDTH APPROX. 26m

2017 HIGHWAYS ENGLAND ARUNDEL A27 BYPASS ROUTES - OPTION 5a

Dwellings Without SDNP Boundary

SCALE
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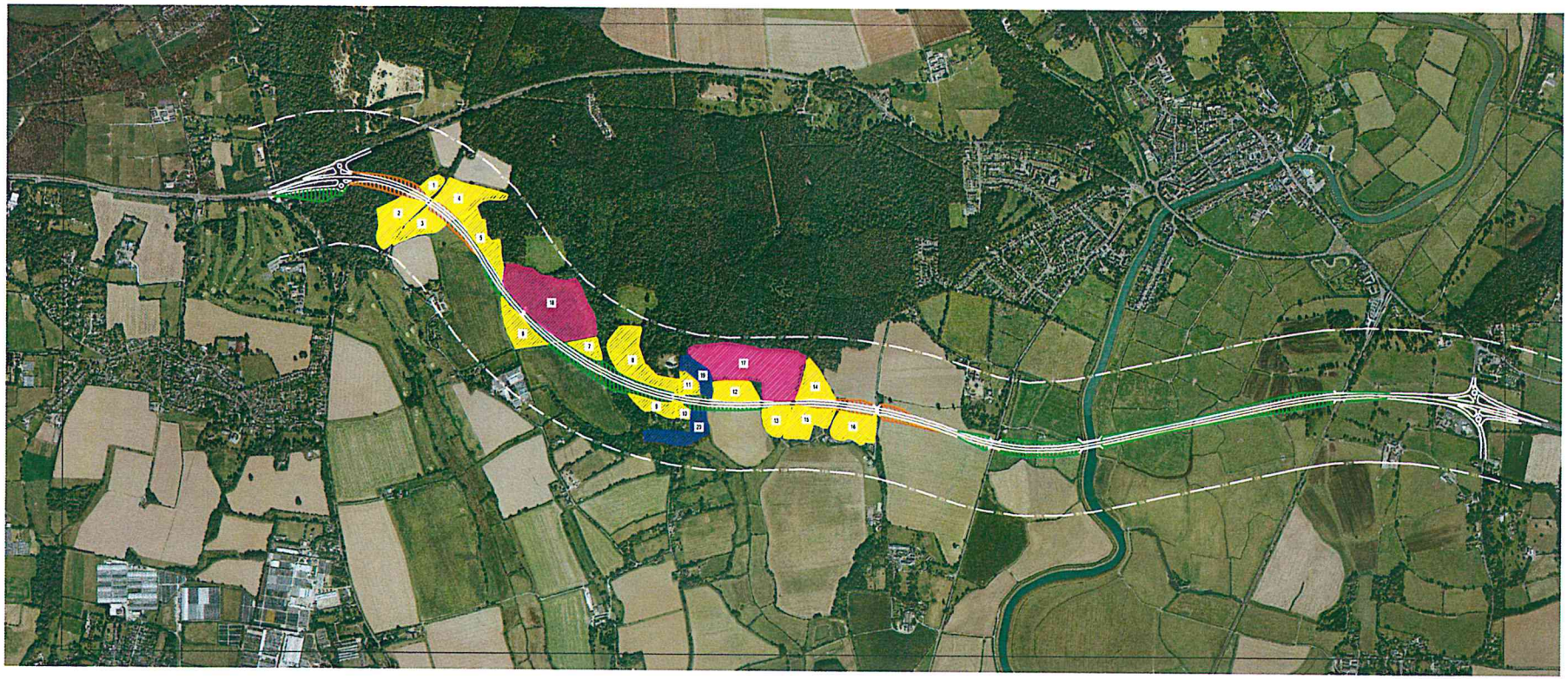

LEGEND

OPTION 1
OPTION 3 ROUTES
OPTION 5A

300M LINE

NATIONAL PARK

EMBANKMENT

CUTTING

CARRIAGEWAY WIDTH APPROX. 26m

SEVERED LAND FIGURES

RESIDUAL FIELDS UNECONOMIC TO FARM

25.72 HECTARES

FIELD REQUIRING NEW ACCESS TRACK

16.88 HECTARES

WOODLAND

3.21 HECTARES

2017 HIGHWAYS ENGLAND ARUNDEL A27 BYPASS ROUTES - OPTION 5a

LAND SEVERANCE

SCALE
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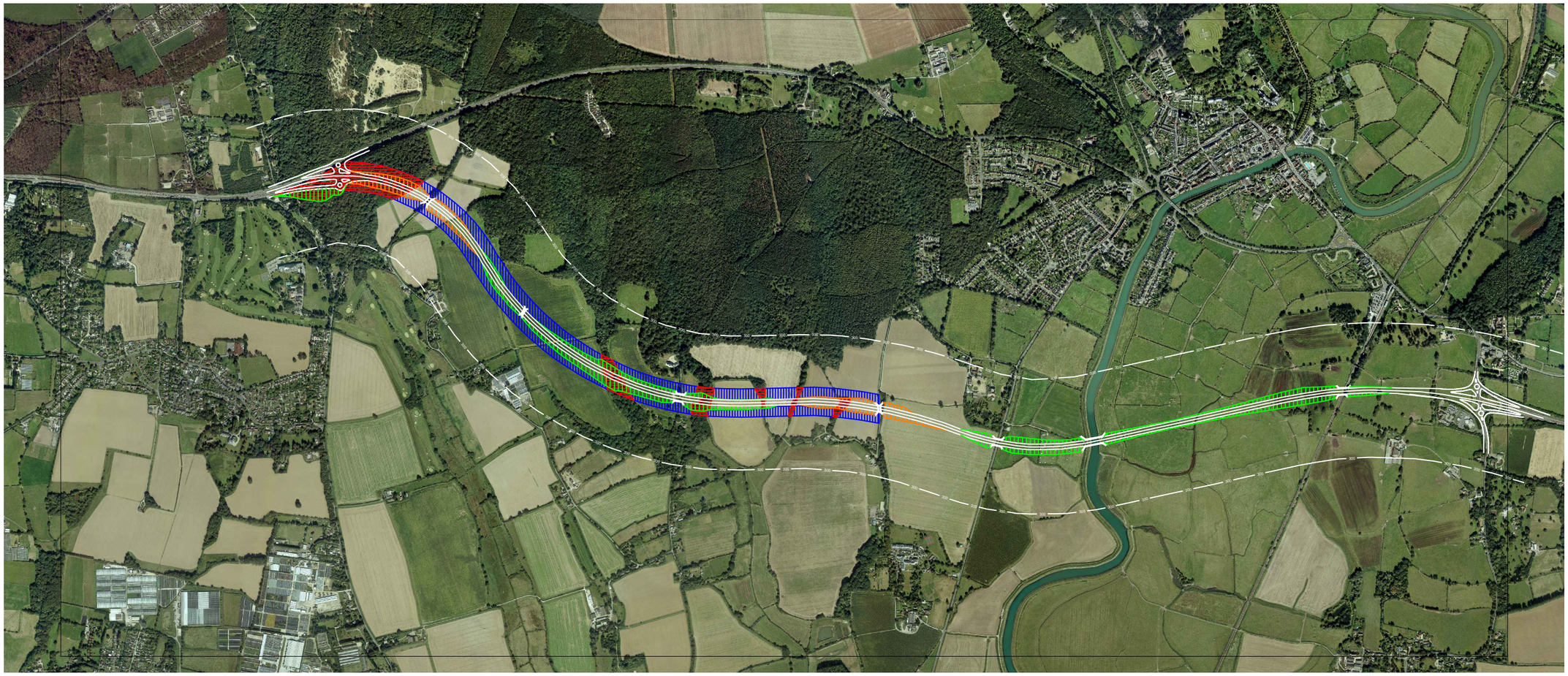

LEGEND

OPTION 1
OPTION 3 ROUTES
OPTION 5A

300M LINE

NATIONAL PARK

WOODLAND

FIELD

EMBANKMENT

CUTTING

CARRIAGEWAY WIDTH APPROX. 26m

LAND TAKE FIGURES

PERMANENT LOSS:

ROAD + EMBANKMENT = 14,9 Hectares

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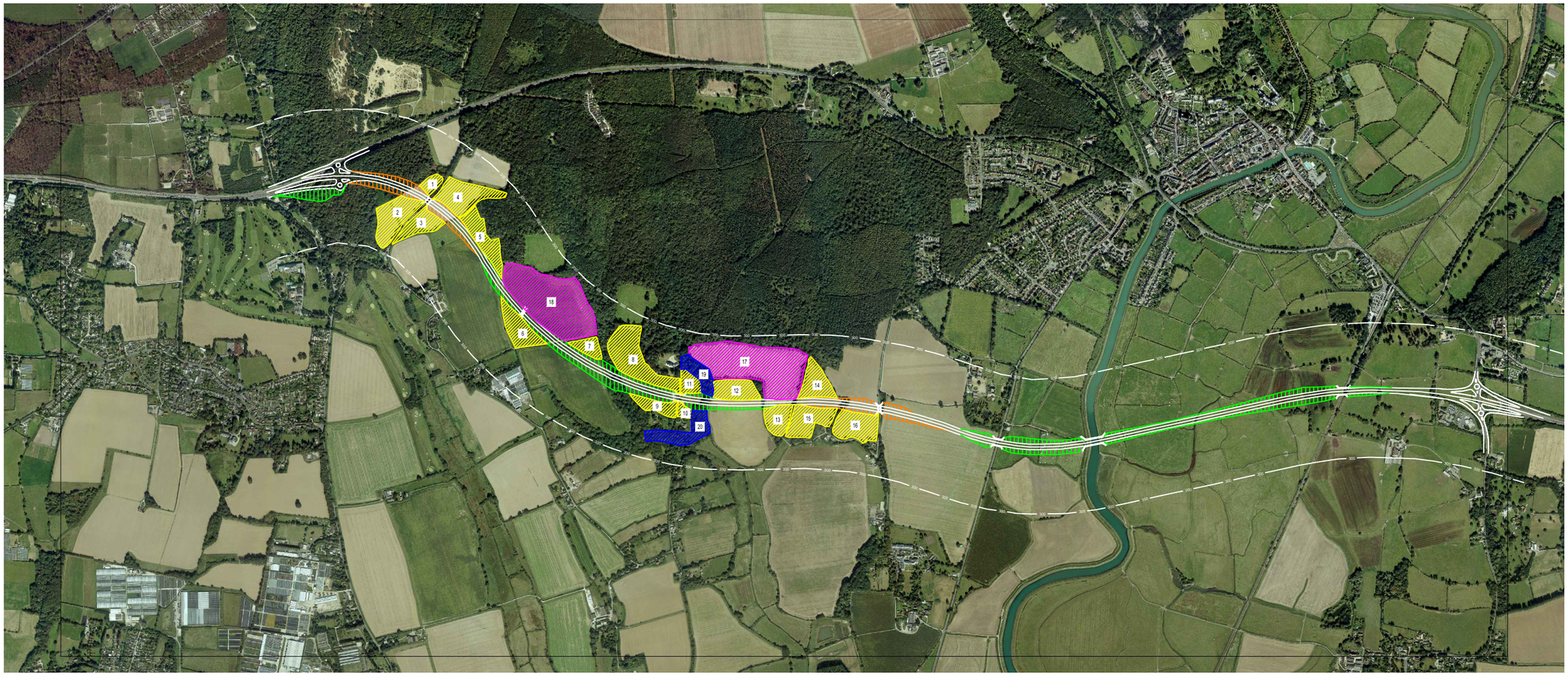
(FIELD = 16,7 HECTARES)

2017 HIGHWAYS ENGLAND ARUNDEL A27 BYPASS ROUTES - OPTION 5a

Land Take with 50m Construction Zone

SCALE
1:2000 @ A3



LEGEND

OPTION 1
OPTION 3 ROUTES
OPTION 5A

300M LINE

NATIONAL PARK

EMBANKMENT

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CARRIAGEWAY WIDTH APPROX. 26m

SEVERED LAND FIGURES

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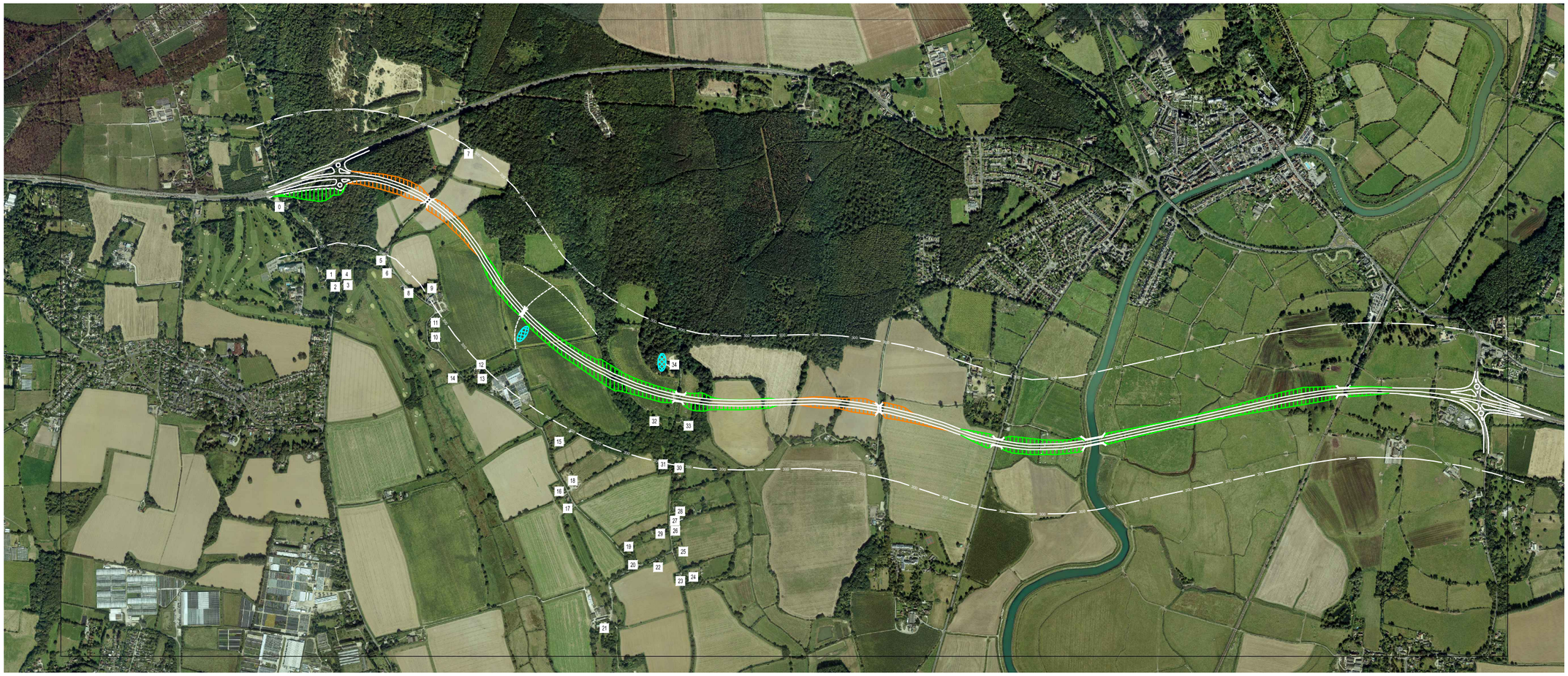

LEGEND

OPTION 1
OPTION 3 ROUTES
OPTION 5A

300M LINE

NATIONAL PARK

ATTENUATION BASIN

NEW FOOTPATH

EMBANKMENT

CUTTING

CARRIAGEWAY WIDTH APPROX. 26m

2017 HIGHWAYS ENGLAND ARUNDEL A27 BYPASS ROUTES - OPTION 5a

Dwellings Without SDNP Boundary

SCALE
1:2000 @ A3

GERALDEVE

A27 Arundel Bypass – Properties in Binsted
Preliminary assessment of potential basis and quantum of compensation

---

1. Introduction & limitations

1.1 We have been instructed by Arundel Bypass Neighbourhood Committee to provide advice on the basis upon which Highways England may be required to pay compensation to owner-occupiers of properties in Binsted, and the potential total quantum of such compensation, in the event that Option 5a of the proposed A27 Arundel Bypass were to be constructed.

1.2 The section of Option 5a subject to this assessment is the section between its new junction with the existing A27 (Yapton Lane) to the west and the point at which it diverges from Option 3 (Tortington Lane) to the east.

1.3 We have been provided with a schedule, and plans showing the approximate location, of the properties which the Committee has asked us to consider.

1.4 In brief summary our understanding of the principal features of the proposed Option 5a road is that:

(i) it will be a dual carriageway road with a 70mph speed limit;

(ii) for most of its length it will be constructed on an embankment of up to 7 metres in height above the existing level of the land although the most northern part adjoining the proposed new junction with the existing A27 will be in a cutting;

(iii) the route will come through a rural area comprising primarily fields and trees, the quiet rural nature of the location being a key factor which attracts those living in the area to buy houses and live there.

1.5 It is important that we set out at this stage the limitations to which our estimates and this report are subject. These are principally the following:

(i) We have not had the opportunity to visit most of the properties to which our assessment relates. On advice from us, however, you have obtained an initial view from an experienced local residential valuer, Roger Russ of Henry Adams, and we have adopted those values for the purpose of our compensation estimates. You have also sought advice, on which we have relied, on the value of and potential damage to the value of the directly affected agricultural land.

(ii) It is not possible to assess in advance the impact, in terms of compensatable factors, of a road which has not yet been constructed and opened for public use and the detailed design of which has not yet even been completed. We have therefore had to make very broad assumptions as to the potential impact.

1.6 We must emphasise, that, even when a new road has been opened and is in use, the impact on the value of affected properties is to a very large degree a matter of experience and opinion and that, whilst compensation claims are generally expected to be supported by clear evidence of sales of comparable properties both affected and unaffected, such evidence is in practice often difficult or indeed impossible to attain.

1.7 We must also make clear that the purpose of this report is to give an indication, subject to the limitations set out above, of the basis and total quantum of compensation which might potentially be claimed and for which Highways England might consequently be liable. This is not to be taken to constitute our advice as to the amount of compensation which any individual owner should expect to claim and/or receive in the event that Option 5a were to be constructed, nor are we able at this stage to provide such advice, and accordingly we are reporting our estimate of the total compensation sum but not the specific allowance in respect of each property.

1.8 We have advised at this stage on the relevant compensation basis and principles; it is not intended that this report should comprise comprehensive advice on all of the relevant compensation issues although we would be happy to provide such advice in due course should the need arise.

2. Statutory compensation entitlement

2.1 We summarise in this section of our report the basis upon which it might reasonably be expected that claims for compensation could be made in accordance with the relevant statutory provisions. We emphasise that this is based on statute and case law as it currently stands.

Compensation where land is acquired

2.2 Where part of a property is compulsorily acquired compensation is payable for the value of the land taken. The purchase price of any land compulsorily acquired will be its full market value at the date it is taken, disregarding any effect on value due to the prospect of the road scheme.

2.3 In addition compensation is payable for damage to the value of the owner's remaining land due to the loss of the land taken and to the impact of the scheme (generally referred to as "severance" and "injurious affection" respectively). Compensation for injurious affection can reflect the adverse impact, on the value of the remaining land, of the road scheme in its entirety – for

example general loss of amenity (which might include loss of view and privacy) in addition to factors such as noise, vibration, fumes etc. from traffic using the road.

2.4 In cases where the taking of part of the property results in the remaining part of the property becoming materially less valuable, it is open to the owner to require the relevant authority to buy the whole of the property and not just the part required for the scheme. Whether or not the damage is 'material' could however be open to dispute. We believe, from the information received from the Committee, that these circumstances might apply in relation to one of the residential properties. In such cases the whole property would be purchased (if the requirement to buy it were accepted by Highways England) at its full market value disregarding the road scheme, and additional costs such as removals and professional fees would be reimbursed in addition. We address the issue of agricultural land separately below.

Agricultural Land

2.5 It is evident from the plans with which we have been provided, and from our discussions with the owner of the directly affected agricultural land, that the proposed road would cut across a significant area of agricultural land. Compensation in these circumstances would be payable for the market value of the land compulsorily acquired and for severance and injurious affection as explained in paragraphs 2.2 and 2.3 above.

2.6 As explained in paragraph 2.2 above, the market value of the land acquired will be assessed on the basis of its open market value disregarding the road scheme.

2.7 We anticipate that in this case the compensation for severance would reflect the fact that a number of the fields would be left as small areas and/or with awkward shapes and therefore not suitable for modern farming methods. In addition, parts of the holding will be physically 'severed' from the remainder by the new road, and it appears unlikely that any form of underpass or tunnel will be provided to link the two parts of the holding together.

2.8 In assessing damage to the market value of any parts of the remaining land regard would have to be had to whether or not another purchaser may be in the market to acquire that land and who would pay the full market value. In this case however, we understand that there is no adjoining agricultural holding and that access to the severed land would be difficult if not impossible other than possibly by way of the remaining part of the holding.

2.9 In circumstances where the severed part of the holding is not reasonably capable of being farmed either by itself or in conjunction with the remainder of the holding or with other land, it may be possible to persuade Highways England to acquire the severed land as well as the land needed for the road at its full market value. However, there is no strict statutory entitlement to do so (the entitlement is to request that the entire holding be acquired); the remedy, if Highways England were to refuse, would therefore be to claim for the reduction in the market value.

Compensation where no land is taken

2.10 Where no land has been acquired from the owner of a property it should be possible in most cases for compensation to be claimed for the reduction in market value of the property due to the physical effects arising from the use of the new road. The entitlement to claim relates to owner-occupied residential properties – which we believe currently comprise the majority of the properties in Binsted likely to be affected. (For the purpose of our estimate we have assumed all to be owner-occupied as we have no information as to which are not.) It also extends to owner-occupied business premises with rateable values not exceeding £36,000.

2.11 The physical effects in respect of which compensation can be claimed are limited to noise, vibration, smell, fumes, smoke, artificial lighting and the discharge of solids or liquids. It may reasonably be anticipated that the principal physical factors arising from the proposed road will be traffic noise and, possibly to a lesser extent, smell or fumes and artificial lighting (although it is not clear to us at this stage whether or not the road would be artificially lit).

2.12 Compensation is unfortunately not payable for the impact on amenity generally – e.g. for loss of or interference with the view from a property and the 'visual intrusion' of the road.

2.13 The compensation is assessed on the basis of the reduction in the market value of the property – i.e. the price that would be paid by someone coming fresh to the property with and without the road being in use. The perception of the damage as viewed by an owner who has lived in the property both before and after the completion and opening of the road unfortunately cannot be taken into consideration.

2.14 It is important to note that the compensation relates strictly to damage to the value of the property interest. Any adverse impact on a business itself over and above the damage to the value of the interest is not compensatable.

3. Difficulties in selling properties

3.1 As we have discussed with members of the Committee, there is no compensation remedy in respect of difficulties in selling properties due to the prospect of the new road being constructed or during the period of construction, even where the property cannot be sold or can be sold only at what is clearly a price below what would otherwise have been the market value.

3.2 The statutory 'blight notice' provisions enable residential owner-occupiers in certain circumstances to serve notice on the relevant authority requiring that their property be purchased. These only relate however to properties which are on or adjacent to the line of a highway which is proposed to be constructed. We would be happy to advise further on these provisions in due course if required.

3.3 Highways England does operate a discretionary purchase scheme under which, in certain circumstances, it will purchase a property which will be on the line of, or close to the line of, a

proposed new road. We can advise on these provisions in due course if required but at this stage we would point out that the scheme is generally applied only in cases where the owner has demonstrated "*pressing reasons for selling*" and that "*severe hardship*" would result if the owner were unable to sell. For the purposes of this report, with the exception of the properties referred to below, we have assumed that discretionary purchase would not be exercised generally in respect of properties in Binsted although it is recognised that there may be individual cases where the required qualifications for discretionary purchase might in due course be met.

3.4 We have been advised that three houses have been offered discretionary purchase by Highways England, one of which may have material detriment. We have, therefore, assumed that these properties meet the criteria and would be purchased by Highways England under the discretionary purchase scheme.

4. Compensation estimate

4.1 We have based our estimates for properties which might be acquired in their entirety on the market value as suggested by Roger Russ of Henry Adams.

4.2 For the agricultural land we have adopted the figures provided by Henry Adams.

4.3 In order to arrive at estimates for those properties which would be affected but from which no land would be taken we have allowed for impact on market value ranging from 50% for the very worst-affected property, 30% for others likely to be substantially affected, and 25% down to 0.5% for the remainder depending on proximity to the new road and other relevant factors.

4.4 On the basis set out in this report our estimate of the total compensation sum is **£10,475,000**.

4.5 In addition professional fees incurred in making and pursuing the claims would be recoverable. We suggest allowing an additional 10% on the total compensation for these – i.e. **£1,047,500**.

4.6 Thus our estimate of the total compensation liability to Highways England amounts to **£11,522,500**.

Gerald Eve LLP

27 October 2017

BINSTED RESIDENTIAL PROPERTY SCHEDULE

MAP 003

Map Number	Listing	House Name	House Type	Gross Internal Square Footage	Distance to Edge Of Existing A27	Distance to Edge Of New Road	Distance Closer to Edge of New Road
0a	Listed Building	Royal Oak Inn	Vertical conversion into 2 houses	2,000	35m	30m	5m
0b	Listed Building	Royal Oak Inn	Vertical conversion into 2 houses	2,000	35m	30m	5m
1	n/a	Old School House	Detached house	2,040	370m	330m	40m
2a	Listed Building	Swiss Cottages	Terrace of 3 cottages	900	450m	400m	50m
2b	Listed Building	Swiss Cottages	Terrace of 3 cottages	900	450m	400m	50m
2c	Listed Building	Swiss Cottages	Terrace of 3 cottages	900	450m	400m	50m
3	Listed Building	Quince Cottage	Detached house	3,760	465m	410m	55m
4	n/a	Ryders	Detached house	2,200	430m	350m	80m
5	n/a	Ashurst	Detached house	5,200	470m	255m	215m
6	n/a	Hill View	Detached house	1,200	500m	320m	180m
7a	n/a	Fox Cottages	Terrace of 3 cottages	965	130m	250m	0m
7b	n/a	Fox Cottages	Terrace of 3 cottages	965	130m	250m	0m
7c	n/a	Fox Cottages	Terrace of 3 cottages	965	130m	250m	0m
8	n/a	Black Horse	Public house with rooms above	4,300	650m	345m	235m
9	Listed Building	Church Farm House	Detached house	2,900	650m	210m	440m
10	Listed Building	Glebe House	Detached house	2,400	830m	325m	505m
11a	n/a	Mount Pleasant	Semi-detached	1,055	780m	300m	480m
11b	n/a	Mount Pleasant	Semi-detached	1,055	780m	300m	480m
12	n/a	Stable Cottage	Detached house	2,360	1050m	300m	750m
13	n/a	Rectory	Detached house	6,000	1100m	315m	785m
14	Listed Building	St Mary's Church	Church	2,200	1050m	400m	650m
15	n/a	Mill Ball	Detached house	2,150	1400m	280m	1120m
16	n/a	Oakleys Barn	Detached house	1,500	1670m	510m	1160m
17a	n/a	Oakleys Cottages	Semi-detached cottages	2,088	1780m	570m	1210m
17b	n/a	Oakleys Cottages	Semi-detached cottages	2,088	1780m	570m	1210m
18	n/a	Lake Copse	Detached house	4,100	1640m	450m	1190m
19	n/a	Goose Wing	Detached house	1,360	2050m	660m	1390m
20	n/a	Grove Lodge	Detached house	1,400	2150m	750m	1400m
21	Listed Building	Marsh Farmhouse	Detached house	3,625	2350m	1030m	1320m
22a	n/a	Grove Cottages	Semi-detached cottages	1,200	2150m	700m	1450m
22b	n/a	Grove Cottages	Semi-detached cottages	1,200	2150m	700m	1450m
23	Listed Building	Thatched Cottage	Detached house	2,200	2250m	750m	1500m
24	n/a	Goose Green	Detached house	3,000	2200m	720m	1480m
25	n/a	Slate Farm	Detached house	2,100	2100m	620m	1480m
26	n/a	Bramble Barn	Detached house	5,800	2050m	560m	1490m
27	n/a	BB Kennels	Detached house	1,800	1980m	505m	1475m
28	n/a	Dawnwood	Detached house	1,500	1930m	460m	1470m
29	n/a	Copperfield Cottage	Detached house	2,100	2020m	570m	1450m
30	Listed Building	Meadow Lodge	Detached house	3,200	1750m	290m	1460m
31	Listed Building	Morleys Croft	Detached house	1,400	1700m	240m	1460m
32	n/a	Kent Cottage	Detached house	1,850	1520m	70m	1450m
33	n/a	Manor House	Detached house	2,600	1550m	70m	1480m
34	n/a	Binsted Manor	Detached house	10,250	1250m	65m	1480m

HIGHWAYS ENGLAND'S TAR - COMMENT ON OPTION 5A

Traffic Impact on Yapton Lane and South Downs National Park

Technical Note

Prepared on behalf of Arundel Bypass Neighbourhood Committee

STRS/17/3898s

November 2017

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Appendix A	Possible Routes
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Appendix D	2017 ATC Data Output
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Appendix F	Location of Work Data
Appendix G	Washington Roundabout Survey Results
Appendix H	ANPR Survey

1 INTRODUCTION

1.1.1 This Technical Note (TN) represents findings of RGP's study of Yapton Lane and impact on the South Downs National Park due to Highways England's (HE) preferred Option 5A for an A27 Arundel By-pass. In so doing it considers traffic data, historical and present in the context of the intended line and form of the Option 5A design.

1.1.2 Walberton Parish Council (WPC) has worked with Arundel Bypass Neighbourhood Committee (ABNC) on this matter and in its consultation response to Highways England on the Arundel By-pass options, WPC notes the inter-relationship of driver choices of routes, including Yapton Lane, when gaining access to the A27 from the south, or returning southward from the A27. **Appendix A** illustrates those driver options.

1.1.3 Yapton Lane has a level crossing at its southern end and at Ford, as shown at **Appendix A**. In the context of WPC's comment to Highways England, the relationship of the two crossings to the local roads that link with the A27 can be readily seen at **Appendix A**, including the options to use the B2233 passing beneath the railway continuing on to the A29 and A27 at Fontwell, or use Lake Lane and Yapton Lane. **Appendix A** shows the routes drivers may take to avoid closed barriers at the level crossings.

1.1.4 If Option 5A were to be permitted, divers that currently travel from Barnham and its environs to the east and return and that currently use the routes shown on the **Appendix A** plan, would likely predominately use Yapton Lane to gain access to or leave the A27. This is because the Option 5A bypass would allow all movements, including right-turns out to the east. Currently, right turns out of Yapton Lane are not permitted, nor straight over movements from and to Shellbridge Road.

1.1.5 Only by undertaking a comprehensive and complex survey of the area at **Appendix A** could the driver inter-relationship of these routes linking the A27 from and to Barnham and environs be properly understood. This is a fundamental building-block to modelling the effects of Option 5A on the area, including the SDNP. In the absence of this element within Highways England's assessment of By-pass options, RGP commissioned Modal Data Ltd to undertake an Automatic Traffic Count (ATC) on Yapton Lane. Furthermore, data obtained from WSCC's traffic data -portal has also been reviewed. Modal Data also recorded traffic at the Washington Roundabout providing RGP with turning volumes.

1.1.6 RGP made repeated attempts since early October to obtain the Traffic Data Collection Report (TDCR) (September 2016) from Highways England. No acknowledgement was received prior to the preparation of this report and so RGP commissioned surveys at the two aforementioned sites as background to this report. The points at which the data for Highways England's studies would be contained in the Traffic Data Collection Report. The Traffic Modelling Summary for the A27 Arundel Bypass states that data was collected at points in Steyning and Storrington amongst other areas.

1.1.7 Following the preparation of this report, RGP received the TDCR on 25th October 2017. Given the delay in receipt of the TDCR, this report was largely finalised before this date. However, an initial appraisal of the TDCR found that the concerns raised by RGP below remain apparent.

1.1.8 The traffic data input into the traffic model that under-pins Highways England's conclusions was collected in 2015 prior to the air crash at Shoreham which occurred on the 22 August 2015. That incident caused a complete and then partial closure of the A27 for many weeks and the diversion of traffic through the SDNP. Furthermore, in the two years since the data collection, the Felpham Bypasses has been completed, which in combination with the Bognor Regis Relief Road has drawn substantial traffic from the A27 onto the A259.

1.1.9 The Traffic Modelling Summary states, "…the A27 Chichester Improvements scheme, which has been cancelled by the Government and the planned A27 Worthing and Lancing improvements scheme are not included in the traffic model because each scheme has to show that it has benefits on its own." Due to incomplete material provided in the consultation process it is not clear whether the model takes account of WSCC's series of on-line improvements for the A27 section of interest to this report. If the model does not reflect the improvements then the Option 5A bypass for Arundel has been demonstrated on the assumption that in the period to 2041, the congestion on the A27 between the river Adur and just west of the Chichester Bypass would worsen to 2041. On this basis, the attractiveness of finding routes around the worsening congestion would increase.

1.1.10 Highways England's preferred Option 5A as a major by-pass around Arundel is based on 2015 traffic data. The model was validated against the 2015 data as the basis for the future traffic forecasts. Whilst a high degree of accuracy in the validation process is reported, the following questions tend to undermine the appropriateness of the 2015 data and so the conclusions drawn by Highways England:

(i) Has the 2015 data been adjusted to reflect long term changes in traffic characteristics following the air-show crash at Shoreham?

(ii) Has the 2015 data been adjusted to take account of the effects of the A27 on-line improvements proposed in WSCC's report dated 17th July 2015;

(iii) Has the 2015 data been adjusted to take account of the effects of the Felpham Bypass and Bognor Regis Relief Road?

1.1.11 On the basis of the information provided the findings on the benefits A27 Arundel Bypass should not be relied upon. Any suggested benefits would need to be accurately validated using a model incorporating the factors stated above.

1.1.12 Against this background, this report is confined to studying two aspects of the conclusions drawn by Highways England – the impact of Option 5A on Yapton Lane and the A283, particularly through Storrington and the SDNP generally.

1.1.13 The purpose of the data collected by Modal Data Ltd at Yapton Lane is to understand:

(i) The level of traffic today in terms of Annual Average Daily Traffic (AADT);

(ii) How traffic has changed over the years;

(iii) The likely growth to 2041 based on no Option 3 or 5A;

(iv) Speculate a best and worst-case change in traffic under item 3 with Option 5A in place;

(v) The likely extent of southbound queuing at the level crossing based on current demand (item 1), item 3 and item 4;

(vi) The level of HGV traffic on Yapton Lane.

1.1.14 The Highways England' Transport Assessment Report identifies at page 24 that the "*…peak hour traffic volumes are approaching or at the capacity of the single carriageway road.*" This statement refers to the existing section of A27 skirting Arundel and is one reason for Highways England's conclusion that the road should be bypassed. It is essential to the very basis of a bypass being justified and the form of an improvement being set, that the issues associated with the signalised junction between the A27 and A284 at Crossbush be discounted from a design option assessment. This junction and the issues of congestion it causes east and west is included in the TAR assessment. This is a fundamental flaw in Highways England's justification because the traffic signals at Crossbush would not be there but for the curtailment of the Arundel Bypass plans decades ago. But for that history, there would likely have been a Crossbush By-pass and a large roundabout linking the A284 and the A27. On that basis, the performance of traffic flow along the Arundel section of the A27 would be very different to what the TAR has considered as its base conditions. The base conditions would be much better than those used in Highways England's work.

1.1.15 Given the TAR's consideration of design capacity of roads, RGP has applied the same methodology to the design capacity of Yapton Lane, which has not been considered in the TAR.

1.1.16 Modal Data Ltd was also commissioned to carry out a survey of the Washington Roundabout in order to estimate the traffic using alternative routes to avoid the congestion on the A27.

2 YAPTON LANE

2.1 Description

2.1.1 The B2132 Yapton Lane is a 2-way single carriageway running between North End to the south of the railway line and on to the A27. Currently, the junction with the A27 allows for left-in, left-out, and right-in movements.

2.1.2 Yapton Lane is c.6.2m wide and is subject to a 40mph speed limit with a short 30mph section to the east of Walberton. The road is most comparable to a single carriageway rural all-purpose road, as defined in the Design Manual for Roads and Bridges (DMRB) TD27/05.

Capacity

2.1.3 Whilst Yapton Lane is classified as a rural road, DMRB does not provide information on the theoretical capacity of rural roads. DMRB TD 79/99 which identifies the theoretical capacities of urban roads has therefore been used to estimate the theoretical capacity of Yapton Lane. DMRB TD 79/99 distinguishes the types of urban road based on a series of features outlined in Table 1 of the document. Based on the features identified, Yapton Lane would likely compare to an Urban All-Purpose 3 (UAP3) road. The defining features of UAP3 roads is shown in **Figure 2.1**.

Feature	ROAD TYPE				
	Urban Motorway	Urban All-purpose			
	UM	UAP1	UAP2	UAP3	UAP4
General Description	Through route with grade separated junctions, hardshoulders or hardstrips, and motorway restrictions.	High standard single/dual carriageway road carrying predominantly through traffic with limited access.	Good standard single/dual carriageway road with frontage access and more than two side roads per km.	Variable standard road carrying mixed traffic with frontage access, side roads, bus stops and at-grade pedestrian crossings.	Busy high street carrying predominantly local traffic with frontage activity including loading and unloading.
Speed Limit	60mph or less	40 to 60 mph for dual, & generally 40mph for single carriageway	Generally 40 mph	30 mph to 40 mph	30mph
Side Roads	None	0 to 2 per km	more than 2 per km	more than 2 per km	more than 2 per km
Access to roadside development	None. Grade separated for major only.	limited access	access to residential properties	frontage access	unlimited access to houses, shops & businesses
Parking and loading	none	restricted	restricted	unrestricted	unrestricted
Pedestrian crossings	grade separated	mostly grade separated	some at-grade	some at-grade	frequent at-grade
Bus stops	none	in lay-bys	at kerbside	at kerbside	at kerbside

Figure 2.1: Extract from DMRB TD 79/99 – Table 1 Types of Urban roads and the Features that Distinguish Them

2.1.4 DMRB TD 79/99 goes on to identify theoretical capacities of the different types of road in Table 2 based on their carriageway widths. Based on Table 2, it is considered that Yapton Lane would have a theoretical capacity of 900 movements per hour in either direction.

2.1.5 The theoretical capacities identified in DMRB TD 79/99 are based on free-flowing sections of road and do not take into account the limiting effects of junctions. Considering the roundabout junction with The Street, and the existing/proposed junction with the A27, it is likely that the capacity of the road would fall below 900 movements per hour.

2.2 Traffic Data

Historic Traffic Data – North of The Street

2.2.1 To establish the trends in traffic on the northern section of Yapton Lane, a review of historic traffic data has been undertaken using data available on the West Sussex Traffic Data (WSTD) online portal. The portal contains data obtained from Automatic Traffic Counter (ATC) surveys in 2003, 2004, 2009, and 2011 on Yapton Lane. The locations of the ATC surveys are shown in **Figure 2.1** and a summary of the weekday 2-way flows recorded in each survey is shown in **Figure 2.2**. The full ATC data from the North of The Street is attached at **Appendix B**.

Figure 2.1: ATC Survey Locations

Date	AADT (2-Way)	AM Peak Hour (08:00-09:00)	PM Peak Hour (17:00-18:00)
30/07/03 – 05/08/03	4814	433	582
25/11/04 – 01/12/04	6258	740	625
05/08/09 – 09/08/09	5269	505	581

Figure 2.2: Summary of WSTD ATC Data

2.2.2 The historic ATC surveys recorded a higher 2-way AADT during the 2004 survey compared to the 2009 survey indicating that traffic has decreased. In addition, the 2004 survey also recorded the highest peak hour flow which occurred during the AM peak hour.

2.2.3 However, given that the 2004 flows are similar to those recorded in 2017 (see **Paragraph 2.2.8**) and that in general, traffic on the network has grown since 2004, it is likely that the 2004 ATC survey data is anomalous. Evidence of traffic growth on the local road network is demonstrated in a comparison of 2003 and 2009 flows, and in a comparison of the 2009 and 2011 flows to the south of The Street.

2.2.4 Additionally, both the 2003 and the 2009 surveys were undertaken outside of school term time meaning that the flows are likely to be significantly lower than flows experienced during term time.

2.2.5 When comparing the AADT recorded in the 2003 and 2009 surveys, which were both undertaken between similar dates, the data shows a 9.5% increase in traffic on Yapton Lane over 6 years. Furthermore, a comparison of the peak hour flows shows a 16.6% increase in AM peak hour traffic.

Historic Traffic Data – South of The Street

2.2.6 Further to the review of the northern section of Yapton Lane, a review of ATC surveys undertaken to the south of The Street was also undertaken. The locations of the ATC survey are shown in **Figure 2.1** and a summary of the weekday 2-way flows recorded in each survey is shown in **Figure 2.3**. The full ATC data from the North of The Street is attached at **Appendix C**.

Date	AADT (2-Way)	AM Peak Hour (08:00-09:00)	PM Peak Hour (17:00-18:00)
02/07/09 – 08/07/09	6411	709	624
10/03/11 – 16/03/11	6945	802	732

Figure 2.3: Summary of WSTD ATC Data

2.2.7 A comparison of the AADT flows recorded in the 2 surveys shows an 8.3% increase in weekday traffic on Yapton Road to the south of The Street over 2 years. In addition, the data shows a 13.1% increase in traffic during the AM peak hour, and a 17.3% increase in traffic during the PM peak hour. This shows that traffic on the road has continued to increase post 2009 and further suggests that the flows recorded in the 2004 survey were anomalous.

2017 Traffic Data

2.2.8 In order to establish the current traffic flows on the Yapton Lane, a 7-day ATC survey has been undertaken by Modal Data between 6th – 12th October 2017 in the vicinity of the historic northern ATC surveys. The location of the ATC survey is shown in **Figure 2.1** and a summary of the weekday flows is shown in **Figure 2.4**. The full 2017 ATC data is attached at **Appendix D**.

Direction	AADT	AM Peak Hour (08:00-09:00)	PM Peak Hour (17:00-18:00)	HGV Percentage
Northbound	2824	433	175	5.8%
Southbound	3524	286	434	2.8%
2-Way	**6348**	**720**	**608**	**4.1%**

Figure 2.4: Summary of 2017 ATC Data

2.2.9 The ATC survey identified a weekday 2-way peak flow of 720 vehicles during the AM peak hour (08:00-09:00). The survey also identified a high proportion of HGVs travelling northbound (5.8%).

2.3 Future Flows

Future Flows (Without Implementation of Option 5A)

2.3.1 In order to anticipate the future traffic flows on Yapton Lane without Option 5A, the 2011 weekday flows have been factored to represent normal traffic growth using TEMPRO (**Appendix E**). A summary of the factored flows is shown in **Figure 2.5**.

	Direction	AADT	AM Peak Hour (08:00-09:00)	PM Peak Hour (17:00-18:00)
2011 Flows	**Northbound**	3286	534	223
	Southbound	3659	270	511
	2-Way	**6945**	**803**	**734**
Predicted 2041 Flows	**Northbound**	4153	674	282
	Southbound	4623	341	645
	2-Way	**8776**	**1015**	**927**

Figure 2.5: Predicted 2041 Weekday Flows

2.3.2 The TEMPRO figures, which represent a normal level of growth show 26.3% increase in AADT flows over the 30 years – 0.88% per year. However, discounting the anomalous 2004 AADT flows, the AADT figures for 2003 and 2009 to the north show growth of 9.4% - 1.6% per year, and the AADT figures for the 2009 and 2011 to the south show growth of 8.3% - 4.2% per year. This shows that traffic on Yapton Lane is growing at a much higher rate – at least around twice the norm. This would be likely to continue notwithstanding Option 5A.

Future Flows (Post Implementation of Option 5A)

2.3.3 Currently, eastbound traffic originating in Barnham and its environs is required to either join the A27 at the Fontwell Roundabout or via Ford Lane and Ford Road. The implementation of Option 5A would enable this traffic to join the A27 eastbound via Yapton Lane providing a more convenient route.

2.3.4 The number of residents that reside in these areas who would likely use Yapton Lane has been estimated using 2011 Census 'Location of Work' data, which identifies the work destinations for people in particular area (ward or lower output level). For this review data has been gathered from the Arun 003A, Arun 003B, and Arun003F super output lower layers. The census data is attached at **Appendix F**.

2.3.5 The data shows that approximately 161 residents from the 3 output areas travel eastbound would likely use the A27. Given that the proposed junction would provide the most convenient option to join the A27 eastbound, it is anticipated that all of these residents would use Yapton Lane to access the A27. Further, given that these trips would be commuter trips, it is assumed that all movements would take place during the AM and PM peak hours. Whilst it is likely that not all residents would travel during these times and that some resident would use public transport, these assumptions is considered robust as there would likely be additional movements originating further south from Yapton and Bognor Regis. Further, additional northbound traffic would also likely use Yapton Lane to access the proposed link to the B2132 which has not been included in this assessment.

2.3.6 To calculate the future flows on the Yapton lane following the implementation of Option 5A, the anticipated flows originating in the 3 areas has been summed with the factored-up 2011 flow on Yapton Lane. A summary of the flows is shown in **Figure 2.6**.

		AM Peak Hour	PM Peak Hour
Northbound	**Predicted 2041 Northbound Flows**	674	282
	Traffic Originating in Barnham and Environs	161	-
	Total	**835**	**282**
Southbound	**Predicted 2041 Southbound Flows**	341	645
	Traffic Originating in Barnham and Environs	-	161
	Total	**341**	**806**
2-Way Total		**1176**	**1088**

Figure 2.6: Predicted 2041 Weekday Flows with Option 5A

2.3.7 It is robustly anticipated that the growth in traffic on Yapton Lane coupled with the additional traffic that would result from the implementation of Option 5A would result in a weekday peak hourly flow of at least 835 vehicles travelling northbound in the AM peak hour. This figure does not take into account the limiting effects of junctions and does include those drivers that may cross over the A27 to join the A29. Further areas of robustness are that the growth on the road has been shown to be higher than the growth factor calculated in TEMPRO and that it is likely that additional movements would originate in Yapton and Bognor Regis. Further still, this estimate does not take the growth in traffic originating from Barnham and its environs into account, which would likely follow the same trend in growth as demonstrated on Yapton Lane. As a result, in reality, Yapton Lane would likely far exceed its theoretical capacity causing congestion and delays.

2.4 Summary

2.4.1 The anticipated impact of Option 5A on Yapton Lane has been assessed using a combination of historic and up-to-date traffic data, census data, and predicted traffic growth figures. The findings are as follows:

(i) Yapton Lane has a maximum theoretical capacity of 900 movements per hour in one direction based on DMRB TD 79/99. In reality, the limiting effects of junctions would mean that the maximum capacity on the road would fall below this figure.

(ii) A study of historical traffic data has shown traffic on Yapton Lane has grown at a higher rate than anticipated – twice that predicted by TEMPRO.

(iii) A review of 2011 Census 'Location of Work' data found that 161 residents from Barnham and its environs are anticipated to use the proposed junction to travel eastbound on the A27. Further, traffic travelling north-south through the proposed 5A junction would also travel on Yapton Lane.

(iv) A robust prediction of 2041 traffic flows on Yapton Lane, calculated using growthed flows and census data, shows that the implementation of Option 5A would result in a peak hour flow of 835 northbound vehicles during the network AM peak hour.

(v) RGP have deduced that in reality, Option 5A would result in Yapton Lane far exceeding its design capacity, causing congestion and delays.

3 SOUTH DOWNS NATIONAL PARK

3.1 Overview

3.1.1 The proposed Arundel By-pass options are intended to improve the capacity of the A27 around Arundel and in turn reduce the congestion experienced on this section of the road. The by-pass is also intended to reduce the volume of traffic on the surrounding road network that may currently use alternative routes to avoid the congestion on the A27. This practice may be seen by way of drivers travelling through the SDNP using the A29, B2139, A283 to avoid peak hour congestion experienced at the bottle necks at Arundel and Worthing. Highways England expects that the implementation of the Arundel By-pass in the form of Option 5A would result in these drivers reverting to using the more direct A27 route, minimising traffic travelling through the SDNP.

3.1.2 Highways England have stated that the by-pass Option 3 would result in a 10% reduction in traffic travelling through the SDNP on the A29. Further, Highways England state that by-pass Option 5A would result in a 33% reduction in traffic on the A29.

3.2 Assessment of East-West Routes

Potential East-West Travel Routes (Existing Conditions)

3.2.1 In order to understand the potential routes that traffic travelling east-west/west-east during peak hours would take, a study of journey times between Chichester and Shoreham has been undertaken using journey times estimated by a Geographic Information System (GIS) algorithm (Google Maps). It is assumed that drivers would either use the A27 (Route 1), or by-pass the congestion using the A283-B2139-A29 (Route 2), or the A283-A24-A280 (Route 3). The 3 routes are demonstrated in **Figure 3.1** and a summary of the journey times and traffic levels is shown in **Figure 3.2**.

Figure 3.1: East-West Routes

Time of Day	Direction	Route	Journey Time	Traffic Conditions
AM Peak Hour (08:00-09:00)	West - East	Route 1	40-1hr5	Medium
		Route 2	45-1hr5	Light
		Route 3	45-1hr10	Light
	East - West	Route 1	45-1hr10	Medium
		Route 2	50-1hr5	Light
		Route 3	50-1hr10	Light
PM Peak Hour (17:00-18:00)	West - East	Route 1	45-1hr15	Heavy
		Route 2	50-1hr10	Medium
		Route 3	55-1hr20	Medium
	East - West	Route 1	50-1hr20	Medium
		Route 2	50-1hr10	Light
		Route 3	50-1hr10	Light

Figure 3.2: Journeys Between Chichester and Shoreham

3.2.2 The study found that the journey times were relatively equal across the 3 routes and were especially comparable between the Route 1 and Route 2. However, the study also found that the A27 experienced a greater level of peak hour congestion than on Route 2 and 3 meaning that drivers who would prefer not to sit in slow moving traffic would have the option to use Route 2 or 3 although they would still arrive at a similar time.

Potential East-West Travel Routes (Post Implementation of Arundel By-pass)

3.2.3 In order to estimate the route that drivers would take following the implementation of the Arundel By-pass, a study of peak hour journey times between the A27 to the north of Angmering and the A27 Shoreham By-pass to the east of the A283 junction has been undertaken. As part of Highways England's standalone criteria for the Arundel By-pass, it must be considered that this section of the Worthing/Lancing A27 would remain unaffected by the implementation of the Arundel By-pass and as such any traffic conditions would remain unchanged. A plan showing the 2 routes is shown in **Figure 3.3** and a summary of the peak hour journey times and traffic conditions between these 2 points is shown in **Figure 3.4**.

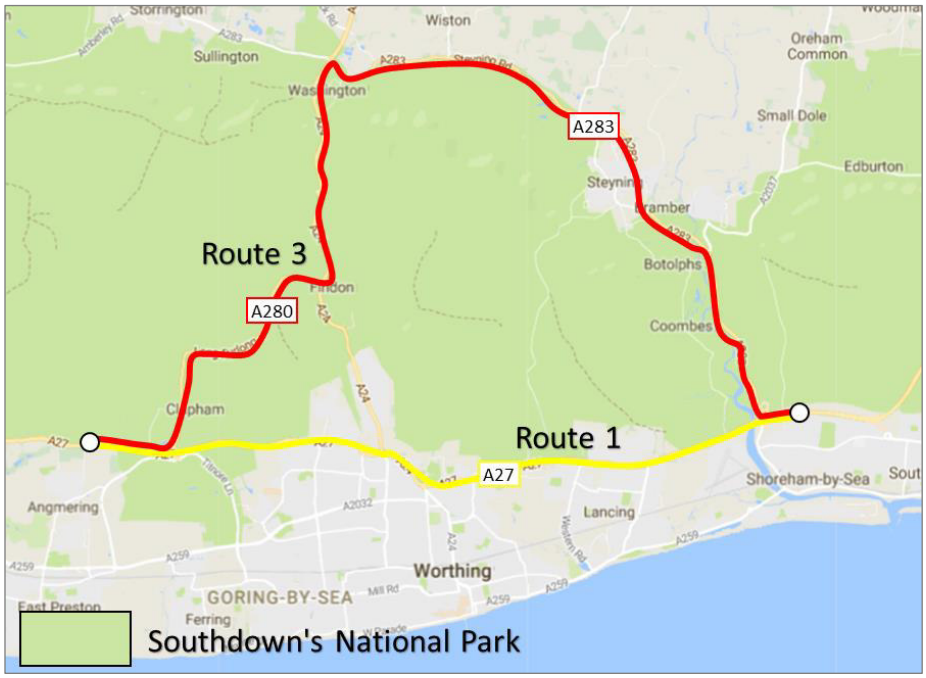


Figure 3.3: Routes Between Angmering and Shoreham Bypass

Time of Day	Direction	Route	Journey Time	Traffic Conditions
AM Peak Hour (08:00-09:00)	West - East	Route 1	16-35	Heavy
		Route 3	22-35	Light
	East - West	Route 1	16-30	Medium
		Route 3	22-30	Light
PM Peak Hour (17:00-18:00)	West - East	Route 1	16-30	Heavy
		Route 3	26-35	Light
	East - West	Route 1	20-45	Heavy
		Route 3	24-35	Medium

Figure 3.4: Journey times

3.2.4 The study found that the journey times between the 2 points were relatively equal however, a greater level of congestion was experienced on the A27 than on the A280-A24-A283.

3.3 Washington Roundabout Survey

3.3.1 The Washington Roundabout is located at the junction between the A24 and the A283. Traffic avoiding the existing peak hour congestion on the A27 would generally travel through this roundabout. Traffic using Route 2 would travel east-west on the A283 and traffic on Route 3 would travel between the A24 and the A283.

3.3.2 In order to estimate the volume of traffic using these alternative routes to the A27 (Route 2 and 3), a turning count survey was undertaken at the Washington Roundabout. In addition, traffic using the side roads to the east of the roundabout was also recorded to capture traffic travelling east-west from the A283 to the A24 (south) bypassing the roundabout. A plan of the survey area is shown in **Figure 3.5** and a summary of the flows is shown in **Figure 3.6**. The percentage split of traffic travelling from each direction is shown in **Figure 3.7** and is demonstrated diagrammatically in **Figure 3.8**. The full turning count survey output is attached at **Appendix G**.

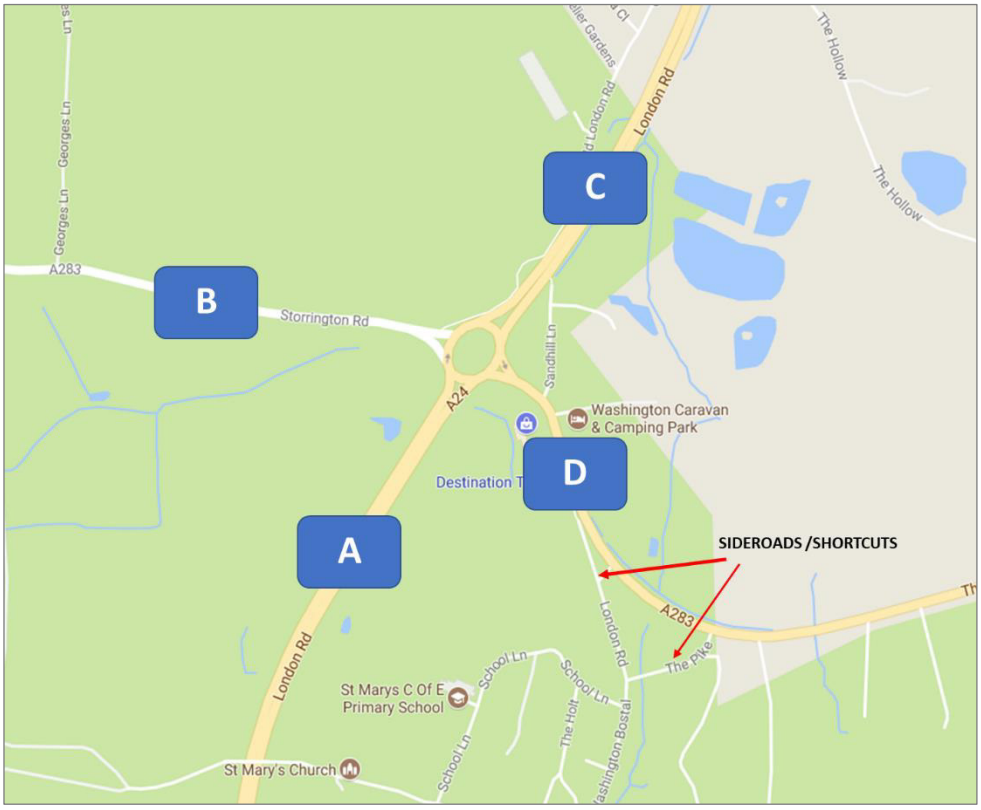


Figure 3.5: Washington Roundabout Survey Plan

AM (08:00 - 09:00)		Destination				
		A (including via The Pike)	B	C	D	Total
Origin	A	-	151	987	158	**1296**
	B	112	-	288	117	**517**
	C	543	291	-	101	**935**
	D	175	281	240	-	**696**
	Total	**830**	**723**	**1515**	**376**	**-**
PM (17:00 - 18:00)		**Destination**				
		A (including via The Pike)	B	C	D	Total
Origin	A	-	179	672	144	**995**
	B	162	-	275	327	**764**
	C	53	737	-	172	**962**
	D	549	255	129	-	**933**
	Total	**764**	**1171**	**1076**	**643**	**-**

Figure 3.6: Traffic Flows (AM/PM)

AM (08:00 - 09:00)		Destination				
		A	B	C	D	Total
Origin	A	-	12%	76%	12%	**100%**
	B	22%	-	56%	23%	**100%**
	C	58%	31%	-	11%	**100%**
	D	25%	40%	34%	-	**100%**
PM (17:00 - 18:00)		**Destination**				
		A	B	C	D	Total
Origin	A	-	18%	68%	14%	**100%**
	B	21%	-	36%	43%	**100%**
	C	6%	77%	-	18%	**100%**
	D	59%	27%	14%	-	**100%**

Figure 3.7: Percentage Split of Traffic (AM/PM)

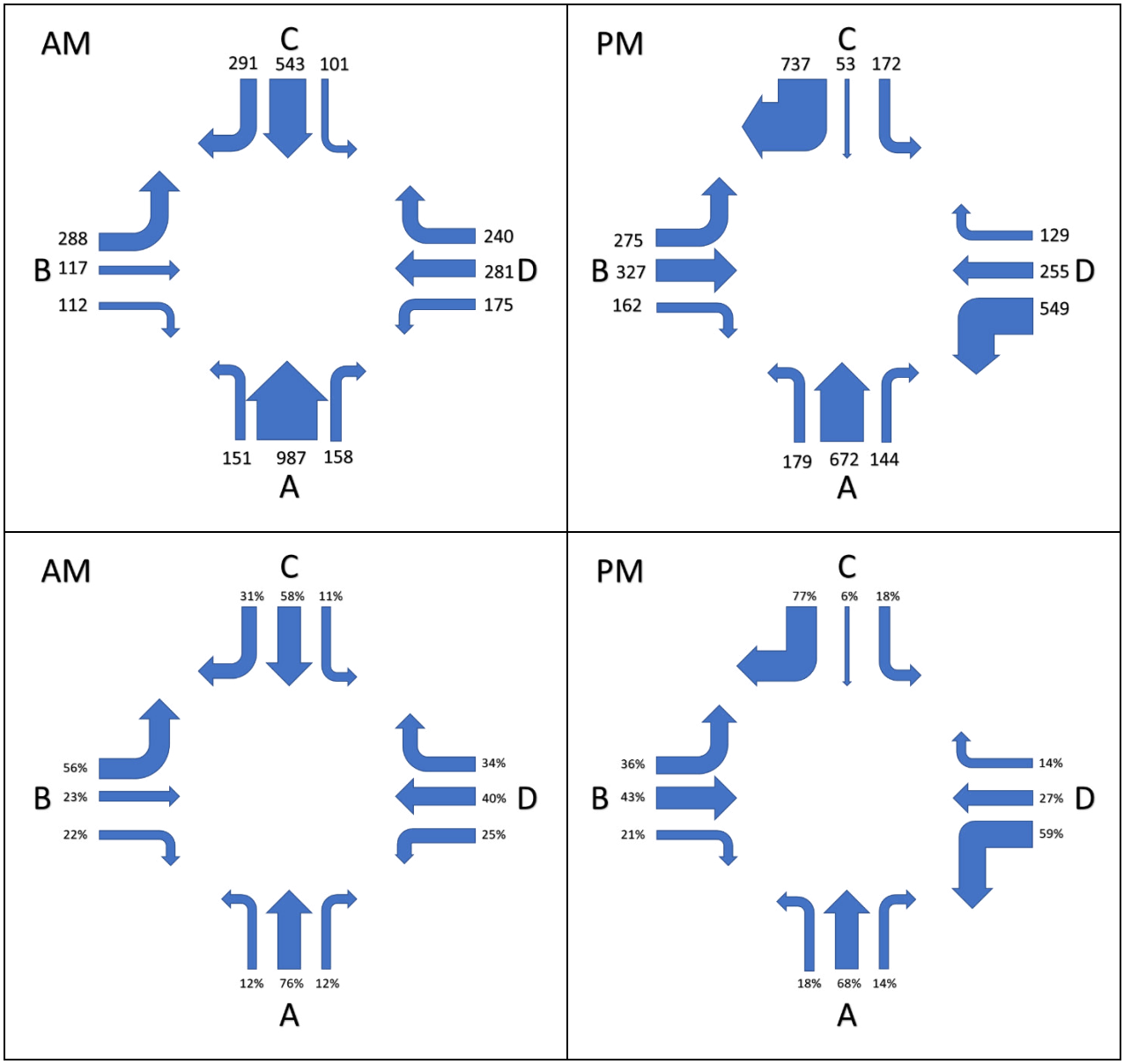


Figure 3.8: Traffic Distribution (AM/PM)

East – West (B – D)

3.3.3 Traffic travelling between B and D is anticipated to contain traffic avoiding the congested section of the A27 using Route 2. The flows show that a proportion of traffic is travelling east-west (40% in the AM), and vice versa (43% in PM). The flows have a tidal nature with a larger number of vehicles travelling east-west in the AM peak hour, and west-east in the PM peak hour.

South – East (A – D)

3.3.4 The flows between A and D is anticipated to contain traffic avoiding congestion in Worthing and is using Route 3. The flows show consistent flows from A – D during the AM and PM peak hours however the D – A flows are considerably heavier during the PM peak hour.

West – North (B – C)

3.3.5 Traffic travelling between B and C is considered unrelated to the A27 and as such would be unaffected by following the implementation of the Arundel By-pass. A large proportion of traffic was recorded travelling between the A283 west and the A24 north. 56% of traffic travels from B – C in the AM peak hour, and 77% of traffic travels from C – B during the PM peak hour.

3.4 Effect of Arundel By-pass

Overview

3.4.1 Notwithstanding the point made in the introduction of this report regarding the artificial baseline used by Highways England in its analysis, the implementation of the Arundel by-pass would improve the capacity of the A27 around Arundel reducing the peak hour congestion experienced and reducing the journey times for traffic travelling east/west. The Arundel By-pass is also intended to reduce traffic currently travelling on alternative routes (Routes 2 and 3) through the SDNP but Option 5a would not address the congestion issue in Worthing which would be unaffected by the improvements.

East – West (B – D)

3.4.2 Following the implementation of the Arundel Bypass, Highways England suggest that east-west traffic currently using Route 2 would revert to using the A27. However, the study of journey times between the A27 north of Angmering and the A27 Shoreham By-pass (see **Paragraph 3.2.4**) show similar journey times for drivers on using either the A27 or the A280/A283.

3.4.3 As a result, it is anticipated that even with the improvements at Arundel, the congestion at Worthing would still deter drivers from travelling on the A27 during peak hours, causing many of them to continue to travel via Route 2 or 3.

South – East (A – D)

3.4.4 A large portion of the traffic travelling on the A283 and the A24 is unrelated to the A27 at Arundel. The implementation of the Arundel bypass is therefore not anticipated to have any impact on this traffic. However, in addition to this traffic, some of the traffic on this route is anticipated to be traffic bypassing the A27 congestion using Route 3. Given that any traffic currently using this route would either be travelling to destinations to the east of Arundel, or would be required to travel through Arundel anyway, the implementation of the Arundel By-pass would not reduce these movements. Further, the reduced journey time on this route as a result of the by-pass may encourage more drivers to use this route.

West – North (B – C)

3.4.5 This traffic may reduce following the implementation of an Arundel Bypass depending upon the option chosen. If Option 5A is proposed over Option 3 then the B-C movement is actually likely to increase, principally because of the straight-over movement from Yapton Lane.

3.4.6 Furthermore, any northbound AM traffic from the A27 that may be discouraged from using Route 2 to gain access to the A24 at the Washington roundabout would simply be displaced to the only other option which is Route 3. Both routes impact on the SDNP and both effect downland villages – Houghton and Amberley on Route 2, and Clapham, Patching and Findon on Route 3. A similar behaviour pattern would be expected in any southbound PM traffic.

3.5 Automatic Number Plate Recognition Survey

3.5.1 In order to understand the movements through the SDNP outside of peak traffic hours, an Automatic Number Plate Recognition (ANPR) survey was undertaken on Tuesday 31st October between 10:55 and 13.55. The survey recorded vehicles travelling east-west/west-east through the Washington and Fontwell roundabouts in order to estimate the proportion of traffic travelling through the SDNP on Route 2 (see **Figure 3.1**). A summary of the survey data is shown in **Figure 3.9** and the full survey results are attached at **Appendix H**.

	Traffic Through Washington Roundabout		Traffic Through Fontwell Roundabout		Through Traffic		Through Traffic Percentage	
	All Vehicles	HGVs	All Vehicles	HGVs	All Vehicles	HGVs	All Vehicles	HGVs
East – West	365	26	413	19	34	3	8.2%	11.5%
West - East	401	32	405	29	25	4	6.2%	12.5%

Figure 3.9:

3.5.2 The survey recorded 34 vehicles (8.2%) travelling east-west through both the roundabouts a 1-hour period. The survey also recorded 25 vehicles (6.2%) travelling west-east, passed through both roundabouts for a 1-hour period. This shows that the majority of off-peak traffic travelling on the A29 between these roundabouts (91.8% east-west and 93.8% west-east) is unrelated to the Arundel section of the A27. Given that the survey did not include the Shoreham roundabout, it is likely that a proportion of the recorded through traffic is travelling to/from destinations on the A283 to the east of the Washington roundabout such as Steyning.

3.5.3 The survey also identified that the majority of HGV traffic on the A29 between these roundabouts is also unrelated to the Arundel section of the A27.

3.5.4 The results of survey suggest that the majority of off-peak traffic on the A29 between these 2 roundabouts is unrelated to the Arundel section of the A27 meaning the implementation of the Arundel By-pass is unlikely to impact on the volume of traffic travelling through the SDNP on the A29.

3.6 Summary

3.6.1 The findings from the study of traffic conditions through the SDNP has found that the implementation of Option 5A is unlikely to reduce traffic travelling through the SDNP based on the following:

(i) A study of the east-west routes found relatively equal journey times between the potential routes however found that there was consistently heavier congestion on the A27. Further, the study comparing routes between Angmering and Shoreham similarly showed relatively equal journey times between the 2 points.

(ii) The turning count survey undertaken at the Washington roundabout suggests that a proportion of peak hour traffic currently uses these alternative routes to the A27. Without major improvements to the A27 at Worthing and Lancing, this practice is expected to continue.

(iii) An ANPR survey found that only 8.2% and 6.2% of off-peak traffic travels on the A29 between the Fontwell and Washington roundabouts. This suggests that the majority of off-peak traffic is unrelated to the Arundel section of the A27.

4 CONCLUSIONS

4.1 Yapton Lane

4.1.1 If it were hypothetically assumed that Option 5A existed now, traffic on Yapton Lane would probably exceed its design capacity of 900 movements per hour. At 2041, flows would far exceed design capacity.

4.1.2 The 900 movements per hour per direction assumes free-flow however if the constraining effects of junctions and the level crossing are factored in, major improvements to Yapton Lane, its junctions, and at the level crossing by way of a bridge would be needed to facilitate the traffic attracting and generating effects of Option 5A. This would need to be factored in to any costing for Option 5A.

4.1.3 Furthermore, a significant proportion of that traffic would use the A29 and in that regard, would have a greater effect on the SDNP than Option 3.

4.2 South Downs National Park

4.2.1 As the signals at Crossbush have existed for decades, they, and the delay they cause have been assumed by Highways England as a normal part of the congestion on the Arundel section of the A27. This is a wholly artificial premise to demonstrate benefit of a by-pass. The correct basis is to assume a large, at-grade roundabout at the junction of the A27 and A284, and then test the conditions from that point to a point west of the Ford roundabout.

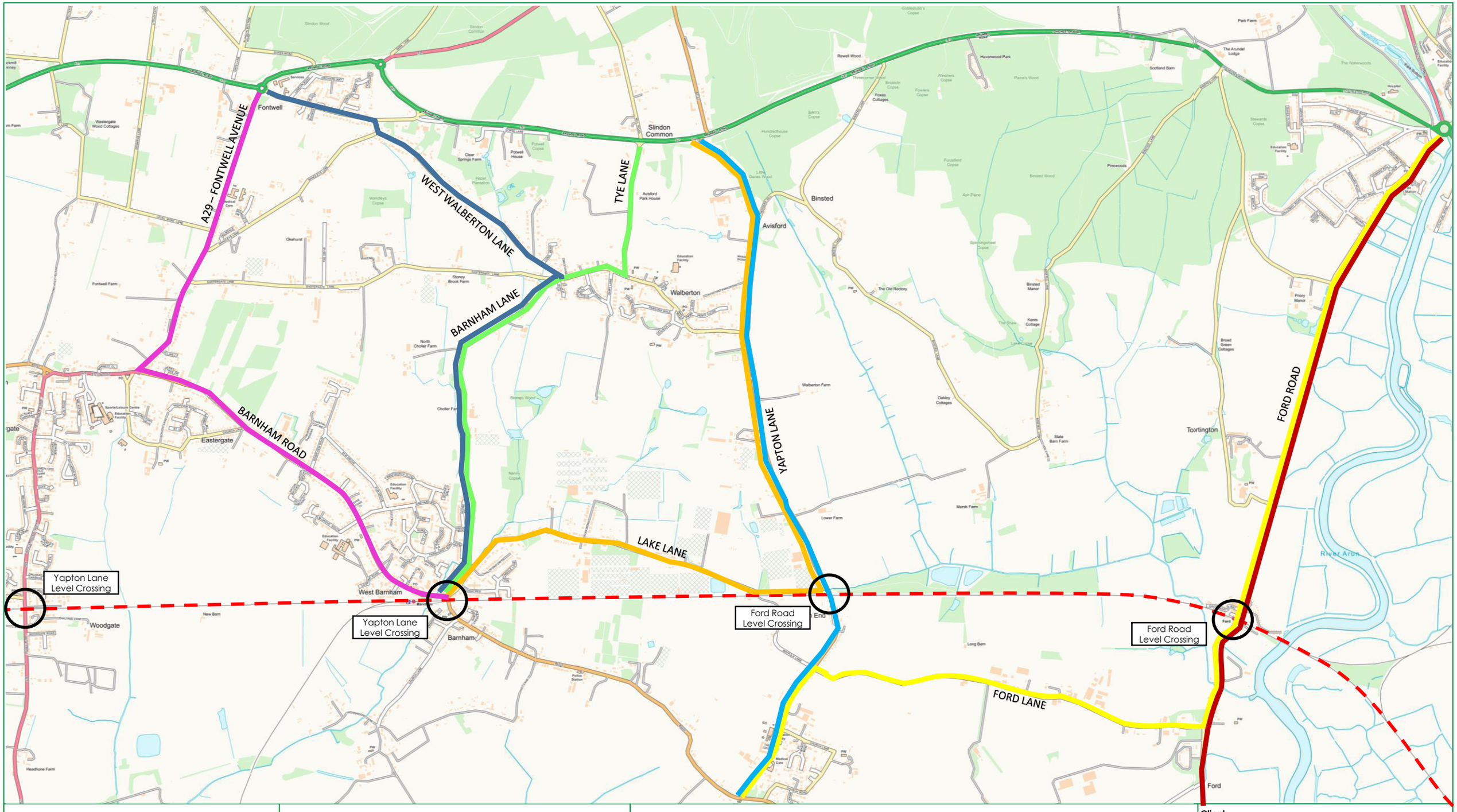
4.2.2 Whilst it is accepted that an Arundel By-pass would improve traffic conditions at Arundel, the reduction in traffic travelling through the SDNP on Routes 2 and 3 at 10% for Option 3 and 33% for Option 5A is unrealistic. It is counterintuitive to expect that Option 5A which would facilitate north-south movements into the SDNP to the A29 would result in less traffic travelling through the SDNP than Option 3 which does not facilitate such movements.

4.2.3 Whilst the Arundel Bypass would improve journeys around Arundel the congestion issue at Worthing and Lancing would remain unchanged and would continue to deter drivers from using the A27. Drivers that currently use Routes 2 or 3 would likely continue to use these routes to avoid peak hour congestion in Worthing unless any bypass at Arundel is combined with a bypass around Worthing and Lancing.

4.2.4 In contradiction to Highways England' suggestion that Option 5A would result in a greater reduction in traffic through the SDNP compared to Option 3, RGP has deduced that the opposite is true. Not least because the addition of the north-south route between Yapton Lane and the B2132 would provide a convenient route for traffic travelling to/from the south of the A27 into the SDNP.

4.2.5 The conclusions stated above have been arrived at following a limited amount of recent survey work. Further surveys of roads within the SDNP would provide reinforcement to the conclusions drawn above and would allow the impacts of the Arundel By-pass on traffic in the SDNP to be more accurately quantified.

APPENDIX A



LEGEND

- RAILWAY
- ROUTE 1
- ROUTE 2
- ROUTE 3
- ROUTE 4
- ROUTE 5
- ROUTE 6
- ROUTE 7

Client: Arundel Bypass Neighbourhood Committee

Project: Critique of HE's TAR

Title: Possible Routes

Plan No:	Job No:	Date:	Scale:
Plan 01	3898	Oct 2017	NTS
Drawn By:	**Checked By:**	**Approved By:**	**Rev:**
SMO	ALB	PMR	-

Transport Planning and Infrastructure Design Consultants
Metro House, Northgate, Chichester,
West Sussex, PO19 1BE
Tel: 01243 210418 Fax: 01483 861682
www.rgp.co.uk

APPENDIX B

Site No. 00004186 **Site Ref.** B2132011L02 **Grid Ref.** 497663,105918

WALBERTON, B2132 YAPTON LANE (Just S. of Greenbank

Vehicle Count Report **Week Begin: 28 July 2003** **Channel:** Total Flow

	Mon Jul 28	Tue Jul 29	Wed Jul 30	Thu Jul 31	Fri Aug 01	Sat Aug 02	Sun Aug 03	#########	Tue Aug 05	5-Day Av	7-Day Av
00:00			21	16	28	33	66	11	13	18	27
01:00			4	2	6	8	21	13	8	7	9
02:00			5	1	7	13	13	5	3	4	7
03:00			3	7	8	9	4	8	6	6	6
04:00			16	11	9	6	5	18	9	13	11
05:00			34	32	34	23	26	39	31	34	31
06:00			129	116	110	80	48	141	134	126	108
07:00			333	341	328	142	87	347	342	338	274
08:00			454	412	414	196	147	427	456	433	358
09:00			271	287	307	238	197	305	265	287	267
10:00			249	269	278	318	291	252	230	256	270
11:00			238	285	333	309	262	235	252	269	273
12:00			274	297	300	310	296	253	275	280	286
13:00			243	283	282	280	249	253	260	264	264
14:00			244	251	298	245	191	247	255	259	247
15:00			295	286	319	271	237	303	274	295	284
16:00			347	351	454	216	220	370	385	381	335
17:00			650	627	596	272	217	514	523	582	486
18:00			412	471	389	256	159	317	341	386	335
19:00			224	237	226	211	144	198	189	215	204
20:00			149	135	150	139	131	113	127	135	135
21:00			99	100	114	94	104	95	101	102	101
22:00			75	82	88	97	52	50	71	73	74
23:00			60	65	54	79	33	42	38	52	53
Total											
12H(7-19)			4010	4160	4298	3053	2553	3823	3858	4030	3679
16H(6-22)			4611	4748	4898	3577	2980	4370	4409	4607	4228
18H(6-24)			4746	4895	5040	3753	3065	4462	4518	4732	4354
24H(0-24)			4829	4964	5132	3845	3200	4556	4588	4814	4445
AM Peak			08:00	08:00	08:00	10:00	10:00	08:00	08:00	08:00	08:00
			454	412	414	318	291	427	456	433	396
PM Peak			17:00	17:00	17:00	12:00	12:00	17:00	17:00	17:00	17:00
			650	627	596	310	296	514	523	582	502

Site No. 00004583 **Site Ref.** B2132011L04 **Grid Ref.** 497662,105925

WALBERTON, YAPTON LANE BY GREENBANK

Vehicle Count Report **Week Begin: 22 November 2004** **Channel:** Total Flow

	Mon Nov 22	Tue Nov 23	Wed Nov 24	Thu Nov 25	Fri Nov 26	Sat Nov 27	Sun Nov 28	Mon Nov 29	Tue Nov 30	Wed Dec 01	5-Day Av	7-Day Av
00:00		9	15	12	25	33	48	8	16	20	16	23
01:00		2	4	5	14	10	17	4	9	9	8	10
02:00		2	1	2	8	5	12	4	0	4	4	5
03:00		3	4	2	10	7	5	3	5	6	5	5
04:00		9	14	12	8	13	4	12	8	19	12	11
05:00		48	64	57	49	23	11	51	50	58	53	43
06:00		196	180	183	164	64	43	186	191	197	184	147
07:00		573	540	524	486	181	77	526	537	560	527	413
08:00		736	752	758	664	278	110	767	754	755	740	584
09:00		418	399	453	403	393	216	488	440	443	445	405
10:00		288	270	301	329	443	314	519	339	303	358	364
11:00		282	280	330	317	472	377	316	327	298	318	348
12:00		320	320	314	340	540	341	325	298	312	318	353
13:00		311	301	323	338	407	348	342	390	323	343	353
14:00		337	330	335	397	386	299	371	336	346	357	353
15:00		406	399	411	475	374	299	422	483	446	447	416
16:00		543	472	527	566	330	286	549	567	532	548	480
17:00		623	623	610	581	255	173	609	620	644	613	499
18:00		381	341	304	378	261	155	337	350	340	342	304
19:00		197	199	669	220	167	126	183	195	225	298	255
20:00		88	123	97	109	102	95	100	116	112	107	104
21:00		102	93	64	98	75	65	73	89	100	85	81
22:00		77	85	78	90	73	39	71	72	89	80	73
23:00		35	46	56	76	76	32	29	48	41	50	51
Total												
12H(7-19)		5218	5027	5190	5274	4320	2995	5571	5441	5302	5356	4870
16H(6-22)		5801	5622	6203	5865	4728	3324	6113	6032	5936	6030	5457
18H(6-24)		5913	5753	6337	6031	4877	3395	6213	6152	6066	6160	5582
24H(0-24)		5986	5855	6427	6145	4968	3492	6295	6240	6182	6258	5678
AM Peak		08:00	08:00	08:00	08:00	11:00	11:00	08:00	08:00	08:00	08:00	08:00
		736	752	758	664	472	377	767	754	755	740	650
PM Peak		17:00	17:00	19:00	17:00	12:00	13:00	17:00	17:00	17:00	17:00	17:00
		623	623	669	581	540	348	609	620	644	625	573

Site No. 00005949 **Site Ref.** B2132011L05 **Grid Ref.** 497660,105903

WALBERTON, YAPTON LANE N. OF ROUNDABOUT

Vehicle Count Report **Week Begin: 03 August 2009** **Channel:** Total Flow

	Mon Aug 03	Tue Aug 04	Wed Aug 05	Thu Aug 06	Fri Aug 07	Sat Aug 08	Sun Aug 09	5-Day Av	7-Day Av
00:00	13	16	20	20	22	34	28	18	22
01:00	6	4	3	4	5	12	20	4	8
02:00	3	4	4	4	3	9	12	4	6
03:00	1	2	2	4	3	3	4	2	3
04:00	10	9	9	13	7	11	4	10	9
05:00	52	41	44	45	45	38	14	45	40
06:00	166	166	162	161	167	72	50	164	135
07:00	383	411	407	376	338	176	90	383	312
08:00	492	490	534	543	466	203	129	505	408
09:00	296	360	330	355	330	290	193	334	308
10:00	292	321	243	290	286	339	274	286	292
11:00	295	291	296	312	312	339	291	301	305
12:00	284	273	302	336	341	329	353	307	317
13:00	279	290	291	300	340	367	275	300	306
14:00	340	262	314	330	327	287	249	315	301
15:00	368	333	346	354	371	281	229	354	326
16:00	460	463	500	482	425	272	221	466	403
17:00	568	579	576	638	543	353	282	581	506
18:00	351	367	374	358	363	275	218	363	329
19:00	182	202	199	203	217	186	145	201	191
20:00	115	112	137	123	122	100	121	122	119
21:00	109	91	106	80	88	92	86	95	93
22:00	68	65	78	57	86	80	43	71	68
23:00	23	28	55	36	48	70	35	38	42
Total								581	
12H(7-19)	4408	4440	4513	4674	4442	3511	2804	4495	4113
16H(6-22)	4980	5011	5117	5241	5036	3961	3206	5077	4650
18H(6-24)	5071	5104	5250	5334	5170	4111	3284	5186	4761
24H(0-24)	5156	5180	5332	5424	5255	4218	3366	5269	4847
AM Peak	08:00	08:00	08:00	08:00	08:00	11:00	11:00	08:00	08:00
	492	490	534	543	466	339	291	505	408
PM Peak	17:00	17:00	17:00	17:00	17:00	13:00	12:00	17:00	17:00
	568	579	576	638	543	367	353	581	506

APPENDIX C

Site No. 00005918 **Site Ref.** B2132010L05 **Grid Ref.** 497658,105740

WALBERTON, YAPTON LANE S. OF ROUNDABOUT

Vehicle Count Report **Week Begin: 29 June 2009** **Channel:** Total Flow

	Mon Jun 29	Tue Jun 30	Wed Jul 01	Thu Jul 02	Fri Jul 03	Sat Jul 04	Sun Jul 05	Mon Jul 06	Tue Jul 07	Wed Jul 08	5-Day Av	7-Day Av
00:00			16	21	18	47	51	20	10	15	17	26
01:00			8	11	9	16	34	16	4	4	9	13
02:00			5	6	5	10	11	12	2	3	6	7
03:00			11	8	11	19	7	8	3	6	7	9
04:00			19	25	15	16	9	14	10	16	16	15
05:00			66	61	74	43	29	69	52	68	65	57
06:00			186	192	186	90	63	178	168	196	184	153
07:00			521	563	505	215	133	536	543	544	538	434
08:00			739	722	646	301	154	730	716	732	709	572
09:00			433	428	431	310	230	403	449	465	435	388
10:00			319	376	354	358	265	328	309	337	341	332
11:00			364	368	353	334	280	323	339	340	345	334
12:00			348	372	305	368	325	348	322	344	338	341
13:00			356	357	389	305	249	333	292	292	333	317
14:00			368	386	421	280	267	332	355	351	369	342
15:00			443	451	451	276	291	429	440	400	434	391
16:00			590	587	652	323	277	551	544	447	556	483
17:00			641	674	709	295	226	650	600	485	624	520
18:00			467	488	508	291	202	397	412	332	427	376
19:00			269	298	320	257	230	216	196	215	249	247
20:00			197	199	198	161	131	135	134	136	160	156
21:00			139	146	128	96	93	81	111	96	112	107
22:00			87	115	112	75	54	52	81	66	85	79
23:00			60	86	69	93	35	27	32	43	51	55
Total												
12H(7-19)			5589	5772	5724	3656	2899	5360	5321	5069	5449	4829
16H(6-22)			6380	6607	6556	4260	3416	5970	5930	5712	6155	5493
18H(6-24)			6527	6808	6737	4428	3505	6049	6043	5821	6292	5627
24H(0-24)			6652	6940	6869	4579	3646	6188	6124	5933	6411	5754
AM Peak			08:00	08:00	08:00	10:00	11:00	08:00	08:00	08:00	08:00	08:00
			739	722	646	358	280	730	716	732	709	598
PM Peak			17:00	17:00	17:00	12:00	12:00	17:00	17:00	17:00	17:00	17:00
			641	674	709	368	325	650	600	485	624	544

Site No. 00004591 **Site Ref.** B2132010L04 **Grid Ref.** 497849,104884

YAPTON, YAPTON LANE N. OF POPLAR FARM ENTRANCE

Vehicle Count Report **Week Begin: 07 March 2011** **Channel:** Total Flow

	Mon Mar 07	Tue Mar 08	Wed Mar 09	Thu Mar 10	Fri Mar 11	Sat Mar 12	Sun Mar 13	Mon Mar 14	Tue Mar 15	Wed Mar 16	5-Day Av	7-Day Av
00:00				11	11	23	33	10	8	16	11	16
01:00				6	7	11	20	5	4	10	6	9
02:00				4	2	5	11	1	2	3	2	4
03:00				7	2	9	6	6	4	6	5	6
04:00				15	10	17	4	19	19	14	15	14
05:00				74	55	26	18	58	67	67	64	52
06:00				212	227	79	52	210	233	235	223	178
07:00				611	608	213	82	686	650	650	641	500
08:00				767	799	284	149	775	849	819	802	635
09:00				496	507	403	216	510	488	517	504	448
10:00				358	374	379	292	372	370	351	365	357
11:00				371	367	422	343	356	347	408	370	373
12:00				382	432	415	320	360	382	388	389	383
13:00				396	424	392	311	417	397	388	404	389
14:00				355	468	340	287	375	416	397	402	377
15:00				486	581	302	293	460	469	483	496	439
16:00				568	633	352	292	558	582	661	600	521
17:00				724	680	297	251	732	762	762	732	601
18:00				403	420	248	168	400	413	415	410	352
19:00				199	211	152	138	198	214	187	202	186
20:00				117	134	96	95	115	132	122	124	116
21:00				78	79	74	77	73	82	93	81	79
22:00				63	59	67	38	45	61	65	59	57
23:00				39	58	49	26	26	33	27	37	37
											802	635
Total												
12H(7-19)				5917	6293	4047	3004	6001	6125	6239	6115	5375
16H(6-22)				6523	6944	4448	3366	6597	6786	6876	6745	5934
18H(6-24)				6625	7061	4564	3430	6668	6880	6968	6840	6028
24H(0-24)				6742	7148	4655	3522	6767	6984	7084	6945	6129
AM Peak				08:00	08:00	11:00	11:00	08:00	08:00	08:00	08:00	08:00
				767	799	422	343	775	849	819	802	621
PM Peak				17:00	17:00	12:00	12:00	17:00	17:00	17:00	17:00	17:00
				724	680	415	320	732	762	762	732	580

APPENDIX D

YAPTON LANE - WALBERTON NORTHBOUND

Globals

Report Id	CustomList-156
Descriptor	Modal Dir2_(modified)
Created by	MetroCount Traffic Executive
Creation Time (UTC)	2017-10-16T08:09:58
Legal	Copyright (c)1997 - 2014 MetroCount
Graphic	header.bmp
Language	English
Country	United Kingdom
Time	UTC + 60 min
Create Version	4.0.6.0
Metric	Part metric
Speed Unit	mph
Length Unit	metre
Mass Unit	tonne

Dataset

Site Name	**Walberton**
Site Attribute	[+51.477222 +0.000000]
File Name	S:\RGPL-012 Modal Data Limited\MetroCount\MTE 4.06\Data\Walberton2 0 2017-10-16 0902.EC0
File Type	Plus
Algorithm	Factory default axle
Description	**Yapton Lane**
Lane	0
Direction	7
Direction Text	7 - North bound A]B, South bound B]A.
Layout Text	Axle sensors - Paired (Class/Speed/Count)
Setup Time	2017-10-04T14:11:10
Start Time	2017-10-04T14:11:10
Finish Time	2017-10-16T09:02:10
Operator	MV
Configuration	00000000 80 00 14 6a 6a 00 00 00 00 00 , Standard

Profile

Name	Default Profile
Title	MetroCount Traffic Executive
Graphic Logo	
Header	
Footer	
Percentile 1	85
Percentile 2	95
Pace	10
Filter Start	2017-10-06T00:00:00
Filter End	2017-10-13T00:00:00
Class Scheme	ARX
Low Speed	0
High Speed	90
Posted Limit	**30**
Speed Limits	
Separation	0.000
Separation Type	Headway
Direction	AB
Encoded Direction	15

YAPTON LANE - WALBERTON — NORTHBOUND

Report Id - CustomList-156
Site Name - Walberton
Description - Yapton Lane
Direction - AB

MODAL
modaldata.com

06 October 2017

Time	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Total	Vbin 0 5	Vbin 5 10	Vbin 10 15	Vbin 15 20	Vbin 20 25	Vbin 25 30	Vbin 30 35	Vbin 35 40	Vbin 40 45	Vbin 45 50	Vbin 50 55	Vbin 55 60	Vbin 60 65	Vbin 65 70	Vbin 70 75	Vbin 75 80	Vbin 80 85	Vbin 85 90	Mean	Vpp 85
0000	0	2	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	45.6	-
0100	0	3	0	0	0	0	0	0	0	0	0	0	3	0	0	0	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0	28.3	-
0200	0	3	0	0	0	1	0	0	0	0	0	0	4	0	0	0	0	0	3	0	0	1	0	0	0	0	0	0	0	0	0	32	-
0300	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	27.8	-
0400	0	10	0	1	0	0	0	0	0	0	0	0	11	0	0	0	0	0	3	6	2	0	0	0	0	0	0	0	0	0	0	32.6	34
0500	1	45	1	1	2	1	0	0	0	1	0	0	52	0	0	0	1	0	5	19	20	6	1	0	0	0	0	0	0	0	0	35.3	39.4
0600	0	106	0	5	3	1	0	2	0	2	0	0	119	0	0	0	1	11	23	53	29	2	0	0	0	0	0	0	0	0	0	31.8	36
0700	2	383	2	8	16	0	0	0	0	0	0	0	411	0	0	0	1	6	189	192	17	6	0	0	0	0	0	0	0	0	0	30.5	32.7
0800	1	374	1	8	19	1	0	1	0	3	0	0	408	0	0	0	1	15	185	173	25	6	2	1	0	0	0	0	0	0	0	30.3	33.3
0900	2	198	1	5	13	2	0	0	0	0	0	0	221	0	0	0	0	20	96	90	14	0	1	0	0	0	0	0	0	0	0	29.7	33.1
1000	0	158	2	6	8	1	0	0	0	0	0	0	175	0	1	1	2	15	59	85	12	0	0	0	0	0	0	0	0	0	0	29.9	33.6
1100	2	151	0	8	3	2	0	0	0	2	0	0	168	0	0	0	4	21	64	67	11	1	0	0	0	0	0	0	0	0	0	29.3	33.6
1200	4	115	0	13	0	3	1	0	0	0	0	0	136	0	2	7	14	10	29	51	20	2	1	0	0	0	0	0	0	0	0	28.7	35.3
1300	0	163	2	23	1	2	0	0	1	1	0	0	193	0	0	0	0	22	65	75	26	3	1	0	1	0	0	0	0	0	0	30.6	35.1
1400	4	139	1	11	3	5	0	0	1	2	0	0	166	0	0	0	3	23	50	64	25	1	0	0	0	0	0	0	0	0	0	30.2	34.9
1500	0	179	2	3	7	2	0	1	0	0	0	0	194	0	0	0	2	4	79	85	18	6	0	0	0	0	0	0	0	0	0	30.9	34.2
1600	2	142	0	2	7	0	0	0	0	0	0	0	153	0	0	1	3	8	79	45	13	4	0	0	0	0	0	0	0	0	0	29.8	33.6
1700	3	175	0	1	4	0	0	0	0	0	0	0	183	0	0	0	1	7	70	83	19	3	0	0	0	0	0	0	0	0	0	30.8	34.7
1800	0	130	1	3	1	0	0	0	0	0	0	0	135	0	0	1	1	9	33	79	11	1	0	0	0	0	0	0	0	0	0	30.6	33.8
1900	0	77	0	0	1	1	0	0	0	0	0	0	79	0	0	0	1	2	18	46	10	2	0	0	0	0	0	0	0	0	0	31.5	34.9
2000	0	28	0	0	3	0	0	0	0	2	0	0	33	0	0	0	0	2	5	14	10	1	1	0	0	0	0	0	0	0	0	33.3	37.8
2100	0	24	0	0	1	2	0	0	0	0	0	0	27	0	0	0	0	0	6	10	8	3	0	0	0	0	0	0	0	0	0	33.9	37.4
2200	0	16	0	1	3	0	0	0	0	0	0	0	20	0	0	0	0	3	5	6	1	4	1	0	0	0	0	0	0	0	0	32.2	41.2
2300	0	15	0	1	3	0	0	0	0	0	0	0	19	0	0	1	1	1	1	15	0	0	0	0	0	0	0	0	0	0	0	28.8	32
08-09	1	374	1	8	19	1	0	1	0	3	0	0	408	0	0	0	1	15	185	173	25	6	2	1	0	0	0	0	0	0	0	30.3	33.3
17-18	3	175	0	1	4	0	0	0	0	0	0	0	183	0	0	0	1	7	70	83	19	3	0	0	0	0	0	0	0	0	0	30.8	34.7
10-16	10	905	7	64	22	15	1	1	2	5	0	0	1032	0	3	8	25	95	346	427	112	13	2	0	1	0	0	0	0	0	0	30	34.4
00-05	0	18	0	1	0	1	0	0	0	1	0	0	21	0	0	0	1	0	7	8	2	2	1	0	0	0	0	0	0	0	0	32.9	36.2
00-00	21	2636	13	100	98	24	1	4	2	14	0	0	2913	0	3	11	37	179	1068	1260	291	53	9	1	1	0	0	0	0	0	0	30.5	34.2

YAPTON LANE - WALBERTON — NORTHBOUND

Report Id - CustomList-156
Site Name - Walberton
Description - Yapton Lane
Direction - AB

MODAL
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07 October 2017

Time	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Total	Vbin 0 5	Vbin 5 10	Vbin 10 15	Vbin 15 20	Vbin 20 25	Vbin 25 30	Vbin 30 35	Vbin 35 40	Vbin 40 45	Vbin 45 50	Vbin 50 55	Vbin 55 60	Vbin 60 65	Vbin 65 70	Vbin 70 75	Vbin 75 80	Vbin 80 85	Vbin 85 90	Mean	Vpp 85
0000	0	12	0	0	0	0	0	0	0	0	0	0	12	0	0	0	0	1	0	9	1	1	0	0	0	0	0	0	0	0	0	32.8	34.2
0100	0	3	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	33.4	-
0200	0	1	0	0	1	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	38	-
0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0400	0	5	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	33	-
0500	0	9	0	0	2	0	0	0	0	0	0	0	11	0	0	0	0	0	2	8	1	0	0	0	0	0	0	0	0	0	0	32.9	33.3
0600	0	34	0	1	4	2	0	0	0	0	0	0	41	0	0	0	0	0	3	26	11	1	0	0	0	0	0	0	0	0	0	33.5	36.9
0700	0	98	0	1	9	0	0	0	0	0	0	0	108	0	0	0	0	1	9	75	21	2	0	0	0	0	0	0	0	0	0	33.1	35.6
0800	2	140	0	0	9	8	0	0	0	1	0	0	160	0	0	0	0	9	42	95	11	3	0	0	0	0	0	0	0	0	0	31.1	33.8
0900	3	153	2	0	6	2	0	0	0	1	0	0	167	0	0	1	0	10	80	56	17	1	2	0	0	0	0	0	0	0	0	30.3	34.2
1000	1	144	1	2	4	4	0	0	0	1	0	0	157	0	1	3	4	12	61	67	4	4	0	1	0	0	0	0	0	0	0	29.1	32.2
1100	1	179	1	1	3	2	0	0	0	1	0	0	188	0	0	0	2	20	75	82	7	2	0	0	0	0	0	0	0	0	0	29.6	32.7
1200	2	137	0	2	8	2	0	0	0	1	0	1	153	0	0	1	1	8	49	75	19	0	0	0	0	0	0	0	0	0	0	30.9	34.4
1300	0	136	0	0	8	0	0	0	0	0	0	0	144	0	0	0	1	4	38	76	21	3	1	0	0	0	0	0	0	0	0	31.9	34.9
1400	2	122	0	5	3	1	0	0	0	0	0	0	133	0	0	0	1	7	48	57	19	1	0	0	0	0	0	0	0	0	0	30.7	34.7
1500	2	94	3	1	3	0	0	0	0	0	0	0	103	0	0	0	1	2	38	53	7	2	0	0	0	0	0	0	0	0	0	30.8	33.3
1600	0	113	0	0	1	0	0	0	0	0	0	0	114	0	0	1	3	4	35	56	12	3	0	0	0	0	0	0	0	0	0	31	34.7
1700	1	99	0	0	2	1	0	0	0	0	0	0	103	0	0	0	0	2	39	36	25	1	0	0	0	0	0	0	0	0	0	31.9	36
1800	0	92	0	1	2	0	0	0	0	0	1	0	96	0	0	0	0	3	27	46	18	0	1	1	0	0	0	0	0	0	0	31.9	35.6
1900	0	65	0	0	1	0	0	0	0	0	0	0	66	0	0	0	0	0	19	34	9	2	2	0	0	0	0	0	0	0	0	32.4	35.3
2000	0	26	0	0	0	0	0	0	0	0	0	0	26	0	0	0	0	0	1	15	6	1	3	0	0	0	0	0	0	0	0	35.8	39.4
2100	0	33	0	0	1	0	0	0	0	0	0	0	34	0	0	0	0	0	5	18	8	1	0	0	2	0	0	0	0	0	0	34.9	38.9
2200	0	17	0	0	1	0	0	0	0	0	0	0	18	0	0	0	0	0	0	8	10	0	0	0	0	0	0	0	0	0	0	35.2	37.4
2300	0	14	0	0	3	1	0	0	0	0	0	0	18	0	0	0	0	1	3	6	6	2	0	0	0	0	0	0	0	0	0	34.1	38
08-09	2	140	0	0	9	8	0	0	0	1	0	0	160	0	0	0	0	9	42	95	11	3	0	0	0	0	0	0	0	0	0	31.1	33.8
17-18	1	99	0	0	2	1	0	0	0	0	0	0	103	0	0	0	0	2	39	36	25	1	0	0	0	0	0	0	0	0	0	31.9	36
10-16	8	812	5	11	29	9	0	0	0	3	0	1	878	0	1	4	10	53	309	410	77	12	1	1	0	0	0	0	0	0	0	30.4	34
00-05	0	21	0	0	1	0	0	0	0	0	0	0	22	0	0	0	0	1	0	17	3	1	0	0	0	0	0	0	0	0	0	33.4	35.1
00-00	14	1726	7	14	71	23	0	0	0	5	1	1	1862	0	1	6	13	84	574	906	235	30	9	2	2	0	0	0	0	0	0	31.2	34.9

YAPTON LANE - WALBERTON — NORTHBOUND

Report Id - CustomList-156
Site Name - Walberton
Description - Yapton Lane
Direction - AB

MODAL
modaldata.com

08 October 2017

Time	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Total	Vbin 0 5	Vbin 5 10	Vbin 10 15	Vbin 15 20	Vbin 20 25	Vbin 25 30	Vbin 30 35	Vbin 35 40	Vbin 40 45	Vbin 45 50	Vbin 50 55	Vbin 55 60	Vbin 60 65	Vbin 65 70	Vbin 70 75	Vbin 75 80	Vbin 80 85	Vbin 85 90	Mean	Vpp 85
0000	0	13	0	0	0	0	0	0	0	0	0	0	13	0	0	0	0	0	1	5	4	2	1	0	0	0	0	0	0	0	0	36.5	40.7
0100	0	2	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	28.3	-
0200	0	1	0	0	1	0	0	0	0	0	0	0	2	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	34.8	-
0300	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	33	-
0400	0	3	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	32.7	-
0500	0	6	0	0	1	0	0	0	0	0	0	0	7	0	0	0	0	0	0	3	3	0	1	0	0	0	0	0	0	0	0	37.2	-
0600	0	18	0	1	0	0	0	0	0	0	0	0	19	0	0	0	0	0	7	8	2	1	1	0	0	0	0	0	0	0	0	32.7	35.1
0700	3	52	0	0	4	0	0	0	1	1	0	0	61	0	0	1	0	0	10	29	19	2	0	0	0	0	0	0	0	0	0	32.8	36.5
0800	5	90	0	1	5	1	0	0	0	0	0	0	102	0	1	0	2	3	33	48	11	3	1	0	0	0	0	0	0	0	0	30.8	34.7
0900	3	114	1	1	7	0	0	0	0	0	0	0	126	0	0	3	0	2	27	73	16	5	0	0	0	0	0	0	0	0	0	31.4	35.1
1000	9	147	1	0	4	1	0	1	1	0	0	0	164	0	1	0	2	4	49	87	17	2	1	1	0	0	0	0	0	0	0	31.1	34.2
1100	7	175	1	2	3	1	0	0	0	0	0	0	189	0	0	3	6	6	84	79	9	2	0	0	0	0	0	0	0	0	0	29.6	33.1
1200	10	206	0	0	1	3	0	0	0	0	0	0	220	0	3	4	4	23	82	79	21	4	0	0	0	0	0	0	0	0	0	29.3	34
1300	4	129	0	4	0	0	0	0	0	0	0	0	137	0	0	2	1	5	44	61	19	4	1	0	0	0	0	0	0	0	0	31.2	35.1
1400	2	108	0	5	1	0	0	0	0	0	0	0	116	0	0	0	1	5	33	60	17	0	0	0	0	0	0	0	0	0	0	31.4	34.7
1500	2	86	0	7	2	0	0	0	0	0	0	0	97	0	0	1	2	10	46	28	7	2	0	1	0	0	0	0	0	0	0	29.3	32.2
1600	1	92	1	1	1	0	0	0	0	1	0	0	97	0	0	0	2	18	45	24	7	1	0	0	0	0	0	0	0	0	0	28.5	32.4
1700	1	72	0	1	2	0	0	0	0	0	0	0	76	0	0	1	1	8	32	27	5	1	1	0	0	0	0	0	0	0	0	29.6	33.6
1800	0	44	1	0	2	0	0	0	0	2	0	0	49	0	0	0	1	2	13	28	5	0	0	0	0	0	0	0	0	0	0	31.3	34.7
1900	1	35	0	0	0	1	0	0	0	0	0	0	37	0	0	1	0	2	19	10	3	2	0	0	0	0	0	0	0	0	0	29.5	32.4
2000	0	30	0	0	1	2	0	0	0	0	0	0	33	0	0	0	0	1	9	15	8	0	0	0	0	0	0	0	0	0	0	31.8	36.5
2100	0	16	0	0	0	0	0	0	0	0	0	0	16	0	0	0	0	1	5	4	4	2	0	0	0	0	0	0	0	0	0	32.7	36.7
2200	0	12	0	0	1	1	0	0	0	0	0	0	14	0	0	0	0	0	4	9	0	1	0	0	0	0	0	0	0	0	0	31.2	32.7
2300	0	4	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	1	2	1	0	0	0	0	0	0	0	0	0	0	32.3	-
08-09	5	90	0	1	5	1	0	0	0	0	0	0	102	0	1	0	2	3	33	48	11	3	1	0	0	0	0	0	0	0	0	30.8	34.7
17-18	1	72	0	1	2	0	0	0	0	0	0	0	76	0	0	1	1	8	32	27	5	1	1	0	0	0	0	0	0	0	0	29.6	33.6
10-16	34	851	2	18	11	5	0	1	1	0	0	0	923	0	4	10	16	53	338	394	90	14	2	2	0	0	0	0	0	0	0	30.2	34.2
00-05	0	20	0	0	1	0	0	0	0	0	0	0	21	0	0	0	0	0	2	11	5	2	1	0	0	0	0	0	0	0	0	34.9	38.9
00-00	48	1456	5	23	36	10	0	1	2	4	0	0	1585	0	5	16	22	90	545	685	179	34	7	2	0	0	0	0	0	0	0	30.5	34.7

YAPTON LANE - WALBERTON — NORTHBOUND

Report Id - CustomList-156
Site Name - Walberton
Description - Yapton Lane
Direction - AB

MODAL
modaldata.com

09 October 2017

Time	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Total	Vbin 0 5	Vbin 5 10	Vbin 10 15	Vbin 15 20	Vbin 20 25	Vbin 25 30	Vbin 30 35	Vbin 35 40	Vbin 40 45	Vbin 45 50	Vbin 50 55	Vbin 55 60	Vbin 60 65	Vbin 65 70	Vbin 70 75	Vbin 75 80	Vbin 80 85	Vbin 85 90	Mean	Vpp 85
0000	0	3	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	36.6	-
0100	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	36.7	-
0200	0	3	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	37.3	-
0300	0	2	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	43.8	-
0400	0	8	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	0	1	1	4	1	1	0	0	0	0	0	0	0	0	37.4	-
0500	1	41	0	0	6	2	0	0	0	0	0	0	50	0	0	0	0	1	4	19	19	7	0	0	0	0	0	0	0	0	0	35	39.6
0600	0	107	0	1	8	4	0	0	0	0	0	0	120	0	0	0	0	2	25	62	26	3	2	0	0	0	0	0	0	0	0	32.6	36.2
0700	3	360	2	11	9	2	0	2	2	0	0	0	391	0	2	20	28	45	151	129	14	2	0	0	0	0	0	0	0	0	0	27.3	32.4
0800	3	344	1	5	16	6	0	0	0	3	0	0	378	0	0	1	1	42	188	127	16	3	0	0	0	0	0	0	0	0	0	29.2	32.4
0900	1	223	0	2	11	3	0	0	0	1	0	0	241	0	0	1	6	12	103	96	22	1	0	0	0	0	0	0	0	0	0	29.7	33.8
1000	0	135	0	2	8	4	0	0	0	0	0	0	149	0	0	0	1	8	73	50	16	1	0	0	0	0	0	0	0	0	0	29.9	32.9
1100	1	116	0	7	8	6	0	0	0	1	0	0	139	0	1	1	1	26	66	40	4	0	0	0	0	0	0	0	0	0	0	28	32.2
1200	2	106	1	5	5	4	0	0	0	2	0	0	125	0	0	0	3	9	50	55	8	0	0	0	0	0	0	0	0	0	0	29.7	33.6
1300	0	119	0	4	6	6	0	0	1	3	0	0	139	0	0	1	9	23	53	41	8	0	0	2	0	1	1	0	0	0	0	29.1	33.3
1400	4	122	0	4	7	6	0	0	0	1	0	0	144	0	0	1	8	27	51	43	12	1	1	0	0	0	0	0	0	0	0	28.4	32.4
1500	0	120	1	4	6	3	0	1	0	1	0	1	137	0	0	1	4	14	55	53	9	1	0	0	0	0	0	0	0	0	0	29.1	32.9
1600	0	164	3	4	1	1	0	0	1	0	0	0	174	0	6	19	29	38	36	33	11	1	1	0	0	0	0	0	0	0	0	24.1	32
1700	0	157	0	3	2	1	0	0	0	0	0	0	163	1	7	45	43	27	21	13	5	1	0	0	0	0	0	0	0	0	0	19.7	28.9
1800	0	88	0	4	2	1	0	1	0	2	0	0	98	0	4	5	12	19	32	20	5	1	0	0	0	0	0	0	0	0	0	25.3	32.2
1900	0	65	0	3	1	0	0	0	1	2	0	0	72	0	0	0	5	9	25	24	8	0	1	0	0	0	0	0	0	0	0	29.3	33.3
2000	0	35	0	4	1	1	0	0	1	2	0	0	44	0	1	1	7	5	9	12	7	0	2	0	0	0	0	0	0	0	0	28.1	35.1
2100	0	16	0	1	3	0	0	0	0	1	0	0	21	0	1	0	2	2	6	7	3	0	0	0	0	0	0	0	0	0	0	27.8	34
2200	0	7	0	0	0	0	0	0	0	0	0	0	7	0	0	0	1	1	1	2	2	0	0	0	0	0	0	0	0	0	0	29.7	-
2300	0	5	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	1	0	2	2	0	0	0	0	0	0	0	0	0	0	32	-
08-09	3	344	1	5	16	6	0	0	0	3	0	0	378	0	0	1	1	42	188	127	16	3	0	0	0	0	0	0	0	0	0	29.2	32.4
17-18	0	157	0	3	2	1	0	0	0	0	0	0	163	1	7	45	43	27	21	13	5	1	0	0	0	0	0	0	0	0	0	19.7	28.9
10-16	7	718	2	26	40	29	0	1	1	8	0	1	833	0	1	4	26	107	348	282	57	3	1	2	0	1	1	0	0	0	0	29	32.9
00-05	0	17	0	0	0	0	0	0	0	0	0	0	17	0	0	0	0	0	1	2	11	1	1	1	0	0	0	0	0	0	0	38	39.4
00-00	15	2347	8	64	100	50	0	4	6	19	0	1	2614	1	22	96	160	311	950	830	208	23	8	3	0	1	1	0	0	0	0	28.1	33.3

YAPTON LANE - WALBERTON — NORTHBOUND

Report Id - CustomList-156
Site Name - Walberton
Description - Yapton Lane
Direction - AB

MODAL
modaldata.com

10 October 2017

Time	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Total	Vbin 0 5	Vbin 5 10	Vbin 10 15	Vbin 15 20	Vbin 20 25	Vbin 25 30	Vbin 30 35	Vbin 35 40	Vbin 40 45	Vbin 45 50	Vbin 50 55	Vbin 55 60	Vbin 60 65	Vbin 65 70	Vbin 70 75	Vbin 75 80	Vbin 80 85	Vbin 85 90	Mean	Vpp 85
0000	0	5	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	1	2	2	0	0	0	0	0	0	0	0	43.5	-
0100	0	2	0	0	1	0	0	0	0	0	0	0	3	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	37.3	-
0200	0	0	0	1	1	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	33.3	-
0300	0	1	0	0	1	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	31.6	-
0400	0	5	0	0	0	0	0	0	0	0	0	0	5	0	0	1	0	0	0	1	2	1	0	0	0	0	0	0	0	0	0	33	-
0500	0	47	0	2	4	0	0	0	0	1	0	0	54	0	0	0	0	1	2	14	27	7	3	0	0	0	0	0	0	0	0	37	40.7
0600	1	116	0	5	10	3	0	0	0	0	0	0	135	0	0	0	0	0	26	70	37	2	0	0	0	0	0	0	0	0	0	32.9	36.2
0700	2	359	1	1	14	8	0	0	1	1	0	0	387	0	0	0	3	40	192	140	9	2	1	0	0	0	0	0	0	0	0	28.9	31.8
0800	5	433	1	3	18	8	0	0	1	0	0	0	469	0	0	0	9	72	245	125	17	0	0	0	1	0	0	0	0	0	0	28.4	31.3
0900	1	211	1	4	7	3	0	0	1	2	0	0	230	0	0	1	2	23	126	65	12	1	0	0	0	0	0	0	0	0	0	29	32
1000	0	148	0	9	8	4	0	0	2	0	0	0	171	0	1	0	2	12	76	62	16	1	0	1	0	0	0	0	0	0	0	29.9	33.8
1100	0	133	1	0	4	4	0	1	1	1	0	0	145	0	0	0	1	9	71	49	14	0	0	1	0	0	0	0	0	0	0	30.1	33.6
1200	1	125	2	3	5	6	0	0	0	1	0	0	143	0	0	1	5	21	61	42	11	2	0	0	0	0	0	0	0	0	0	28.6	32.9
1300	2	102	1	9	4	1	0	0	1	1	0	0	121	0	0	3	4	10	38	56	10	0	0	0	0	0	0	0	0	0	0	29.5	33.3
1400	2	124	0	4	4	2	0	0	0	1	0	0	137	0	0	1	1	15	49	61	9	1	0	0	0	0	0	0	0	0	0	30	34.2
1500	1	142	3	5	5	4	0	0	0	1	0	0	161	0	0	0	3	18	73	54	10	2	1	0	0	0	0	0	0	0	0	29.4	32.9
1600	0	164	1	4	6	1	0	1	0	1	0	0	178	1	0	0	5	12	81	64	13	2	0	0	0	0	0	0	0	0	0	29.7	33.8
1700	2	144	1	2	5	2	0	0	1	0	0	0	157	0	0	0	4	9	54	66	22	2	0	0	0	0	0	0	0	0	0	30.8	34.9
1800	0	98	1	1	2	1	0	0	0	1	0	0	104	0	0	1	5	3	41	50	4	0	0	0	0	0	0	0	0	0	0	29.3	32.7
1900	0	58	0	1	4	0	0	0	0	1	0	0	64	0	0	0	1	6	14	33	8	1	1	0	0	0	0	0	0	0	0	31.6	34.2
2000	1	40	0	0	0	2	0	0	0	1	0	0	44	0	0	0	0	0	17	11	14	2	0	0	0	0	0	0	0	0	0	32.2	36.5
2100	0	21	0	0	0	1	0	0	0	0	0	0	22	0	0	0	0	2	4	9	6	1	0	0	0	0	0	0	0	0	0	33	37.8
2200	0	16	0	0	1	0	0	0	0	0	0	0	17	0	0	0	0	0	1	5	10	1	0	0	0	0	0	0	0	0	0	36.2	38.9
2300	0	6	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	2	4	0	0	0	0	0	0	0	0	0	0	0	30.2	-
08-09	5	433	1	3	18	8	0	0	1	0	0	0	469	0	0	0	9	72	245	125	17	0	0	0	1	0	0	0	0	0	0	28.4	31.3
17-18	2	144	1	2	5	2	0	0	1	0	0	0	157	0	0	0	4	9	54	66	22	2	0	0	0	0	0	0	0	0	0	30.8	34.9
10-16	6	774	7	30	30	21	0	1	4	5	0	0	878	0	1	5	16	85	368	324	70	6	1	2	0	0	0	0	0	0	0	29.6	33.6
00-05	0	13	0	1	3	0	0	0	0	0	0	0	17	0	0	1	0	0	0	6	4	4	2	0	0	0	0	0	0	0	0	36.7	41.6
00-00	18	2500	13	54	104	50	0	2	8	13	0	0	2762	1	1	8	45	253	1173	986	253	31	8	2	1	0	0	0	0	0	0	29.8	34

YAPTON LANE - WALBERTON — NORTHBOUND

Report Id - CustomList-156
Site Name - Walberton
Description - Yapton Lane
Direction - AB

11 October 2017

MODAL
modaldata.com

Time	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Total	Vbin 0 5	Vbin 5 10	Vbin 10 15	Vbin 15 20	Vbin 20 25	Vbin 25 30	Vbin 30 35	Vbin 35 40	Vbin 40 45	Vbin 45 50	Vbin 50 55	Vbin 55 60	Vbin 60 65	Vbin 65 70	Vbin 70 75	Vbin 75 80	Vbin 80 85	Vbin 85 90	Mean	Vpp 85
0000	0	2	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	43.4	-
0100	0	2	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	34	-
0200	0	2	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	34	-
0300	0	2	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	34	-
0400	0	13	0	0	1	0	0	0	0	1	0	0	15	0	0	0	0	0	3	11	1	0	0	0	0	0	0	0	0	0	0	31.8	33.6
0500	0	53	0	0	0	0	0	0	0	0	0	0	53	0	0	0	0	0	0	24	24	3	2	0	0	0	0	0	0	0	0	36.3	38
0600	0	114	0	3	5	2	0	0	0	0	0	0	124	0	0	0	3	8	31	56	23	2	1	0	0	0	0	0	0	0	0	31.5	35.8
0700	2	364	1	5	9	7	0	0	0	3	0	0	391	0	0	0	7	42	219	108	9	3	2	1	0	0	0	0	0	0	0	28.7	31.8
0800	0	428	4	8	13	4	0	0	1	0	0	0	458	0	0	1	11	60	256	122	8	0	0	0	0	0	0	0	0	0	0	28.2	31.1
0900	3	201	1	8	12	5	0	0	1	0	0	0	231	0	1	2	7	22	88	103	7	1	0	0	0	0	0	0	0	0	0	29	32.2
1000	2	125	0	5	6	5	0	0	0	2	0	0	145	0	1	5	7	16	58	49	9	0	0	0	0	0	0	0	0	0	0	28.3	32.9
1100	0	140	1	9	2	2	0	0	0	0	0	0	154	0	2	1	7	18	54	57	12	2	1	0	0	0	0	0	0	0	0	29	33.8
1200	1	139	3	11	4	3	1	0	0	0	0	0	162	0	0	0	0	18	68	59	13	3	1	0	0	0	0	0	0	0	0	30	34.2
1300	1	126	2	12	2	2	0	1	1	3	0	0	150	0	0	3	9	16	56	50	13	2	1	0	0	0	0	0	0	0	0	28.9	33.3
1400	1	111	0	8	4	1	0	0	1	2	0	0	128	0	1	0	3	19	42	48	11	4	0	0	0	0	0	0	0	0	0	29.5	33.6
1500	2	162	0	11	2	0	0	0	1	0	0	0	178	0	0	0	1	18	79	65	14	1	0	0	0	0	0	0	0	0	0	29.6	32.9
1600	0	155	0	8	6	0	0	0	1	0	1	0	171	0	0	2	5	2	55	81	23	2	0	1	0	0	0	0	0	0	0	30.9	34.7
1700	1	172	1	3	4	1	0	0	1	0	0	0	183	0	0	0	4	9	72	75	22	1	0	0	0	0	0	0	0	0	0	30.4	34.2
1800	0	110	1	1	2	0	0	0	0	0	0	0	114	0	0	0	1	9	24	65	11	3	1	0	0	0	0	0	0	0	0	31.5	34.4
1900	0	64	0	0	0	1	0	0	0	0	0	0	65	0	0	0	0	10	26	23	5	1	0	0	0	0	0	0	0	0	0	29.6	33.3
2000	1	50	0	0	0	0	0	0	0	0	0	0	51	0	0	0	0	7	21	15	8	0	0	0	0	0	0	0	0	0	0	29.6	33.8
2100	0	30	0	0	0	0	0	0	0	0	0	0	30	0	0	0	1	1	9	14	3	2	0	0	0	0	0	0	0	0	0	31.1	35.8
2200	0	21	0	0	0	0	0	0	0	0	0	0	21	0	0	1	2	4	5	6	3	0	0	0	0	0	0	0	0	0	0	28	34.2
2300	0	6	0	0	2	0	0	0	0	0	0	0	8	0	0	0	0	0	2	5	0	0	1	0	0	0	0	0	0	0	0	32.7	-
08-09	0	428	4	8	13	4	0	0	1	0	0	0	458	0	0	1	11	60	256	122	8	0	0	0	0	0	0	0	0	0	0	28.2	31.1
17-18	1	172	1	3	4	1	0	0	1	0	0	0	183	0	0	0	4	9	72	75	22	1	0	0	0	0	0	0	0	0	0	30.4	34.2
10-16	7	803	6	56	20	13	1	1	3	7	0	0	917	0	4	9	27	105	357	328	72	12	3	0	0	0	0	0	0	0	0	29.2	33.6
00-05	0	21	0	0	1	0	0	0	0	1	0	0	23	0	0	0	0	0	3	16	3	0	1	0	0	0	0	0	0	0	0	33.4	35.3
00-00	14	2592	14	92	74	33	1	1	7	11	1	0	2840	0	5	15	68	279	1168	1041	221	30	11	2	0	0	0	0	0	0	0	29.5	33.6

YAPTON LANE - WALBERTON — NORTHBOUND

Report Id - CustomList-156
Site Name - Walberton
Description - Yapton Lane
Direction - AB

MODAL
modaldata.com

12 October 2017

Time	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Total	Vbin 0 5	Vbin 5 10	Vbin 10 15	Vbin 15 20	Vbin 20 25	Vbin 25 30	Vbin 30 35	Vbin 35 40	Vbin 40 45	Vbin 45 50	Vbin 50 55	Vbin 55 60	Vbin 60 65	Vbin 65 70	Vbin 70 75	Vbin 75 80	Vbin 80 85	Vbin 85 90	Mean	Vpp 85
0000	0	2	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	41	-
0100	0	3	0	0	1	0	0	0	0	0	0	0	4	0	0	0	0	0	1	3	0	0	0	0	0	0	0	0	0	0	0	30.9	-
0200	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	31.9	-
0300	0	2	0	1	0	0	0	0	0	0	0	0	3	0	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	30.6	-
0400	0	10	0	0	0	0	0	0	0	0	0	0	10	0	0	0	0	1	1	1	6	1	0	0	0	0	0	0	0	0	0	35.4	-
0500	0	56	0	1	2	1	0	0	1	0	0	0	61	0	0	0	0	1	7	17	28	6	0	2	0	0	0	0	0	0	0	35.4	39.8
0600	0	133	0	3	8	1	0	0	0	0	0	0	145	0	0	0	0	1	35	89	17	1	2	0	0	0	0	0	0	0	0	32.1	34.7
0700	3	341	0	4	17	6	0	0	0	4	0	0	375	0	0	0	1	39	213	111	11	0	0	0	0	0	0	0	0	0	0	28.7	31.5
0800	3	406	1	4	30	8	0	0	1	1	0	0	454	0	0	1	8	55	218	159	12	1	0	0	0	0	0	0	0	0	0	28.6	32
0900	4	218	1	6	12	10	0	0	0	0	0	0	251	0	1	5	2	19	104	101	18	1	0	0	0	0	0	0	0	0	0	29.4	33.3
1000	0	141	0	8	5	7	0	0	0	0	0	0	161	0	0	1	3	18	70	54	13	2	0	0	0	0	0	0	0	0	0	29.4	32.7
1100	1	181	2	23	3	5	0	0	0	2	0	0	217	0	1	0	10	18	93	76	18	1	0	0	0	0	0	0	0	0	0	29.2	33.6
1200	2	144	2	7	2	1	0	0	0	0	0	0	158	0	0	0	0	13	44	78	18	5	0	0	0	0	0	0	0	0	0	31.2	34.7
1300	1	122	3	16	2	1	0	0	1	1	0	0	147	0	0	0	3	10	56	51	26	1	0	0	0	0	0	0	0	0	0	30.6	35.6
1400	2	137	1	19	5	1	1	1	0	2	0	0	169	0	0	2	0	16	53	70	23	4	0	1	0	0	0	0	0	0	0	30.8	35.3
1500	1	162	2	13	6	1	0	0	1	0	0	0	186	0	0	0	2	13	65	77	28	1	0	0	0	0	0	0	0	0	0	30.6	35.3
1600	3	170	0	7	0	0	0	0	1	0	0	0	181	0	0	1	0	15	75	62	25	3	0	0	0	0	0	0	0	0	0	30.4	34.9
1700	3	172	1	2	6	1	1	0	0	0	1	0	187	0	0	1	2	12	61	87	23	1	0	0	0	0	0	0	0	0	0	30.6	34.4
1800	1	103	0	0	8	3	0	0	0	0	0	0	115	0	0	0	1	3	36	54	17	2	2	0	0	0	0	0	0	0	0	31.7	35.1
1900	2	67	0	0	5	1	0	0	0	1	0	0	76	0	1	0	0	1	34	31	8	0	1	0	0	0	0	0	0	0	0	30.6	33.8
2000	2	37	0	0	3	1	0	0	0	0	0	0	43	0	0	0	0	2	15	15	9	1	1	0	0	0	0	0	0	0	0	32.3	36.2
2100	0	25	0	0	1	1	0	0	0	0	0	0	27	0	0	0	0	1	2	11	13	0	0	0	0	0	0	0	0	0	0	33.7	36
2200	0	13	0	0	2	0	0	0	0	0	0	0	15	0	0	0	0	0	1	9	4	1	0	0	0	0	0	0	0	0	0	35	36.5
2300	0	4	0	0	0	0	0	0	0	1	0	0	5	0	0	0	0	0	0	3	2	0	0	0	0	0	0	0	0	0	0	35.3	-
08-09	3	406	1	4	30	8	0	0	1	1	0	0	454	0	0	1	8	55	218	159	12	1	0	0	0	0	0	0	0	0	0	28.6	32
17-18	3	172	1	2	6	1	1	0	0	0	1	0	187	0	0	1	2	12	61	87	23	1	0	0	0	0	0	0	0	0	0	30.6	34.4
10-16	7	887	10	86	23	16	1	1	2	5	0	0	1038	0	1	3	18	88	381	406	126	14	0	1	0	0	0	0	0	0	0	30.3	34.4
00-05	0	18	0	1	1	0	0	0	0	0	0	0	20	0	0	0	0	1	3	8	6	1	0	1	0	0	0	0	0	0	0	34.1	38.7
00-00	28	2650	13	114	118	49	2	1	5	12	1	0	2993	0	3	11	32	238	1185	1163	319	32	6	4	0	0	0	0	0	0	0	30.1	34.2

YAPTON LANE - WALBERTON — NORTHBOUND

Report Id - CustomList-156
Site Name - Walberton
Description - Yapton Lane
Direction - AB

Grand Total

Time	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Total	Vbin 0 5	Vbin 5 10	Vbin 10 15	Vbin 15 20	Vbin 20 25	Vbin 25 30	Vbin 30 35	Vbin 35 40	Vbin 40 45	Vbin 45 50	Vbin 50 55	Vbin 55 60	Vbin 60 65	Vbin 65 70	Vbin 70 75	Vbin 75 80	Vbin 80 85	Vbin 85 90	Mean	Vpp 85
--	158	15907	73	461	601	239	4	13	30	78	3	2	17569	2	40	163	377	1434	6663	6871	1706	233	58	16	4	1	1	0	0	0	0	29.9	34.2

YAPTON LANE - WALBERTON SOUTHBOUND

Globals

Report Id	CustomList-156
Descriptor	Modal Dir2_(modified)
Created by	MetroCount Traffic Executive
Creation Time (UTC)	2017-10-16T08:11:42
Legal	Copyright (c)1997 - 2014 MetroCount
Graphic	header.bmp
Language	English
Country	United Kingdom
Time	UTC + 60 min
Create Version	4.0.6.0
Metric	Part metric
Speed Unit	mph
Length Unit	metre
Mass Unit	tonne

Dataset

Site Name	**Walberton**
Site Attribute	[+51.477222 +0.000000]
File Name	S:\RGPL-012 Modal Data Limited\MetroCount\MTE 4.06\Data\Walberton2 0 2017-10-16 0902.EC0
File Type	Plus
Algorithm	Factory default axle
Description	**Yapton Lane**
Lane	0
Direction	7
Direction Text	7 - North bound A]B, South bound B]A.
Layout Text	Axle sensors - Paired (Class/Speed/Count)
Setup Time	2017-10-04T14:11:10
Start Time	2017-10-04T14:11:10
Finish Time	2017-10-16T09:02:10
Operator	MV
Configuration	00000000 80 00 14 6a 6a 00 00 00 00 00 , Standard

Profile

Name	Default Profile
Title	MetroCount Traffic Executive
Graphic Logo	
Header	
Footer	
Percentile 1	85
Percentile 2	95
Pace	10
Filter Start	2017-10-06T00:00:00
Filter End	2017-10-13T00:00:00
Class Scheme	ARX
Low Speed	0
High Speed	90
Posted Limit	**30**
Speed Limits	
Separation	0.000
Separation Type	Headway
Direction	BA
Encoded Direction	15

YAPTON LANE - WALBERTON — SOUTHBOUND

Report Id - CustomList-156
Site Name - Walberton
Description - Yapton Lane
Direction - BA

MODAL
modaldata.com

06 October 2017

Time	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Total	Vbin 0 5	Vbin 5 10	Vbin 10 15	Vbin 15 20	Vbin 20 25	Vbin 25 30	Vbin 30 35	Vbin 35 40	Vbin 40 45	Vbin 45 50	Vbin 50 55	Vbin 55 60	Vbin 60 65	Vbin 65 70	Vbin 70 75	Vbin 75 80	Vbin 80 85	Vbin 85 90	Mean	Vpp 85
0000	0	11	0	1	0	0	0	0	0	0	0	0	12	0	0	0	0	0	1	3	3	3	2	0	0	0	0	0	0	0	0	38.2	44.5
0100	0	4	0	0	0	0	1	0	0	0	0	0	5	0	0	0	0	0	0	4	0	1	0	0	0	0	0	0	0	0	0	33.6	-
0200	0	3	0	1	0	0	0	0	0	0	0	0	4	0	0	0	0	0	1	0	0	1	2	0	0	0	0	0	0	0	0	42.3	-
0300	0	2	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	38.7	-
0400	0	7	0	0	0	0	0	0	0	1	0	0	8	0	0	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0	42.2	-
0500	0	6	0	2	0	0	0	0	0	0	0	0	8	0	0	0	0	0	2	0	1	0	2	3	0	0	0	0	0	0	0	43.5	-
0600	1	73	1	6	0	0	0	0	0	2	0	0	83	0	0	0	1	2	7	41	17	8	4	3	0	0	0	0	0	0	0	34.6	40.7
0700	1	302	1	15	1	0	0	1	2	1	0	0	324	0	0	0	0	8	61	160	71	24	0	0	0	0	0	0	0	0	0	33.3	37.8
0800	1	262	0	10	3	0	0	0	0	0	0	0	276	0	0	0	0	1	28	142	65	33	6	1	0	0	0	0	0	0	0	34.9	39.8
0900	0	209	1	18	1	1	0	0	0	0	0	0	230	0	0	1	1	1	26	94	83	19	5	0	0	0	0	0	0	0	0	34.8	39.1
1000	0	182	2	35	1	2	0	1	0	1	0	0	224	0	0	0	1	3	44	95	62	17	2	0	0	0	0	0	0	0	0	33.6	38.5
1100	1	164	1	19	3	4	0	0	3	0	0	0	195	0	0	0	0	3	35	79	56	17	5	0	0	0	0	0	0	0	0	34.2	38.5
1200	6	147	3	26	3	1	1	0	0	1	0	0	188	0	0	0	2	4	21	83	53	19	3	2	0	0	1	0	0	0	0	34.7	39.1
1300	4	172	4	29	8	3	0	0	1	2	0	0	223	0	0	1	1	6	40	93	53	22	6	1	0	0	0	0	0	0	0	34	39.4
1400	3	202	4	25	5	2	0	1	1	5	0	0	248	0	0	0	0	3	35	114	59	25	10	1	1	0	0	0	0	0	0	34.4	39.8
1500	2	277	3	38	2	3	1	0	3	0	0	0	329	0	0	0	1	2	82	140	72	27	5	0	0	0	0	0	0	0	0	33.4	38.5
1600	2	371	1	32	5	2	1	0	1	2	1	0	418	0	0	3	1	19	89	162	96	38	8	2	0	0	0	0	0	0	0	33.2	38.9
1700	4	397	1	29	3	0	0	1	0	1	0	0	436	0	0	0	2	22	82	166	114	39	7	3	1	0	0	0	0	0	0	33.7	38.7
1800	1	273	0	9	3	1	0	0	0	2	0	1	290	0	1	0	1	5	30	134	89	28	2	0	0	0	0	0	0	0	0	34.2	38.7
1900	3	145	0	6	0	1	0	0	2	0	0	0	157	0	0	0	2	5	22	57	41	20	8	2	0	0	0	0	0	0	0	35.1	40.7
2000	0	70	0	2	0	0	1	0	0	2	0	0	75	0	0	0	0	0	2	23	24	19	6	1	0	0	0	0	0	0	0	37.7	42.1
2100	0	52	0	4	0	0	0	0	0	0	0	0	56	0	0	0	0	0	5	16	18	12	3	2	0	0	0	0	0	0	0	37.2	41.4
2200	2	39	0	2	0	0	0	0	0	0	0	0	43	0	0	0	0	3	1	13	13	7	3	2	0	0	1	0	0	0	0	37.4	43.8
2300	1	39	0	7	0	1	0	0	0	0	0	0	48	0	1	1	4	2	13	8	14	5	0	0	0	0	0	0	0	0	0	30.9	38.7
08-09	1	262	0	10	3	0	0	0	0	0	0	0	276	0	0	0	0	1	28	142	65	33	6	1	0	0	0	0	0	0	0	34.9	39.8
17-18	4	397	1	29	3	0	0	1	0	1	0	0	436	0	0	0	2	22	82	166	114	39	7	3	1	0	0	0	0	0	0	33.7	38.7
10-16	16	1144	17	172	22	15	2	2	8	9	0	0	1407	0	0	1	5	21	257	604	355	127	31	4	1	0	1	0	0	0	0	34	38.9
00-05	0	27	0	2	0	0	1	0	0	1	0	0	31	0	0	0	0	0	2	8	3	13	5	0	0	0	0	0	0	0	0	39	44.5
00-00	32	3409	22	316	38	21	5	4	13	20	1	1	3882	0	2	6	17	89	627	1628	1004	392	90	23	2	0	2	0	0	0	0	34.2	39.4

YAPTON LANE - WALBERTON — SOUTHBOUND

Report Id - CustomList-156
Site Name - Walberton
Description - Yapton Lane
Direction - BA

07 October 2017

MODAL
modaldata.com

Time	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Total	Vbin 0 5	Vbin 5 10	Vbin 10 15	Vbin 15 20	Vbin 20 25	Vbin 25 30	Vbin 30 35	Vbin 35 40	Vbin 40 45	Vbin 45 50	Vbin 50 55	Vbin 55 60	Vbin 60 65	Vbin 65 70	Vbin 70 75	Vbin 75 80	Vbin 80 85	Vbin 85 90	Mean	Vpp 85
0000	0	25	0	0	0	0	0	0	0	0	0	0	25	0	0	0	0	1	1	3	7	8	3	2	0	0	0	0	0	0	0	39.4	45
0100	0	7	0	0	1	0	1	0	0	0	0	0	9	0	0	0	0	0	0	3	1	4	0	1	0	0	0	0	0	0	0	40.1	-
0200	0	5	0	2	0	0	0	0	0	0	0	0	7	0	0	0	0	0	1	5	0	0	1	0	0	0	0	0	0	0	0	34.3	-
0300	0	1	0	1	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	40.1	-
0400	0	6	0	1	0	0	0	0	1	2	0	0	10	0	0	0	0	0	0	3	5	2	0	0	0	0	0	0	0	0	0	37	-
0500	0	13	0	4	0	0	0	0	0	1	0	0	18	0	0	0	0	0	1	3	10	3	1	0	0	0	0	0	0	0	0	37.5	40.3
0600	1	29	1	5	0	0	0	0	0	1	0	0	37	0	0	0	1	1	3	5	15	8	4	0	0	0	0	0	0	0	0	37.2	42.3
0700	0	95	1	9	0	0	0	0	0	0	0	0	105	0	0	0	0	2	4	26	49	21	1	2	0	0	0	0	0	0	0	37	40.7
0800	1	136	1	7	0	0	0	0	0	1	0	0	146	0	0	1	1	3	20	57	50	11	2	0	0	1	0	0	0	0	0	34.2	38.3
0900	0	149	0	10	0	0	0	1	0	0	0	0	160	0	0	2	2	1	13	60	64	14	4	0	0	0	0	0	0	0	0	35	39.6
1000	1	174	2	10	2	0	1	0	0	0	0	0	190	0	1	0	0	4	35	94	44	10	2	0	0	0	0	0	0	0	0	33.1	37.4
1100	0	209	0	15	1	0	0	0	2	2	0	0	229	0	0	0	2	8	51	88	57	19	4	0	0	0	0	0	0	0	0	33.2	38.3
1200	1	201	2	12	0	0	0	0	0	0	0	0	216	0	0	1	2	2	25	105	53	21	5	2	0	0	0	0	0	0	0	34.3	39.4
1300	0	179	0	8	1	0	0	0	2	0	0	0	190	0	0	0	0	1	15	82	50	29	13	0	0	0	0	0	0	0	0	36	41.6
1400	1	156	0	13	0	0	0	0	1	0	0	0	171	0	0	1	0	3	26	54	53	25	8	1	0	0	0	0	0	0	0	35.3	40.5
1500	0	190	2	9	0	1	1	0	0	0	0	0	203	0	0	1	0	3	25	77	66	24	5	2	0	0	0	0	0	0	0	35	39.8
1600	2	166	2	6	0	0	0	0	0	0	0	0	176	0	0	0	1	3	37	61	40	20	11	3	0	0	0	0	0	0	0	34.6	41.2
1700	0	212	0	1	0	0	0	1	0	1	0	0	215	0	0	1	2	7	40	70	60	22	10	2	1	0	0	0	0	0	0	34.4	40.3
1800	0	151	0	4	0	0	0	0	0	0	0	0	155	0	0	0	0	2	24	56	42	21	8	2	0	0	0	0	0	0	0	35.4	40.9
1900	0	107	0	5	0	0	0	0	0	0	0	0	112	0	0	0	1	1	9	26	42	21	9	3	0	0	0	0	0	0	0	37.3	44.1
2000	0	55	0	2	1	0	0	0	0	1	0	0	59	0	0	0	0	0	3	13	16	17	5	3	1	0	0	1	0	0	0	39.8	48.3
2100	1	61	0	1	0	0	0	0	0	0	0	0	63	0	0	0	0	1	3	21	20	11	6	1	0	0	0	0	0	0	0	37.1	42.3
2200	2	59	0	4	0	0	0	0	0	0	0	0	65	0	0	0	0	0	7	28	16	11	2	1	0	0	0	0	0	0	0	35.7	41.6
2300	0	37	0	0	0	0	0	0	0	0	0	0	37	0	0	0	0	0	6	9	6	7	7	2	0	0	0	0	0	0	0	37.9	45.4
08-09	1	136	1	7	0	0	0	0	0	1	0	0	146	0	0	1	1	3	20	57	50	11	2	0	0	1	0	0	0	0	0	34.2	38.3
17-18	0	212	0	1	0	0	0	1	0	1	0	0	215	0	0	1	2	7	40	70	60	22	10	2	1	0	0	0	0	0	0	34.4	40.3
10-16	3	1109	6	67	4	1	2	0	5	2	0	0	1199	0	1	3	4	21	177	500	323	128	37	5	0	0	0	0	0	0	0	34.4	39.6
00-05	0	44	0	4	1	0	1	0	1	2	0	0	53	0	0	0	0	1	2	14	14	15	4	3	0	0	0	0	0	0	0	38.4	43.8
00-00	10	2423	11	129	6	1	3	2	6	9	0	0	2600	0	1	7	12	43	349	949	767	330	111	27	2	1	0	1	0	0	0	35.1	40.7

YAPTON LANE - WALBERTON — SOUTHBOUND

Report Id - CustomList-156
Site Name - Walberton
Description - Yapton Lane
Direction - BA

08 October 2017

MODAL
modaldata.com

Time	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Total	Vbin 0 5	Vbin 5 10	Vbin 10 15	Vbin 15 20	Vbin 20 25	Vbin 25 30	Vbin 30 35	Vbin 35 40	Vbin 40 45	Vbin 45 50	Vbin 50 55	Vbin 55 60	Vbin 60 65	Vbin 65 70	Vbin 70 75	Vbin 75 80	Vbin 80 85	Vbin 85 90	Mean	Vpp 85
0000	0	23	0	1	0	0	0	0	0	0	0	0	24	0	0	0	0	0	1	5	8	9	1	0	0	0	0	0	0	0	0	38.1	42.3
0100	0	10	0	0	0	0	0	0	0	0	0	0	10	0	0	0	0	0	2	3	2	1	1	0	1	0	0	0	0	0	0	38	-
0200	0	3	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0	39	-
0300	0	1	0	1	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	40.7	-
0400	0	3	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	42.8	-
0500	0	3	0	3	0	0	0	0	0	0	0	0	6	0	0	0	0	0	2	0	2	0	0	2	0	0	0	0	0	0	0	38.4	-
0600	0	11	0	5	0	0	0	0	0	0	0	0	16	0	0	0	0	0	2	6	6	2	0	0	0	0	0	0	0	0	0	35	37.8
0700	1	45	0	6	1	0	0	0	0	0	0	0	53	0	0	0	0	2	6	6	27	7	4	1	0	0	0	0	0	0	0	37	41.6
0800	1	85	0	4	0	1	0	0	0	0	0	0	91	0	0	1	1	4	5	21	45	11	3	0	0	0	0	0	0	0	0	35.4	39.8
0900	0	116	0	4	0	0	0	0	0	1	0	0	121	0	0	1	0	1	14	48	35	16	6	0	0	0	0	0	0	0	0	35.2	40.5
1000	0	146	0	4	0	0	0	1	2	1	0	0	154	0	0	0	0	3	26	63	48	12	1	1	0	0	0	0	0	0	0	33.9	38
1100	1	153	0	2	0	1	0	0	0	0	0	0	157	0	0	1	1	1	22	50	51	24	7	0	0	0	0	0	0	0	0	35.4	40.9
1200	2	146	1	4	1	0	0	1	0	0	0	0	155	0	0	1	1	4	26	59	45	16	3	0	0	0	0	0	0	0	0	33.9	39.4
1300	7	144	0	10	0	1	0	0	1	0	0	0	163	0	0	1	3	2	17	54	51	28	4	3	0	0	0	0	0	0	0	35.4	41.6
1400	7	153	0	10	0	1	0	0	1	0	0	0	172	0	0	2	1	2	25	77	44	15	5	1	0	0	0	0	0	0	0	34.2	39.4
1500	10	204	2	10	0	0	0	1	1	2	0	0	230	0	1	6	7	9	59	81	51	12	3	1	0	0	0	0	0	0	0	31.6	37.8
1600	7	199	0	11	0	2	0	0	3	1	0	0	223	0	0	1	3	2	28	93	69	26	1	0	0	0	0	0	0	0	0	34.3	39.1
1700	3	122	2	6	0	0	0	0	0	0	0	0	133	0	0	1	0	3	25	53	33	15	3	0	0	0	0	0	0	0	0	34.1	39.1
1800	1	98	0	4	0	1	0	0	1	1	0	0	106	0	0	0	0	2	12	47	32	10	1	2	0	0	0	0	0	0	0	34.9	39.4
1900	0	60	0	2	0	0	0	0	0	1	0	0	63	0	0	0	0	0	12	16	27	7	1	0	0	0	0	0	0	0	0	35.3	39.4
2000	0	44	0	0	0	0	0	1	0	2	0	0	47	0	0	0	0	0	6	14	14	7	4	2	0	0	0	0	0	0	0	36.9	43.6
2100	0	27	0	1	0	0	0	0	0	1	0	0	29	0	0	0	0	1	4	8	11	3	1	0	1	0	0	0	0	0	0	36	40.3
2200	0	25	0	2	1	0	0	0	0	0	0	0	28	0	0	0	0	0	1	5	9	9	4	0	0	0	0	0	0	0	0	39.1	44.3
2300	1	8	0	1	0	0	0	0	0	0	0	0	10	0	0	0	0	0	1	2	4	2	1	0	0	0	0	0	0	0	0	37.6	-
08-09	1	85	0	4	0	1	0	0	0	0	0	0	91	0	0	1	1	4	5	21	45	11	3	0	0	0	0	0	0	0	0	35.4	39.8
17-18	3	122	2	6	0	0	0	0	0	0	0	0	133	0	0	1	0	3	25	53	33	15	3	0	0	0	0	0	0	0	0	34.1	39.1
10-16	27	946	3	40	1	3	0	3	5	3	0	0	1031	0	1	11	13	21	175	384	290	107	23	6	0	0	0	0	0	0	0	33.9	39.4
00-05	0	40	0	2	0	0	0	0	0	0	0	0	42	0	0	0	0	0	3	8	14	13	3	0	1	0	0	0	0	0	0	38.6	43.2
00-00	41	1829	5	91	3	7	0	4	9	10	0	0	1999	0	1	15	17	36	296	711	618	235	55	13	2	0	0	0	0	0	0	34.6	40

YAPTON LANE - WALBERTON — SOUTHBOUND

Report Id - CustomList-156
Site Name - Walberton
Description - Yapton Lane
Direction - BA

09 October 2017

MODAL
modaldata.com

Time	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Total	Vbin 0 5	Vbin 5 10	Vbin 10 15	Vbin 15 20	Vbin 20 25	Vbin 25 30	Vbin 30 35	Vbin 35 40	Vbin 40 45	Vbin 45 50	Vbin 50 55	Vbin 55 60	Vbin 60 65	Vbin 65 70	Vbin 70 75	Vbin 75 80	Vbin 80 85	Vbin 85 90	Mean	Vpp 85
0000	0	2	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	38.1	-
0100	0	2	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	45	-
0200	0	4	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	1	0	0	3	0	0	0	0	0	0	0	0	44.6	-
0300	0	2	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	43.8	-
0400	0	3	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	1	0	0	2	0	0	0	0	0	0	0	0	0	0	32.4	-
0500	0	16	0	2	0	0	0	0	0	0	0	0	18	0	0	0	0	0	0	5	4	5	3	1	0	0	0	0	0	0	0	40.1	45.6
0600	0	74	0	4	2	0	0	0	0	0	0	0	80	0	0	0	0	0	7	27	19	24	3	0	0	0	0	0	0	0	0	36.9	41.8
0700	1	260	1	7	1	0	0	2	0	1	0	0	273	1	0	0	3	2	29	138	75	20	3	2	0	0	0	0	0	0	0	34.2	38.5
0800	0	286	1	10	1	0	0	0	0	1	1	0	300	0	0	0	1	6	46	122	101	21	3	0	0	0	0	0	0	0	0	34.3	38.3
0900	0	206	3	24	0	0	0	1	0	3	0	0	237	0	0	0	4	7	46	110	59	8	2	1	0	0	0	0	0	0	0	32.7	37.1
1000	0	135	1	19	3	0	0	0	0	1	0	0	159	0	0	1	1	7	39	76	28	7	0	0	0	0	0	0	0	0	0	32	35.8
1100	0	140	4	21	3	0	0	0	2	0	0	0	170	0	0	0	0	3	48	63	39	14	2	1	0	0	0	0	0	0	0	33.6	38.3
1200	1	141	2	19	6	2	0	0	1	0	0	0	172	0	0	2	5	9	28	71	33	18	6	0	0	0	0	0	0	0	0	33.1	38.9
1300	0	145	1	19	6	0	0	0	2	3	0	0	176	0	0	1	0	8	32	81	38	13	2	0	0	1	0	0	0	0	0	33.2	38.5
1400	1	158	2	17	2	0	0	0	0	3	0	0	183	0	1	0	1	3	31	77	47	17	6	0	0	0	0	0	0	0	0	34	39.4
1500	0	196	2	32	2	2	0	0	2	0	0	0	236	0	0	0	0	4	55	109	50	12	5	1	0	0	0	0	0	0	0	33.2	36.9
1600	1	285	0	31	3	2	0	0	3	2	1	0	328	0	1	0	0	7	96	144	63	17	0	0	0	0	0	0	0	0	0	32.2	36.5
1700	7	383	2	30	4	1	0	0	3	1	0	0	431	2	5	2	6	36	146	159	53	17	4	0	1	0	0	0	0	0	0	30.5	35.8
1800	1	203	1	7	1	0	1	0	1	3	0	0	218	0	1	0	0	1	54	105	42	13	2	0	0	0	0	0	0	0	0	32.7	36.7
1900	2	112	0	9	0	0	0	0	1	3	0	0	127	0	0	1	1	5	16	42	30	24	4	3	1	0	0	0	0	0	0	35.4	41.8
2000	0	48	0	5	1	0	0	0	0	1	0	0	55	0	0	0	0	1	7	16	16	9	5	1	0	0	0	0	0	0	0	36.6	43.2
2100	0	40	0	3	1	0	0	0	0	1	0	0	45	0	1	0	0	0	6	14	11	10	1	1	1	0	0	0	0	0	0	36	42.3
2200	0	25	0	1	0	0	0	0	0	0	0	0	26	0	0	0	0	0	2	6	7	5	4	2	0	0	0	0	0	0	0	39.1	46.3
2300	2	14	0	2	0	0	0	0	0	0	0	0	18	0	0	0	0	1	2	7	3	3	1	1	0	0	0	0	0	0	0	36.1	41.8
08-09	0	286	1	10	1	0	0	0	0	1	1	0	300	0	0	0	1	6	46	122	101	21	3	0	0	0	0	0	0	0	0	34.3	38.3
17-18	7	383	2	30	4	1	0	0	3	1	0	0	431	2	5	2	6	36	146	159	53	17	4	0	1	0	0	0	0	0	0	30.5	35.8
10-16	2	915	12	127	22	4	0	0	7	7	0	0	1096	0	1	4	7	34	233	477	235	81	21	2	0	1	0	0	0	0	0	33.2	38
00-05	0	13	0	0	0	0	0	0	0	0	0	0	13	0	0	0	0	1	0	1	3	4	4	0	0	0	0	0	0	0	0	40.7	46.8
00-00	16	2880	20	262	36	7	1	3	15	23	2	0	3265	3	9	7	22	101	690	1373	721	261	60	14	3	1	0	0	0	0	0	33.3	38.3

YAPTON LANE - WALBERTON — SOUTHBOUND

Report Id - CustomList-156
Site Name - Walberton
Description - Yapton Lane
Direction - BA

10 October 2017

MODAL
modaldata.com

Time	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Total	Vbin 0 5	Vbin 5 10	Vbin 10 15	Vbin 15 20	Vbin 20 25	Vbin 25 30	Vbin 30 35	Vbin 35 40	Vbin 40 45	Vbin 45 50	Vbin 50 55	Vbin 55 60	Vbin 60 65	Vbin 65 70	Vbin 70 75	Vbin 75 80	Vbin 80 85	Vbin 85 90	Mean	Vpp 85
0000	0	9	0	1	0	0	0	0	0	0	0	0	10	0	0	0	0	0	1	2	0	5	1	1	0	0	0	0	0	0	0	40	-
0100	0	4	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	1	0	0	2	1	0	0	0	0	0	0	0	44.6	-
0200	0	3	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	1	0	1	0	0	0	1	0	0	0	0	0	0	41.4	-
0300	0	1	0	0	0	0	0	0	0	1	0	0	2	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	35.7	-
0400	0	3	0	0	0	0	0	0	0	1	0	0	4	0	0	0	0	0	0	0	1	2	1	0	0	0	0	0	0	0	0	43.2	-
0500	1	16	0	2	0	0	0	0	0	0	0	0	19	0	0	0	0	1	2	1	3	7	5	0	0	0	0	0	0	0	0	40.6	46.5
0600	0	75	0	6	1	0	0	0	0	3	0	0	85	0	0	0	0	0	6	37	15	21	4	1	1	0	0	0	0	0	0	36.9	42.3
0700	0	241	1	13	1	0	0	1	2	1	0	0	260	0	0	0	0	2	28	100	108	19	2	1	0	0	0	0	0	0	0	34.8	38.7
0800	0	260	3	16	3	0	0	0	0	0	0	0	282	0	0	0	2	3	35	120	103	16	3	0	0	0	0	0	0	0	0	34.4	38.9
0900	0	179	2	24	6	1	0	1	1	2	0	0	216	0	0	0	0	3	47	114	43	4	4	1	0	0	0	0	0	0	0	32.8	36.7
1000	1	117	2	23	2	1	0	0	1	1	0	0	148	0	0	1	2	5	20	67	38	12	1	2	0	0	0	0	0	0	0	33.6	38.5
1100	1	139	3	22	3	0	0	2	3	1	0	0	174	0	0	0	0	1	39	66	50	14	3	1	0	0	0	0	0	0	0	34	38.5
1200	3	140	4	23	5	1	0	0	2	3	0	0	181	0	0	3	4	5	41	73	33	18	3	1	0	0	0	0	0	0	0	32.8	39.1
1300	2	144	5	23	5	1	0	0	1	0	0	0	181	0	0	0	1	0	35	75	46	18	5	1	0	0	0	0	0	0	0	34.3	39.4
1400	1	168	1	25	5	1	0	1	2	1	0	0	205	0	0	1	0	0	34	92	47	26	4	1	0	0	0	0	0	0	0	34.5	39.8
1500	2	207	2	33	2	2	1	1	1	2	1	0	254	0	0	1	0	6	34	104	75	26	6	1	1	0	0	0	0	0	0	34.6	39.8
1600	2	314	2	35	3	2	0	0	7	2	0	0	367	0	0	0	0	8	90	168	71	25	5	0	0	0	0	0	0	0	0	32.9	37.4
1700	2	396	3	30	2	0	0	0	1	2	0	0	436	0	0	0	1	1	123	199	84	23	4	0	1	0	0	0	0	0	0	32.8	36.7
1800	2	245	0	12	0	0	0	1	1	1	0	0	262	0	0	0	0	11	53	109	65	20	2	1	1	0	0	0	0	0	0	33.4	37.6
1900	0	111	0	2	0	0	0	0	4	1	0	0	118	0	0	0	0	1	20	47	35	14	0	0	0	0	1	0	0	0	0	34.8	39.1
2000	0	80	0	3	0	0	0	0	0	1	0	0	84	0	0	0	0	1	14	27	26	10	4	1	1	0	0	0	0	0	0	35.5	40.3
2100	0	42	0	1	0	0	0	0	0	0	0	0	43	0	0	0	0	3	4	20	10	4	0	2	0	0	0	0	0	0	0	34.7	39.8
2200	0	30	0	1	0	0	0	0	0	0	0	0	31	0	0	0	0	0	1	10	7	7	1	5	0	0	0	0	0	0	0	39.3	45
2300	1	31	0	2	0	0	0	0	0	0	0	0	34	0	0	0	0	0	1	9	14	5	3	2	0	0	0	0	0	0	0	38.3	44.7
08-09	0	260	3	16	3	0	0	0	0	0	0	0	282	0	0	0	2	3	35	120	103	16	3	0	0	0	0	0	0	0	0	34.4	38.9
17-18	2	396	3	30	2	0	0	0	1	2	0	0	436	0	0	0	1	1	123	199	84	23	4	0	1	0	0	0	0	0	0	32.8	36.7
10-16	10	915	17	149	22	6	1	4	10	8	1	0	1143	0	0	6	7	17	203	477	289	114	22	7	1	0	0	0	0	0	0	34	39.1
00-05	0	20	0	1	0	0	0	0	0	2	0	0	23	0	0	0	0	0	2	4	3	7	4	2	1	0	0	0	0	0	0	41.2	48.3
00-00	18	2955	28	297	38	9	1	7	26	23	1	0	3403	0	0	6	10	51	629	1442	876	296	63	23	6	0	1	0	0	0	0	34	38.9

YAPTON LANE - WALBERTON — SOUTHBOUND

Report Id - CustomList-156
Site Name - Walberton
Description - Yapton Lane
Direction - BA

11 October 2017

MODAL
modaldata.com

Time	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Total	Vbin 0 5	Vbin 5 10	Vbin 10 15	Vbin 15 20	Vbin 20 25	Vbin 25 30	Vbin 30 35	Vbin 35 40	Vbin 40 45	Vbin 45 50	Vbin 50 55	Vbin 55 60	Vbin 60 65	Vbin 65 70	Vbin 70 75	Vbin 75 80	Vbin 80 85	Vbin 85 90	Mean	Vpp 85
0000	0	9	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	0	1	2	2	3	0	1	0	0	0	0	0	0	0	38.7	-
0100	0	3	0	1	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	3	0	0	1	0	0	0	0	0	0	0	40.8	-
0200	0	2	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	47.9	-
0300	0	2	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	47.9	-
0400	0	7	0	0	0	0	0	1	0	1	0	0	9	0	0	0	1	0	0	6	1	0	1	0	0	0	0	0	0	0	0	32.3	-
0500	0	23	0	3	0	0	0	0	0	1	0	0	27	0	0	0	0	0	3	4	11	7	1	1	0	0	0	0	0	0	0	37.7	41.2
0600	0	72	0	7	1	0	0	0	1	1	0	0	82	0	0	0	1	2	5	24	32	12	6	0	0	0	0	0	0	0	0	36.5	42.1
0700	0	218	0	14	0	0	0	1	1	1	0	0	235	0	0	0	0	4	37	107	73	11	3	0	0	0	0	0	0	0	0	33.8	37.6
0800	1	203	3	18	3	2	0	0	1	1	0	0	232	0	0	0	0	6	53	110	49	11	2	1	0	0	0	0	0	0	0	33	37.8
0900	1	141	1	26	0	0	0	0	1	0	0	0	170	0	0	1	2	3	37	64	42	17	4	0	0	0	0	0	0	0	0	33.3	38.9
1000	0	130	1	18	2	1	0	0	1	0	0	0	153	0	0	1	1	10	31	61	34	11	3	1	0	0	0	0	0	0	0	32.8	38.3
1100	0	140	4	26	1	3	0	1	3	1	0	0	179	0	0	0	2	4	26	72	58	15	2	0	0	0	0	0	0	0	0	33.8	38
1200	2	152	3	25	0	1	1	1	4	3	0	0	192	0	0	2	3	5	35	78	47	17	2	2	0	0	1	0	0	0	0	33.6	38.5
1300	0	126	0	23	2	0	0	0	3	0	0	0	154	0	0	1	1	3	30	59	41	16	2	0	1	0	0	0	0	0	0	33.8	39.1
1400	1	157	1	18	4	1	0	2	1	1	0	0	186	0	0	1	0	2	35	90	31	23	3	1	0	0	0	0	0	0	0	33.9	39.6
1500	2	231	1	30	2	1	0	1	3	2	0	0	273	0	0	0	4	4	69	113	65	15	3	0	0	0	0	0	0	0	0	32.8	37.6
1600	0	283	0	44	1	2	1	2	4	4	0	0	341	0	0	0	0	3	87	152	72	20	6	0	1	0	0	0	0	0	0	33.1	37.6
1700	3	379	1	31	2	0	1	0	4	2	0	0	423	0	0	0	0	6	114	185	83	30	5	0	0	0	0	0	0	0	0	32.9	37.1
1800	0	255	0	21	0	0	0	0	3	2	0	0	281	0	0	0	1	4	56	113	83	17	6	0	0	1	0	0	0	0	0	33.9	38.7
1900	1	101	0	4	2	0	0	1	2	1	0	0	112	0	0	0	0	1	15	54	32	8	2	0	0	0	0	0	0	0	0	34	38.5
2000	0	91	0	3	0	0	0	0	1	0	0	0	95	0	0	0	0	0	14	38	31	7	5	0	0	0	0	0	0	0	0	35	38.7
2100	1	67	0	4	0	0	0	0	2	1	0	0	75	0	0	0	0	0	12	37	18	6	0	2	0	0	0	0	0	0	0	34.4	38.3
2200	0	38	0	0	0	0	0	0	0	0	0	0	38	0	0	0	0	2	2	16	9	8	1	0	0	0	0	0	0	0	0	34.9	41.2
2300	0	25	0	4	0	0	0	0	0	0	0	0	29	0	0	0	0	1	0	12	9	2	3	2	0	0	0	0	0	0	0	37.7	46.3
08-09	1	203	3	18	3	2	0	0	1	1	0	0	232	0	0	0	0	6	53	110	49	11	2	1	0	0	0	0	0	0	0	33	37.8
17-18	3	379	1	31	2	0	1	0	4	2	0	0	423	0	0	0	0	6	114	185	83	30	5	0	0	0	0	0	0	0	0	32.9	37.1
10-16	5	936	10	140	11	7	1	5	15	7	0	0	1137	0	0	5	11	28	226	473	276	97	15	4	1	0	1	0	0	0	0	33.4	38.5
00-05	0	23	0	1	0	0	0	1	0	1	0	0	26	0	0	0	1	0	1	8	6	4	3	3	0	0	0	0	0	0	0	38.2	47.9
00-00	12	2855	15	320	20	11	3	10	35	22	0	0	3303	0	0	6	16	60	662	1397	826	257	62	13	2	1	1	0	0	0	0	33.6	38.5

YAPTON LANE - WALBERTON — SOUTHBOUND

Report Id - CustomList-156
Site Name - Walberton
Description - Yapton Lane
Direction - BA

12 October 2017

MODAL
modaldata.com

Time	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Total	Vbin 0 5	Vbin 5 10	Vbin 10 15	Vbin 15 20	Vbin 20 25	Vbin 25 30	Vbin 30 35	Vbin 35 40	Vbin 40 45	Vbin 45 50	Vbin 50 55	Vbin 55 60	Vbin 60 65	Vbin 65 70	Vbin 70 75	Vbin 75 80	Vbin 80 85	Vbin 85 90	Mean	Vpp 85
0000	1	10	0	1	0	0	0	0	0	0	0	0	12	0	0	0	0	0	3	4	1	1	2	1	0	0	0	0	0	0	0	37.2	47.6
0100	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	34.9	-
0200	0	1	0	1	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	33.4	-
0300	0	3	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	2	0	1	0	0	0	0	0	0	0	0	0	36.9	-
0400	0	7	0	1	0	0	0	0	0	1	0	0	9	0	0	0	0	0	0	2	3	1	2	1	0	0	0	0	0	0	0	40.5	-
0500	0	38	0	5	1	0	0	0	0	0	0	0	44	0	0	0	0	1	6	12	18	4	1	1	1	0	0	0	0	0	0	35.9	39.8
0600	1	122	0	9	2	1	0	0	0	2	0	0	137	0	0	0	1	2	17	46	44	17	9	1	0	0	0	0	0	0	0	35.7	42.3
0700	1	327	1	18	1	0	0	0	0	1	0	0	349	0	0	0	0	0	37	142	141	26	3	0	0	0	0	0	0	0	0	35	39.1
0800	0	304	6	24	2	2	1	0	2	0	0	0	341	0	0	0	0	7	67	138	94	28	6	1	0	0	0	0	0	0	0	33.7	38.3
0900	0	201	0	21	2	5	0	0	0	0	0	0	229	0	0	0	1	8	28	106	64	18	4	0	0	0	0	0	0	0	0	33.9	38.3
1000	0	143	1	25	2	1	0	1	1	4	0	0	178	0	0	1	3	4	34	72	40	18	6	0	0	0	0	0	0	0	0	33.6	39.8
1100	1	131	2	26	1	2	0	0	2	2	0	1	168	0	0	0	3	7	45	53	44	13	2	1	0	0	0	0	0	0	0	32.7	38.3
1200	0	145	4	23	1	2	0	0	2	3	0	0	180	0	0	1	1	0	34	80	47	14	2	1	0	0	0	0	0	0	0	33.6	38
1300	7	151	1	16	3	1	0	0	1	1	0	0	181	0	0	0	2	2	27	79	40	22	8	1	0	0	0	0	0	0	0	34.6	40.5
1400	2	170	3	22	5	1	1	0	1	1	0	0	206	0	0	0	1	1	28	69	61	33	10	3	0	0	0	0	0	0	0	35.8	40.9
1500	2	220	4	37	4	2	1	0	4	4	0	0	278	0	0	0	0	9	49	121	67	23	7	2	0	0	0	0	0	0	0	33.8	38
1600	4	285	2	39	2	0	0	1	1	1	0	0	335	0	0	0	1	2	39	147	103	38	4	0	1	0	0	0	0	0	0	34.8	39.4
1700	4	405	0	26	2	1	1	0	1	1	0	1	442	0	0	1	1	4	110	201	89	27	9	0	0	0	0	0	0	0	0	33.1	37.4
1800	3	270	0	8	2	0	0	1	0	1	0	1	286	0	0	0	1	10	57	114	68	24	12	0	0	0	0	0	0	0	0	33.8	39.1
1900	3	146	0	7	1	0	0	0	1	1	1	0	160	0	0	0	1	3	30	69	44	12	1	0	0	0	0	0	0	0	0	33.7	38.3
2000	0	74	0	1	0	0	0	0	0	1	0	0	76	0	0	0	0	2	5	23	28	12	3	2	1	0	0	0	0	0	0	36.9	41.2
2100	0	64	0	4	0	0	0	0	0	0	0	0	68	0	0	0	1	0	2	17	25	15	6	2	0	0	0	0	0	0	0	38.3	44.1
2200	1	50	0	2	0	0	0	0	0	0	0	0	53	0	0	0	0	0	6	16	11	11	5	2	2	0	0	0	0	0	0	38.1	46.3
2300	1	24	0	2	0	0	0	0	0	0	0	0	27	0	0	0	0	0	4	5	5	7	2	3	1	0	0	0	0	0	0	39.3	45.9
08-09	0	304	6	24	2	2	1	0	2	0	0	0	341	0	0	0	0	7	67	138	94	28	6	1	0	0	0	0	0	0	0	33.7	38.3
17-18	4	405	0	26	2	1	1	0	1	1	0	1	442	0	0	1	1	4	110	201	89	27	9	0	0	0	0	0	0	0	0	33.1	37.4
10-16	12	960	15	149	16	9	2	1	11	15	0	1	1191	0	0	2	10	23	217	474	299	123	35	8	0	0	0	0	0	0	0	34	39.6
00-05	1	22	0	3	0	0	0	0	0	1	0	0	27	0	0	0	0	0	3	11	4	3	4	2	0	0	0	0	0	0	0	37.9	45
00-00	31	3292	24	318	31	18	4	3	16	24	1	3	3765	0	0	3	17	62	628	1521	1037	365	104	22	6	0	0	0	0	0	0	34.4	39.6

YAPTON LANE - WALBERTON — SOUTHBOUND

Report Id - CustomList-156
Site Name - Walberton
Description - Yapton Lane
Direction - BA

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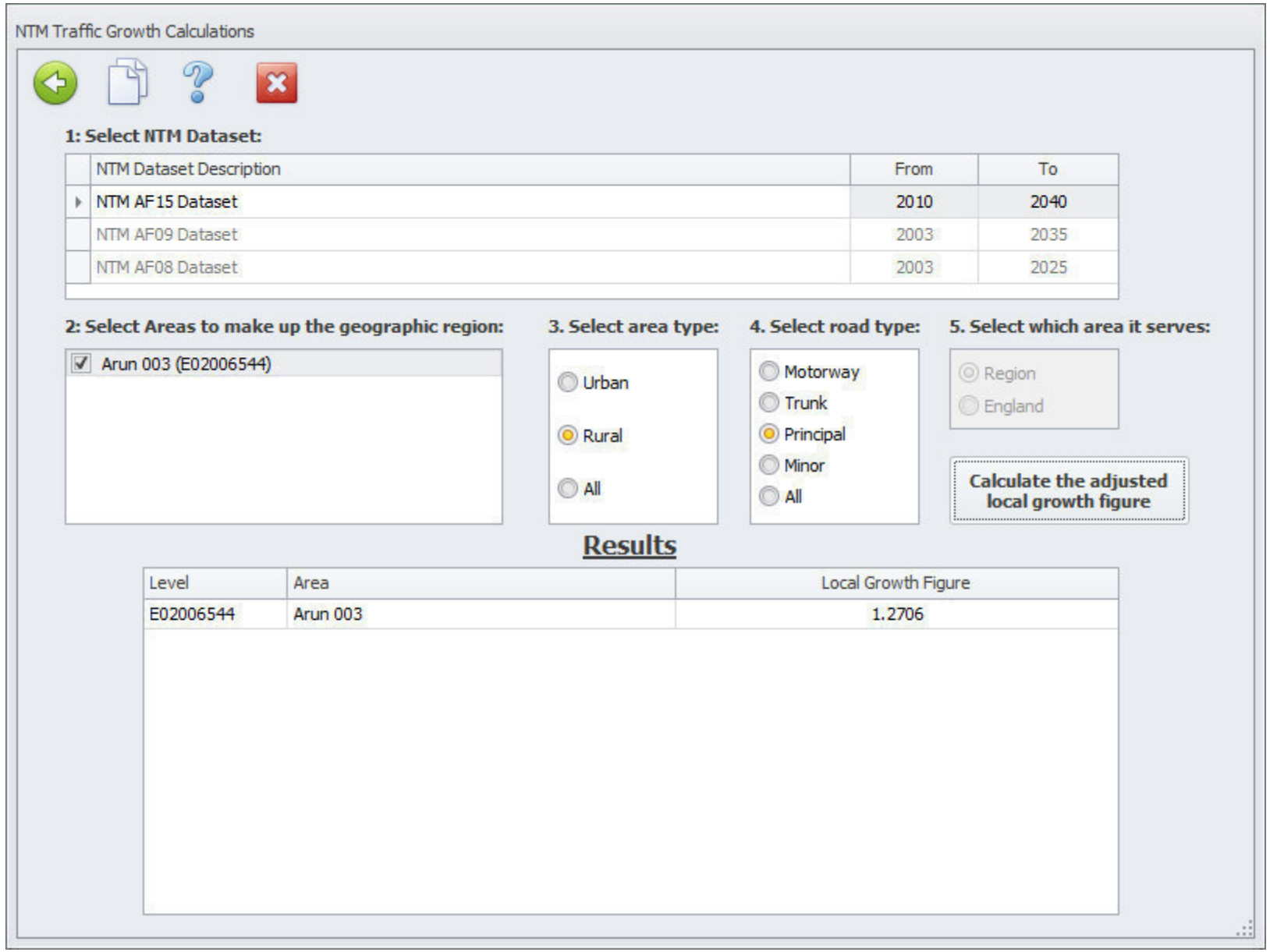
Grand Total

Time	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Total	Vbin 0 5	Vbin 5 10	Vbin 10 15	Vbin 15 20	Vbin 20 25	Vbin 25 30	Vbin 30 35	Vbin 35 40	Vbin 40 45	Vbin 45 50	Vbin 50 55	Vbin 55 60	Vbin 60 65	Vbin 65 70	Vbin 70 75	Vbin 75 80	Vbin 80 85	Vbin 85 90	Mean	Vpp 85
--	160	19643	125	1733	172	74	17	33	120	131	5	4	22217	3	13	50	111	442	3881	9021	5849	2136	545	135	23	3	4	1	0	0	0	34.1	39.1

APPENDIX E


NTM Traffic Growth Calculations
1: Select NTM Dataset:
NTM Dataset Description
From
To
NTM AF15 Dataset
2010
2040
NTM AF09 Dataset
2003
2035
NTM AF08 Dataset
2003
2025
2: Select Areas to make up the geographic region:
Arun 003 (E02006544)
3. Select area type:
Urban
Rural
All
4. Select road type:
Motorway
Trunk
Principal
Minor
All
5. Select which area it serves:
Region
England
Calculate the adjusted local growth figure
Results
Level
Area
Local Growth Figure
E02006544
Arun 003
1.2706

APPENDIX F

WF01BEW - Location of usual residence and place of work (OA level)

population	All usual residents ages 16 and over in employment the week before the census
units	Persons
date	2011

place of work	currently residing in: E01031393 : Arun 003A	E01031394 : Arun 003B	E01031466 : Arun 003F	Total	Travelling East on A27		
E01031393 : Arun 003A	31	49	7	87	-	-	
E01031394 : Arun 003B	11	22	3	36	-	-	
E01031395 : Arun 003C	1	2	1	4	-	-	
E01031396 : Arun 003D	7	12	12	31	-	-	
E01031397 : Arun 003E	9	16	13	38	-	-	
E01031466 : Arun 003F	15	19	33	67	-	-	
E01031390 : Arun 001A	4	1	7	12	-	-	
E01031391 : Arun 001B	0	0	1	1	-	-	
E01031392 : Arun 001C	11	11	6	28		100%	28
E01031465 : Arun 001D	17	19	15	51	-	-	
E02006542 : Arun 001	32	31	29	92	-	-	
E02006543 : Arun 002	2	2	6	10		100%	10
E02006544 : Arun 003	74	120	69	263	-	-	
E02006545 : Arun 004	16	18	13	47	-	-	
E02006546 : Arun 005	6	4	6	16	-	-	
E02006547 : Arun 006	17	21	16	54	-	-	
E02006548 : Arun 007	4	5	3	12	-	-	
E02006549 : Arun 008	0	2	2	4	-	-	
E02006550 : Arun 009	9	13	5	27	-	-	
E02006551 : Arun 010	1	5	4	10	-	-	
E02006552 : Arun 011	11	10	9	30	-	-	
E02006553 : Arun 012	14	11	6	31	-	-	
E02006554 : Arun 013	3	3	2	8	-	-	
E02006555 : Arun 014	14	36	3	53	-	-	
E02006556 : Arun 015	1	3	1	5	-	-	
E02006557 : Arun 016	4	5	4	13	-	-	
E02006558 : Arun 017	24	39	24	87	-	-	
E02006559 : Arun 018	3	2	1	6	-	-	
E02006560 : Arun 019	5	1	2	8	-	-	
E02006621 : Worthing 001	1	4	1	6		100%	6
E02006622 : Worthing 002	2	0	1	3		100%	3
E02006623 : Worthing 003	4	2	1	7		100%	7
E02006624 : Worthing 004	1	2	1	4		100%	4
E02006625 : Worthing 005	4	4	1	9		100%	9
E02006626 : Worthing 006	5	2	1	8		100%	8
E02006627 : Worthing 007	2	2	6	10		100%	10
E02006628 : Worthing 008	3	0	2	5		100%	5
E02006629 : Worthing 009	1	1	0	2		100%	2
E02006630 : Worthing 010	0	1	1	2	-	-	
E02006631 : Worthing 011	9	12	7	28	-	-	
E02006632 : Worthing 012	0	0	1	1	-	-	
E02006633 : Worthing 013	3	5	4	12	-	-	
Arun	240	331	205	776	-	-	
Chichester	198	248	140	586	-	-	
Worthing	35	35	27	97	-	-	
Horsham	16	16	15	47	-	-	
Portsmouth	22	15	8	45	-	-	
Havant	16	7	9	32	-	-	
Westminster,City of London	10	10	8	28	-	-	
Brighton and Hove	4	10	11	25		100%	25

Crawley	11	5	6	22		50%	11
Adur	4	14	2	20		100%	20
East Hampshire	9	3	2	14	-	-	
Fareham	5	5	1	11	-	-	
Guildford	4	5	1	10	-	-	
Islington	3	1	2	6	-	-	
Southwark	2	2	2	6	-	-	
Waverley	2	1	3	6	-	-	
Mid Sussex	2	3	1	6		100%	6
Southampton	3	2	0	5	-	-	
Camden	1	3	0	4	-	-	
Hammersmith and Fulham	1	0	3	4	-	-	
Lewes	1	2	1	4		100%	4
Winchester	3	1	0	4	-	-	
Woking	3	0	1	4	-	-	
Greenwich	0	1	2	3	-	-	
Hillingdon	1	1	1	3	-	-	
Merton	1	0	2	3	-	-	
Wychavon	0	2	0	2	-	-	
Basildon	1	1	0	2	-	-	
Great Yarmouth	1	1	0	2	-	-	
Croydon	1	1	0	2	-	-	
Enfield	0	1	1	2	-	-	
Kensington and Chelsea	2	0	0	2	-	-	
Tower Hamlets	0	0	2	2	-	-	
Wealden	2	0	0	2		100%	2
Rushmoor	1	1	0	2	-	-	
Elmbridge	0	1	1	2	-	-	
Reigate and Banstead	0	1	1	2	-	-	
Tandridge	0	0	2	2	-	-	
Wiltshire	2	0	0	2	-	-	
Northampton	1	0	0	1	-	-	
Wellingborough	0	1	0	1	-	-	
Coventry	1	0	0	1	-	-	
Wolverhampton	0	1	0	1	-	-	
Bedford	1	0	0	1	-	-	
Huntingdonshire	0	0	1	1	-	-	
Rochford	1	0	0	1	-	-	
East Hertfordshire	0	0	1	1	-	-	
Hertsmere	0	0	1	1	-	-	
Stevenage	1	0	0	1	-	-	
Bromley	1	0	0	1	-	-	
Hackney	1	0	0	1	-	-	
Havering	0	1	0	1	-	-	
Hounslow	1	0	0	1	-	-	
Kingston upon Thames	1	0	0	1	-	-	
Lambeth	1	0	0	1	-	-	
Richmond upon Thames	1	0	0	1	-	-	
Bracknell Forest	1	0	0	1	-	-	
Slough	0	0	1	1	-	-	
Windsor and Maidenhead	1	0	0	1	-	-	
Milton Keynes	0	0	1	1	-	-	
Isle of Wight	0	1	0	1	-	-	
Aylesbury Vale	0	0	1	1	-	-	
Hastings	0	1	0	1		100%	1
Gosport	0	1	0	1	-	-	
Hart	0	1	0	1	-	-	
New Forest	0	0	1	1	-	-	
Test Valley	0	1	0	1	-	-	
Maidstone	0	0	1	1	-	-	
Cherwell	1	0	0	1	-	-	
Epsom and Ewell	0	1	0	1	-	-	
Mole Valley	1	0	0	1	-	-	
Runnymede	0	1	0	1	-	-	
Bristol, City of	1	0	0	1	-	-	
North Somerset	1	0	0	1	-	-	
Plymouth	1	0	0	1	-	-	
Poole	0	1	0	1	-	-	
The Vale of Glamorgan	0	1	0	1	-	-	
							161.0

APPENDIX G

WASHINGTON ROUNDABOUT - STORRINGTON

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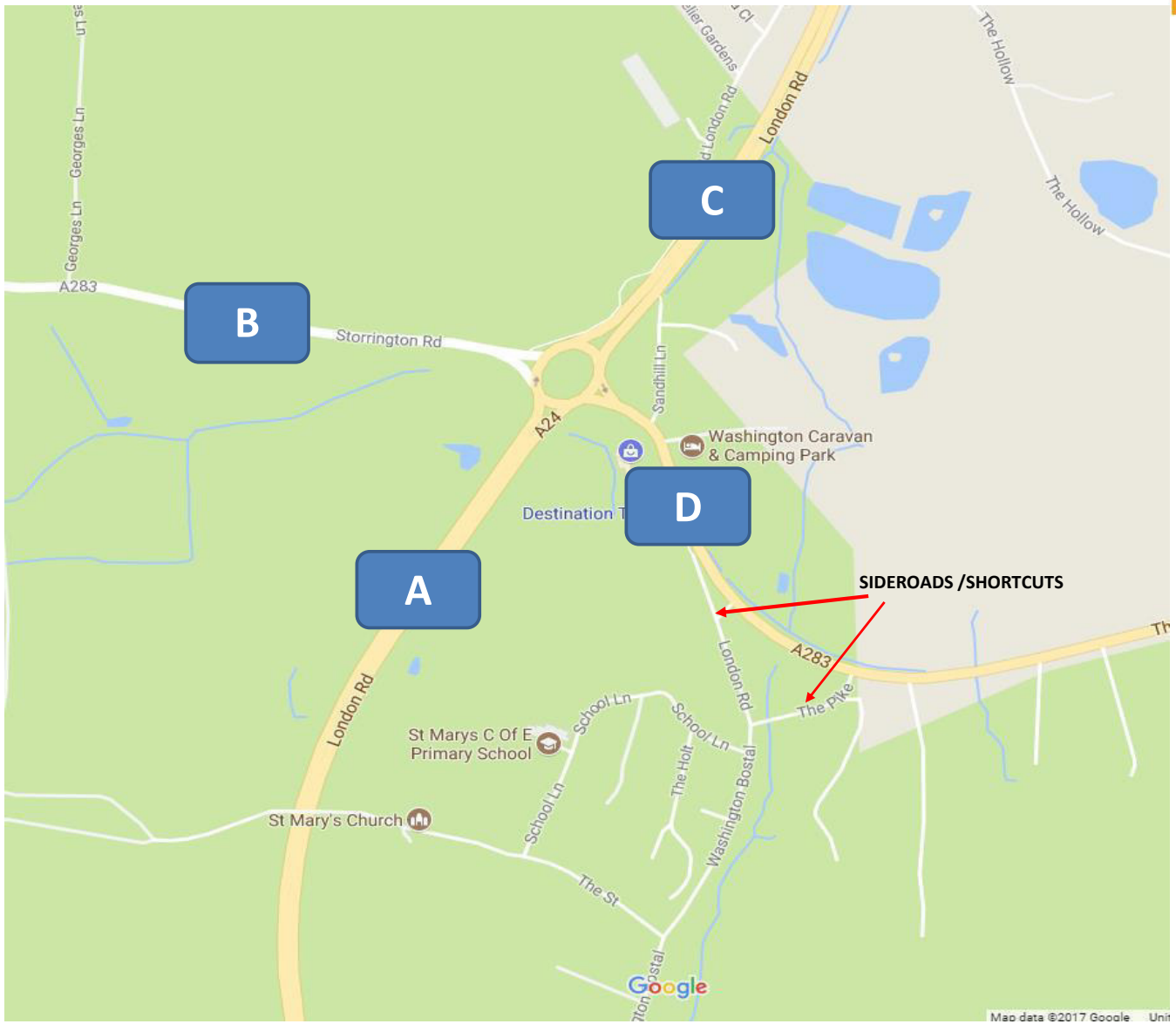

Washington Roundabout - Storrington

MODAL
modaldata.com

Tuesday 10 October 2017

London Road Northbound

A	London Rd Left						London Road thru						London Road Right					
	A-B						A-C						A-D					
TIME	CARS	LIGHT	HEAVY	BUSES	MOTORCYCLES	TOTAL MOVEMENTS	CARS	LIGHT	HEAVY	BUSES	MOTORCYCLES	TOTAL MOVEMENTS	CARS	LIGHT	HEAVY	BUSES	MOTORCYCLES	TOTAL MOVEMENTS
07:00 - 07:15	**22**	10	0	3	0	***35***	**287**	85	5	1	3	***381***	**29**	3	1	0	0	***33***
07:15 - 07:30	**23**	10	0	0	0	***33***	**268**	84	3	0	5	***360***	**26**	0	1	0	0	***27***
07:30 - 07:45	**26**	12	0	0	1	***39***	**150**	47	9	0	1	***207***	**20**	9	2	0	1	***32***
07:45 - 08:00	**28**	7	2	0	0	***37***	**190**	47	9	0	2	***248***	**20**	7	3	0	0	***30***
08:00 - 08:15	**29**	11	2	0	1	***43***	**204**	53	5	0	0	***262***	**25**	6	0	0	2	***33***
08:15 - 08:30	**20**	7	1	0	3	***31***	**172**	45	6	0	1	***224***	**23**	4	2	0	1	***30***
08:30 - 08:45	**27**	11	0	0	0	***38***	**210**	44	17	0	0	***271***	**45**	7	3	0	0	***55***
08:45 - 09:00	**28**	10	1	0	0	***39***	**174**	46	10	0	0	***230***	**36**	2	2	0	0	***40***
09:00 - 09:15	**23**	8	1	0	0	***32***	**160**	44	18	0	0	***222***	**18**	3	3	0	0	***24***
09:15 - 09:30	**30**	11	0	0	0	***41***	**134**	44	11	0	1	***190***	**18**	7	3	0	0	***28***
09:30 - 09:45	**29**	12	0	0	0	***41***	**126**	35	15	0	0	***176***	**18**	2	1	0	0	***21***
09:45 - 10:00	**32**	7	0	0	1	***40***	**128**	35	13	0	0	***176***	**19**	4	0	0	0	***23***
	317	**116**	**7**	**3**	**6**	**449**	**2203**	**609**	**121**	**1**	**13**	**2947**	**297**	**54**	**21**	**0**	**4**	**376**
HOUR TOTALS																		
07:00 - 08:00	**99**	39	2	3	1	***144***	**895**	263	26	1	11	***1196***	**95**	19	7	0	1	***122***
07:15 - 08:15	**106**	40	4	0	2	***152***	**812**	231	26	0	8	***1077***	**91**	22	6	0	3	***122***
07:30 - 08:30	**103**	37	5	0	5	***150***	**716**	192	29	0	4	***941***	**88**	26	7	0	4	***125***
07:45 - 08:45	**104**	36	5	0	4	***149***	**776**	189	37	0	3	***1005***	**113**	24	8	0	3	***148***
08:00 - 09:00	**104**	39	4	0	4	***151***	**760**	188	38	0	1	***987***	**129**	19	7	0	3	***158***
08:15 - 09:15	**98**	36	3	0	3	***140***	**716**	179	51	0	1	***947***	**122**	16	10	0	1	***149***
08:30 - 09:30	**108**	40	2	0	0	***150***	**678**	178	56	0	1	***913***	**117**	19	11	0	0	***147***
08:45 - 09:45	**110**	41	2	0	0	***153***	**594**	169	54	0	1	***818***	**90**	14	9	0	0	***113***
09:00 - 10:00	**114**	38	1	0	1	***154***	**548**	158	57	0	1	***764***	**73**	16	7	0	0	***96***

Storrington Road Eastbound

B	Storrington Rd Left						Storrington Rd Thru						Storrington Rd Right					
	B-C						B-D						B-A					
TIME	CARS	LIGHT	HEAVY	BUSES	MOTORCYCLES	TOTAL MOVEMENTS	CARS	LIGHT	HEAVY	BUSES	MOTORCYCLES	TOTAL MOVEMENTS	CARS	LIGHT	HEAVY	BUSES	MOTORCYCLES	TOTAL MOVEMENTS
07:00 - 07:15	**50**	39	10	0	0	***99***	**18**	0	1	0	0	***19***	**13**	1	1	0	0	***15***
07:15 - 07:30	**68**	21	21	0	0	***110***	**11**	1	0	0	2	***14***	**19**	1	0	0	0	***20***
07:30 - 07:45	**47**	25	25	0	1	***98***	**30**	1	2	0	0	***33***	**28**	1	5	0	1	***35***
07:45 - 08:00	**71**	19	19	0	1	***110***	**35**	2	4	0	1	***42***	**32**	2	0	0	2	***36***
08:00 - 08:15	**52**	17	17	0	0	***86***	**29**	5	0	0	0	***34***	**30**	3	0	0	0	***33***
08:15 - 08:30	**47**	13	13	0	0	***73***	**29**	0	4	0	0	***33***	**27**	3	1	0	0	***31***
08:30 - 08:45	**49**	9	9	2	0	***69***	**19**	2	1	0	0	***22***	**22**	2	1	0	0	***25***
08:45 - 09:00	**50**	5	5	0	0	***60***	**23**	2	2	0	1	***28***	**19**	1	3	0	0	***23***
09:00 - 09:15	**64**	17	17	0	0	***98***	**34**	5	3	0	1	***43***	**28**	5	1	0	1	***35***
09:15 - 09:30	**58**	14	14	0	0	***86***	**15**	5	2	0	0	***22***	**20**	3	2	0	0	***25***
09:30 - 09:45	**60**	11	11	0	0	***82***	**29**	1	3	0	0	***33***	**32**	1	2	0	0	***35***
09:45 - 10:00	**47**	10	10	3	0	***70***	**29**	1	1	0	0	***31***	**20**	2	2	0	0	***24***
	663	**200**	**171**	**5**	**2**	1041	**301**	**25**	**23**	**0**	**5**	354	**290**	**25**	**18**	**0**	**4**	337
HOUR TOTALS																		
07:00 - 08:00	**236**	104	75	0	2	***417***	**94**	4	7	0	3	***108***	**92**	5	6	0	3	***106***
07:15 - 08:15	**238**	82	82	0	2	***404***	**105**	9	6	0	3	***123***	**109**	7	5	0	3	***124***
07:30 - 08:30	**217**	74	74	0	2	***367***	**123**	8	10	0	1	***142***	**117**	9	6	0	3	***135***
07:45 - 08:45	**219**	58	58	2	1	***338***	**112**	9	9	0	1	***131***	**111**	10	2	0	2	***125***
08:00 - 09:00	**198**	44	44	2	0	***288***	**100**	9	7	0	1	***117***	**98**	9	5	0	0	***112***
08:15 - 09:15	**210**	44	44	2	0	***300***	**105**	9	10	0	2	***126***	**96**	11	6	0	1	***114***
08:30 - 09:30	**221**	45	45	2	0	***313***	**91**	14	8	0	2	***115***	**89**	11	7	0	1	***108***
08:45 - 09:45	**232**	47	47	0	0	***326***	**101**	13	10	0	2	***126***	**99**	10	8	0	1	***118***
09:00 - 10:00	**229**	52	52	3	0	***336***	**107**	12	9	0	1	***129***	**100**	11	7	0	1	***119***

London Road Southbound

C	London Rd Left						London Rd Thru						London Rd Right					
	C-D						C-A						C-B					
TIME	CARS	LIGHT	HEAVY	BUSES	MOTORCYCLES	TOTAL MOVEMENTS	CARS	LIGHT	HEAVY	BUSES	MOTORCYCLES	TOTAL MOVEMENTS	CARS	LIGHT	HEAVY	BUSES	MOTORCYCLES	TOTAL MOVEMENTS
07:00 - 07:15	**8**	3	6	0	0	***17***	**76**	13	11	0	0	***100***	**45**	21	4	0	0	***70***
07:15 - 07:30	**13**	1	5	0	0	***19***	**77**	34	19	0	0	***130***	**56**	15	6	0	0	***77***
07:30 - 07:45	**5**	2	1	1	0	***9***	**113**	27	12	0	0	***152***	**49**	16	2	0	0	***67***
07:45 - 08:00	**10**	4	3	0	0	***17***	**118**	33	11	0	0	***162***	**49**	20	3	1	0	***73***
08:00 - 08:15	**20**	3	2	0	0	***25***	**113**	29	12	0	0	***154***	**53**	20	0	0	0	***73***
08:15 - 08:30	**14**	3	4	0	0	***21***	**91**	24	14	0	0	***129***	**63**	25	6	0	0	***94***
08:30 - 08:45	**19**	3	5	2	0	***29***	**113**	26	12	0	0	***151***	**28**	21	2	0	0	***51***
08:45 - 09:00	**20**	0	3	3	0	***26***	**85**	22	2	0	0	***109***	**50**	21	2	0	0	***73***
09:00 - 09:15	**8**	3	5	0	0	***16***	**102**	29	16	0	0	***147***	**37**	13	6	0	0	***56***
09:15 - 09:30	**12**	2	5	0	0	***19***	**92**	34	10	0	0	***136***	**31**	15	3	0	0	***49***
09:30 - 09:45	**17**	1	1	0	0	***19***	**84**	24	10	0	0	***118***	**50**	11	3	0	0	***64***
09:45 - 10:00	**10**	3	4	0	0	***17***	**81**	24	9	0	0	***114***	**38**	13	4	0	0	***55***
	156	**28**	**44**	**6**	**0**	**234**	**1145**	**319**	**138**	**0**	**0**	**1602**	**549**	**211**	**41**	**1**	**0**	**802**
HOUR TOTALS																		
07:00 - 08:00	**36**	10	15	1	0	***62***	**384**	107	53	0	0	***544***	**199**	72	15	1	0	***287***
07:15 - 08:15	**48**	10	11	1	0	***70***	**421**	123	54	0	0	***598***	**207**	71	11	1	0	***290***
07:30 - 08:30	**49**	12	10	1	0	***72***	**435**	113	49	0	0	***597***	**214**	81	11	1	0	***307***
07:45 - 08:45	**63**	13	14	2	0	***92***	**435**	112	49	0	0	***596***	**193**	86	11	1	0	***291***
08:00 - 09:00	**73**	9	14	5	0	***101***	**402**	101	40	0	0	***543***	**194**	87	10	0	0	***291***
08:15 - 09:15	**61**	9	17	5	0	***92***	**391**	101	44	0	0	***536***	**178**	80	16	0	0	***274***
08:30 - 09:30	**59**	8	18	5	0	***90***	**392**	111	40	0	0	***543***	**146**	70	13	0	0	***229***
08:45 - 09:45	**57**	6	14	3	0	***80***	**363**	109	38	0	0	***510***	**168**	60	14	0	0	***242***
09:00 - 10:00	**47**	9	15	0	0	***71***	**359**	111	45	0	0	***515***	**156**	52	16	0	0	***224***

A283 (The Pike) Westbound

D	The Pike Left						The Pike Thru						The Pike Right					
	D-A						D-B						D-C					
TIME	CARS	LIGHT	HEAVY	BUSES	MOTORCYCLES	TOTAL MOVEMENTS	CARS	LIGHT	HEAVY	BUSES	MOTORCYCLES	TOTAL MOVEMENTS	CARS	LIGHT	HEAVY	BUSES	MOTORCYCLES	TOTAL MOVEMENTS
07:00 - 07:15	**10**	3	1	0	0	***14***	**43**	15	4	0	0	***62***	**26**	1	3	0	0	***30***
07:15 - 07:30	**17**	2	1	0	0	***20***	**63**	21	5	1	0	***90***	**32**	10	6	2	0	***50***
07:30 - 07:45	**8**	2	0	0	0	***10***	**45**	23	7	0	0	***75***	**52**	9	2	0	1	***64***
07:45 - 08:00	**11**	4	0	0	0	***15***	**55**	27	2	2	0	***86***	**41**	16	3	1	1	***62***
08:00 - 08:15	**30**	11	2	0	0	***43***	**80**	7	3	0	0	***90***	**46**	11	4	1	0	***62***
08:15 - 08:30	**10**	2	1	1	0	***14***	**52**	6	1	1	0	***60***	**49**	8	4	1	1	***63***
08:30 - 08:45	**6**	6	0	0	0	***12***	**43**	12	2	0	0	***57***	**37**	12	2	0	1	***52***
08:45 - 09:00	**6**	8	1	0	0	***15***	**54**	13	5	2	0	***74***	**48**	11	1	3	0	***63***
09:00 - 09:15	**16**	2	2	0	0	***20***	**38**	7	4	2	0	***51***	**27**	8	4	1	1	***41***
09:15 - 09:30	**14**	2	1	0	0	***17***	**44**	10	4	0	0	***58***	**29**	10	0	0	0	***39***
09:30 - 09:45	**15**	8	4	0	0	***27***	**43**	7	2	1	0	***53***	**23**	8	6	0	1	***38***
09:45 - 10:00	**8**	3	0	0	0	***11***	**37**	8	2	0	0	***47***	**27**	6	3	0	0	***36***
	151	**53**	**13**	**1**	**0**	218	**597**	**156**	**41**	**9**	**0**	803	**437**	**110**	**38**	**9**	**6**	600
HOUR TOTALS																		
07:00 - 08:00	**46**	11	2	0	0	***59***	**206**	86	18	3	0	***313***	**151**	36	14	3	2	***206***
07:15 - 08:15	**66**	19	3	0	0	***88***	**243**	78	17	3	0	***341***	**171**	46	15	4	2	***238***
07:30 - 08:30	**59**	19	3	1	0	***82***	**232**	63	13	3	0	***311***	**188**	44	13	3	3	***251***
07:45 - 08:45	**57**	23	3	1	0	***84***	**230**	52	8	3	0	***293***	**173**	47	13	3	3	***239***
08:00 - 09:00	**52**	27	4	1	0	***84***	**229**	38	11	3	0	***281***	**180**	42	11	5	2	***240***
08:15 - 09:15	**38**	18	4	1	0	***61***	**187**	38	12	5	0	***242***	**161**	39	11	5	3	***219***
08:30 - 09:30	**42**	18	4	0	0	***64***	**179**	42	15	4	0	***240***	**141**	41	7	4	2	***195***
08:45 - 09:45	**51**	20	8	0	0	***79***	**179**	37	15	5	0	***236***	**127**	37	11	4	2	***181***
09:00 - 10:00	**53**	15	7	0	0	***75***	**162**	32	12	3	0	***209***	**106**	32	13	1	2	***154***

Washington Roundabout - Storrington

MODAL
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Tuesday 10 October 2017

London Road Northbound

A	London Rd Left						London Road thru						London Road Right					
	A-B						A-C						A-D					
TIME	CARS	LIGHT	HEAVY	BUSES	MOTORCYCLES	TOTAL MOVEMENTS	CARS	LIGHT	HEAVY	BUSES	MOTORCYCLES	TOTAL MOVEMENTS	CARS	LIGHT	HEAVY	BUSES	MOTORCYCLES	TOTAL MOVEMENTS
16:00 - 16:15	**35**	11	4	0	0	***50***	**222**	51	23	0	0	***296***	**26**	5	2	0	0	***33***
16:15 - 16:30	**28**	7	0	0	0	***35***	**126**	23	4	0	0	***153***	**24**	5	3	0	0	***32***
16:30 - 16:45	**37**	2	0	0	0	***39***	**119**	20	6	0	0	***145***	**18**	3	0	0	1	***22***
16:45 - 17:00	**43**	6	1	0	0	***50***	**133**	24	7	0	0	***164***	**31**	4	2	0	0	***37***
17:00 - 17:15	**33**	5	0	0	0	***38***	**159**	38	6	0	0	***203***	**29**	12	0	0	2	***43***
17:15 - 17:30	**34**	3	0	0	0	***37***	**150**	33	7	0	0	***190***	**33**	1	1	0	2	***37***
17:30 - 17:45	**43**	7	0	0	1	***51***	**116**	19	4	0	0	***139***	**29**	1	1	0	1	***32***
17:45 - 18:00	**45**	6	0	0	2	***53***	**125**	13	2	0	0	***140***	**31**	1	0	0	0	***32***
18:00 - 18:15	**50**	4	0	0	0	***54***	**117**	13	2	0	0	***132***	**23**	1	0	0	2	***26***
18:15 - 18:30	**33**	1	1	1	1	***37***	**84**	10	1	0	0	***95***	**18**	1	1	0	1	***21***
18:30 - 18:45	**35**	2	0	0	0	***37***	**86**	17	4	0	0	***107***	**14**	1	0	0	0	***15***
18:45 - 19:00	**29**	1	0	0	0	***30***	**67**	15	1	0	0	***83***	**20**	0	0	0	0	***20***
	445	**55**	**6**	**1**	**4**	511	**1504**	**276**	**67**	**0**	**0**	1847	**296**	**35**	**10**	**0**	**9**	350
HOUR TOTALS																		
16:00 - 17:00	**143**	26	5	0	0	***174***	**600**	118	40	0	0	***758***	**99**	17	7	0	1	***124***
16:15 - 17:15	**141**	20	1	0	0	***162***	**537**	105	23	0	0	***665***	**102**	24	5	0	3	***134***
16:30 - 17:30	**147**	16	1	0	0	***164***	**561**	115	26	0	0	***702***	**111**	20	3	0	5	***139***
16:45 - 17:45	**153**	21	1	0	1	***176***	**558**	114	24	0	0	***696***	**122**	18	4	0	5	***149***
17:00 - 18:00	**155**	21	0	0	3	***179***	**550**	103	19	0	0	***672***	**122**	15	2	0	5	***144***
17:15 - 18:15	**172**	20	0	0	3	***195***	**508**	78	15	0	0	***601***	**116**	4	2	0	5	***127***
17:30 - 18:30	**171**	18	1	1	4	***195***	**442**	55	9	0	0	***506***	**101**	4	2	0	4	***111***
17:45 - 18:45	**163**	13	1	1	3	***181***	**412**	53	9	0	0	***474***	**86**	4	1	0	3	***94***
19:00 - 19:00	**147**	8	1	1	1	***158***	**354**	55	8	0	0	***417***	**75**	3	1	0	3	***82***

Storrington Road Eastbound

B	Storrington Rd Left						Storrington Rd Thru						Storrington Rd Right					
	B-C						B-D						B-A					
TIME	CARS	LIGHT	HEAVY	BUSES	MOTORCYCLES	TOTAL MOVEMENTS	CARS	LIGHT	HEAVY	BUSES	MOTORCYCLES	TOTAL MOVEMENTS	CARS	LIGHT	HEAVY	BUSES	MOTORCYCLES	TOTAL MOVEMENTS
16:00 - 16:15	**61**	13	6	0	0	***80***	**51**	8	3		1	***63***	**35**	6	6	0	1	***48***
16:15 - 16:30	**49**	10	3	0	0	***62***	57	13	0	0	0	***70***	**25**	4	3	0	1	***33***
16:30 - 16:45	**53**	13	6	0	0	***72***	65	19	2	3	0	***89***	**27**	15	0	0	0	***42***
16:45 - 17:00	**55**	13	3	0	0	***71***	73	19	0	0	0	***92***	**26**	4	1	0	0	***31***
17:00 - 17:15	**50**	6	8	0	0	***64***	66	17	0	1	0	***84***	**26**	6	1	0	1	***34***
17:15 - 17:30	**63**	12	5	0	0	***80***	**72**	11	0	1	1	***85***	**37**	4	2	1	1	***45***
17:30 - 17:45	**54**	10	3	0	0	***67***	74	7	0	0	1	***82***	**29**	11	0	0	0	***40***
17:45 - 18:00	**56**	5	3	0	0	***64***	67	7	0	2	0	***76***	**37**	2	3	1	0	***43***
18:00 - 18:15	**47**	5	2	0	0	***54***	52	3	0	0	1	***56***	**28**	4	1	0	1	***34***
18:15 - 18:30	**45**	10	3	0	0	***58***	51	8	0	1	0	***60***	**25**	6	1	0	2	***34***
18:30 - 18:45	**42**	7	6	0	0	***55***	53	3	0	1	0	***57***	**38**	1	1	2	0	***42***
18:45 - 19:00	**37**	5	1	0	0	***43***	46	2	1	1	0	***50***	**31**	3	1	0	0	***35***
	612	**109**	**49**	**0**	**0**	**770**	**727**	**117**	**6**	**0**	**4**	**864**	**364**	**66**	**20**	**4**	**7**	**461**
HOUR TOTALS																		
16:00 - 17:00	**218**	49	18	0	0	***285***	**246**	59	5	3	1	***314***	**113**	29	10	0	2	***154***
16:15 - 17:15	**207**	42	20	0	0	***269***	**261**	68	2	4	0	***335***	**104**	29	5	0	2	***140***
16:30 - 17:30	**221**	44	22	0	0	***287***	**276**	66	2	5	1	***350***	**116**	29	4	1	2	***152***
16:45 - 17:45	**222**	41	19	0	0	***282***	**285**	54	0	2	2	***343***	**118**	25	4	1	2	***150***
17:00 - 18:00	**223**	33	19	0	0	***275***	**279**	42	0	4	2	***327***	**129**	23	6	2	2	***162***
17:15 - 18:15	**220**	32	13	0	0	***265***	**265**	28	0	3	3	***299***	**131**	21	6	2	2	***162***
17:30 - 18:30	**202**	30	11	0	0	***243***	**244**	25	0	3	2	***274***	**119**	23	5	1	3	***151***
17:45 - 18:45	**190**	27	14	0	0	***231***	**223**	21	0	4	1	***249***	**128**	13	6	3	3	***153***
19:00 - 19:00	**171**	27	12	0	0	***210***	**202**	16	1	3	1	***223***	**122**	14	4	2	3	***145***

London Road Southbound

C	London Rd Left						London Rd Thru						London Rd Right					
	C-D						C-A						C-B					
TIME	CARS	LIGHT	HEAVY	BUSES	MOTORCYCLES	TOTAL MOVEMENTS	CARS	LIGHT	HEAVY	BUSES	MOTORCYCLES	TOTAL MOVEMENTS	CARS	LIGHT	HEAVY	BUSES	MOTORCYCLES	TOTAL MOVEMENTS
16:00 - 16:15	**14**	8	1	1	0	***24***	**148**	53	5	0	0	***206***	**31**	13	2	0	0	***46***
16:15 - 16:30	**16**	1	4	0	0	***21***	**113**	47	6	0	0	***166***	**44**	20	5	0	0	***69***
16:30 - 16:45	**22**	0	1	0	0	***23***	**142**	43	5	0	0	***190***	**33**	20	0	0	0	***53***
16:45 - 17:00	**10**	4	2	0	0	***16***	**132**	40	6	0	0	***178***	**39**	17	0	0	0	***56***
17:00 - 17:15	**5**	2	4	0	0	***11***	**138**	34	4	0	0	***176***	**27**	10	0	0	0	***37***
17:15 - 17:30	**7**	0	2	0	0	***9***	**140**	30	2	0	0	***172***	**21**	18	1	0	0	***40***
17:30 - 17:45	**11**	3	4	0	0	***18***	**159**	23	1	0	0	***183***	**27**	12	0	0	0	***39***
17:45 - 18:00	**10**	3	2	0	0	***15***	**183**	18	5	0	0	***206***	**42**	14	0	0	0	***56***
18:00 - 18:15	**9**	1	1	0	0	***11***	**209**	26	4	0	0	***239***	**50**	8	0	0	0	***58***
18:15 - 18:30	**4**	3	2	0	0	***9***	**169**	32	9	0	0	***210***	**37**	11	2	0	0	***50***
18:30 - 18:45	**13**	0	0	0	0	***13***	**139**	24	6	0	0	***169***	**58**	2	0	0	0	***60***
18:45 - 19:00	**11**	1	0	0	0	***12***	**130**	19	0	0	0	***149***	**48**	8	0	0	0	***56***
	132	**26**	**23**	**1**	**0**	**182**	**1802**	**389**	**53**	**0**	**0**	**2244**	**457**	**153**	**10**	**0**	**0**	**620**
HOUR TOTALS																		
16:00 - 17:00	**62**	13	8	1	0	***84***	**535**	183	22	0	0	***740***	**147**	70	7	0	0	***224***
16:15 - 17:15	**53**	7	11	0	0	***71***	**525**	164	21	0	0	***710***	**143**	67	5	0	0	***215***
16:30 - 17:30	**44**	6	9	0	0	***59***	**552**	147	17	0	0	***716***	**120**	65	1	0	0	***186***
16:45 - 17:45	**33**	9	12	0	0	***54***	**569**	127	13	0	0	***709***	**114**	57	1	0	0	***172***
17:00 - 18:00	**33**	8	12	0	0	***53***	**620**	105	12	0	0	***737***	**117**	54	1	0	0	***172***
17:15 - 18:15	**37**	7	9	0	0	***53***	**691**	97	12	0	0	***800***	**140**	52	1	0	0	***193***
17:30 - 18:30	**34**	10	9	0	0	***53***	**720**	99	19	0	0	***838***	**156**	45	2	0	0	***203***
17:45 - 18:45	**36**	7	5	0	0	***48***	**700**	100	24	0	0	***824***	**187**	35	2	0	0	***224***
19:00 - 19:00	**37**	5	3	0	0	***45***	**647**	101	19	0	0	***767***	**193**	29	2	0	0	***224***

A283 (The Pike) Westbound

D	The Pike Left						The Pike Thru						The Pike Right					
	D-A						D-B						D-C					
TIME	CARS	LIGHT	HEAVY	BUSES	MOTORCYCLES	TOTAL MOVEMENTS	CARS	LIGHT	HEAVY	BUSES	MOTORCYCLES	TOTAL MOVEMENTS	CARS	LIGHT	HEAVY	BUSES	MOTORCYCLES	TOTAL MOVEMENTS
16:00 - 16:15	**19**	3	0	0	0	***22***	**44**	12	1	0	0	***57***	**22**	7	2	1	0	***32***
16:15 - 16:30	**19**	5	0	0	0	***24***	**57**	15	1	1	0	***74***	**30**	6	2	0	0	***38***
16:30 - 16:45	**27**	4	0	0	0	***31***	**63**	13	0	1	0	***77***	**29**	7	1	1	0	***38***
16:45 - 17:00	**26**	6	0	0	0	***32***	**51**	12	0	1	4	***68***	**30**	5	3	0	1	***39***
17:00 - 17:15	**21**	2	0	0	0	***23***	**53**	8	1	0	1	***63***	**27**	7	0	1	1	***36***
17:15 - 17:30	**36**	5	1	0	0	***42***	**54**	6	0	1	0	***61***	**28**	3	0	0	0	***31***
17:30 - 17:45	**29**	3	0	1	0	***33***	**54**	11	0	1	1	***67***	**25**	3	0	0	3	***31***
17:45 - 18:00	**25**	2	1	0	0	***28***	**51**	8	0	2	3	***64***	**28**	3	0	0	0	***31***
18:00 - 18:15	**19**	7	0	0	0	***26***	**64**	8	0	0	1	***73***	**34**	4	0	1	0	***39***
18:15 - 18:30	**24**	6	0	0	0	***30***	**66**	5	0	2	1	***74***	**27**	4	0	0	0	***31***
18:30 - 18:45	**27**	6	0	0	0	***33***	**52**	8	0	0	0	***60***	**20**	3	0	1	1	***25***
18:45 - 19:00	**15**	3	0	0	0	***18***	**42**	5	0	1	0	***48***	**19**	4	0	1	1	***25***
	287	**52**	**2**	**1**	**0**	**342**	**651**	**111**	**3**	**10**	**11**	**786**	**319**	**56**	**8**	**6**	**7**	**396**
HOUR TOTALS																		
16:00 - 17:00	**91**	18	0	0	0	***109***	**215**	52	2	3	4	***276***	**111**	25	8	2	1	***147***
16:15 - 17:15	**93**	17	0	0	0	***110***	**224**	48	2	3	5	***282***	**116**	25	6	2	2	***151***
16:30 - 17:30	**110**	17	1	0	0	***128***	**221**	39	1	3	5	***269***	**114**	22	4	2	2	***144***
16:45 - 17:45	**112**	16	1	1	0	***130***	**212**	37	1	3	6	***259***	**110**	18	3	1	5	***137***
17:00 - 18:00	**111**	12	2	1	0	***126***	**212**	33	1	4	5	***255***	**108**	16	0	1	4	***129***
17:15 - 18:15	**109**	17	2	1	0	***129***	**223**	33	0	4	5	***265***	**115**	13	0	1	3	***132***
17:30 - 18:30	**97**	18	1	1	0	***117***	**235**	32	0	5	6	***278***	**114**	14	0	1	3	***132***
17:45 - 18:45	**95**	21	1	0	0	***117***	**233**	29	0	4	5	***271***	**109**	14	0	2	1	***126***
19:00 - 19:00	**85**	22	0	0	0	***107***	**224**	26	0	3	2	***255***	**100**	15	0	3	2	***120***

SIDEROAD - LONDON RD & THE PIKE

MODAL
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Time		From London Rd To A283 CAR	LGV	HGV	TOTAL OUT	From A283 to London Rd CAR	LGV	HGV	TOTAL IN	TOTAL MOVEMENTS
07:00	07:15	5	0	2	7	4	0	4	8	15
07:15	07:30	4	0	2	6	4	0	9	13	19
07:30	07:45	9	1	4	14	3	0	4	7	21
07:45	08:00	10	1	3	14	1	0	11	12	26
08:00	08:15	8	1	4	13	3	2	4	9	22
08:15	08:30	10	1	2	13	1	1	13	15	28
08:30	08:45	3	2	2	7	1	0	24	25	32
08:45	09:00	25	1	3	29	0	2	24	26	55
09:00	09:15	15	1	1	17	1	1	3	5	22
09:15	09:30	7	1	0	8	2	4	7	13	21
09:30	09:45	6	0	1	7	0	0	10	10	17
09:45	10:00	5	3	0	8	2	1	7	10	18
Sum		107	12	24	143	22	11	120	153	296

Time		FROM A283 WESTBOUND LEFT CAR	LGV	HGV	BUS	MC	TOTAL SOUTH
07:00	07:15	2	0	1	0	0	3
07:15	07:30	3	2	0	0	0	5
07:30	07:45	12	3	0	0	0	15
07:45	08:00	11	4	0	0	0	15
08:00	08:15	21	3	0	0	0	24
08:15	08:30	17	5	0	0	0	22
08:30	08:45	17	2	0	1	0	20
08:45	09:00	21	4	0	0	0	25
09:00	09:15	17	3	0	0	0	20
09:15	09:30	8	1	0	0	0	9
09:30	09:45	5	3	0	0	0	8
09:45	10:00	4	1	0	0	0	5
Sum		138	31	1	1	0	171

Time		From London Rd To A283 CAR	LGV	HGV	TOTAL OUT	From A283 to London Rd CAR	LGV	HGV	TOTAL IN	TOTAL MOVEMENTS
16:00	16:15	7	4	1	12	17	0	1	18	30
16:15	16:30	8	1	0	9	13	2	1	16	25
16:30	16:45	5	5	2	12	17	1	1	19	31
16:45	17:00	13	1	1	15	15	9	3	27	42
17:00	17:15	10	0	1	11	9	1	2	12	23
17:15	17:30	8	1	2	11	7	0	0	7	18
17:30	17:45	8	2	1	11	11	1	1	13	24
17:45	18:00	12	0	1	13	10	3	1	14	27
18:00	18:15	36	0	1	37	8	0	2	10	47
18:15	18:30	4	1	2	7	10	2	2	14	21
18:30	18:45	4	1	1	6	12	1	2	15	21
18:45	19:00	7	0	1	8	8	2	1	11	19
Sum		122	16	14	152	137	22	17	176	328

Time		FROM A283 WESTBOUND LEFT CAR	LGV	HGV	BUS	MC	TOTAL SOUTH
16:00	16:15	22	12	0	0	0	34
16:15	16:30	34	12	0	0	0	46
16:30	16:45	58	7	0	0	0	65
16:45	17:00	63	24	0	0	1	88
17:00	17:15	75	17	0	0	0	92
17:15	17:30	77	20	0	0	1	98
17:30	17:45	89	20	0	0	0	109
17:45	18:00	105	19	0	0	0	124
18:00	18:15	80	14	0	0	0	94
18:15	18:30	44	8	0	0	0	52
18:30	18:45	25	2	0	0	1	28
18:45	19:00	23	4	0	0	0	27
Sum		695	159	0	0	3	857

APPENDIX H

Traffic Flow Analysis

Between A29 Roundabout Fontwell Slindon Exit & A24 Roundabout Washington Pike Rd A283 Exit

All Vehicles

Start
Finish

	Location			
	A24 Roundabout	A29 Roundabout		
Direction	Total No. Vehicles Counted	Total No. Vehicles Counted	Total No. Vehicles Matched	Percentage Matched
East to West	365	413	34	8.23%
West to East	401	405	25	6.17%

Notes

1) Traffic analysis took place on Tuesday 31st October 2017 between 11.00 - 14.00
2) Traffic measured for 1hr at each location staggered by the estimated journey time between count locations (calculated using Google Maps - approx. 22mins)
3) Percentage Matched figures are taken as % of traffic flows at Fontwell Roundabout

HGV Vehicles

	Location				
	A24 Roundabout	A29 Roundabout		Total HGV Traffic as % of All Vehicles	
Direction	Total No. Vehicles Counted	Total No. Vehicles Counted	Total No. Vehicles Matched	A24 Roundabout	A29 Roundabout
East to West	26	19	3	7.12%	4.60%
West to East	32	29	4	7.98%	7.16%

Notes

1) HGV data extracted from total data collected as detailed above

	Washington 12.30-13.30	TYPE		Fontwell 12.50-13.55	Type		Match		
			Lorry Count			Lorry Count			Total Matches
			26			19			34
1	LZD		0	OEB	LORRY	1	#N/A	0	
2	UCG		0	MZP		0	#N/A	0	
3	CWW		0	LLC		0	#N/A	0	
4	XFR	LORRY	1	NAA		0	#N/A	0	
5	HBY	LORRY	1	HVT		0	#N/A	0	
6	VDC		0	YYG		0	#N/A	0	
7	ORG		0	FXD		0	#N/A	0	
8	WEV		0	RVD		0	195	1	
9	YTS		0	KAE		0	#N/A	0	
10	FVX		0	FHM		0	#N/A	0	
11	NZO		0	XCG		0	#N/A	0	
12	TAG		0	BTU		0	#N/A	0	
13	XPV		0	TYV		0	#N/A	0	
14	HKG		0	ZXJ		0	#N/A	0	
15	WNZ		0	111N		0	#N/A	0	
16	XFE		0	UKHN		0	#N/A	0	
17	FBB		0	EPE		0	#N/A	0	
18	YTH		0	WJE		0	#N/A	0	
19	YBP		0	YBT		0	#N/A	0	
20	8473		0	RYB		0	#N/A	0	
21	YFA		0	WSU		0	#N/A	0	
22	EVV		0	CLU		0	#N/A	0	
23	YTV		0	XYM		0	#N/A	0	
24	HWM		0	CYX	LORRY	1	#N/A	0	
25	OGS		0	HWO		0	#N/A	0	
26	TYA	LORRY	1	OAP		0	#N/A	0	
27	ECA		0	AXX		0	#N/A	0	
28	YNE		0	GZD		0	#N/A	0	
29	KPT		0	EKD		0	#N/A	0	
30	AUE		0	OMV		0	#N/A	0	
31	PPZ		0	GYO		0	34	1	
32	FRV		0	KYF		0	#N/A	0	
33	SGZ		0	RKZ		0	#N/A	0	
34	EUT		0	PPZ		0	#N/A	0	
35	XJO		0	BMJ		0	#N/A	0	
36	ZLU		0	PJ		0	#N/A	0	
37	LBP		0	VHF		0	#N/A	0	
38	KWW		0	RMO		0	#N/A	0	
39	RYR		0	FMG		0	#N/A	0	
40	EFR		0	TWZ		0	#N/A	0	
41	EZO		0	CYP		0	50	1	
42	MLF		0	DZZ		0	#N/A	0	
43	XXD		0	EFB		0	#N/A	0	
44	UFX		0	PFE		0	#N/A	0	
45	BZX		0	EUJ		0	#N/A	0	
46	WBX		0	YNN		0	#N/A	0	
47	LFS	LORRY	1	AKK		0	#N/A	0	
48	MEU		0	UWN		0	#N/A	0	
49	TSU	LORRY	1	EFY		0	#N/A	0	
50	PJJ		0	EZO		0	#N/A	0	
51	AZN		0	KLO		0	#N/A	0	
52	LPU		0	GKP		0	316	1	
53	AKY	BUS	0	UXD		0	#N/A	0	
54	EXW		0	YMV		0	#N/A	0	
55	PHK		0	OHN		0	#N/A	0	
56	VNN		0	CMX		0	#N/A	0	
57	LXA		0	JYG		0	#N/A	0	
58	OSO	LORRY	1	WVG		0	#N/A	0	
59	LKK		0	FEM		0	#N/A	0	
60	BYG		0	GUY		0	#N/A	0	
61	JHH		0	WFJ		0	#N/A	0	
62	GSX		0	ZDH		0	#N/A	0	
63	HXX		0	LTF		0	242	1	
64	RWW		0	AUJ		0	#N/A	0	
65	ADO		0	VVE		0	#N/A	0	
66	XGR		0	VUN		0	#N/A	0	
67	XWT		0	XLY		0	#N/A	0	
68	UYF	LORRY	1	JWK		0	#N/A	0	
69	DVF		0	GJN		0	#N/A	0	
70	CFK		0	OKP		0	#N/A	0	
71	ZGV		0	BTF		0	#N/A	0	
72	RVZ		0	YPK		0	#N/A	0	
73	YWW		0	LBG		0	#N/A	0	
74	VLS		0	KPY		0	#N/A	0	
75	VKJ		0	FVB		0	#N/A	0	
76	KZX		0	CLY		0	#N/A	0	
77	GKZ		0	BAC		0	#N/A	0	
78	VWG		0	NDE		0	#N/A	0	
79	YAN		0	FWL		0	#N/A	0	
80	RYJ	LORRY	1	FAA		0	#N/A	0	
81	NNM		0	LJU		0	#N/A	0	
82	SVW		0	CWJ		0	#N/A	0	

83	WUX		0	BZF		0	#N/A	0
84	ABY		0	YYV		0	#N/A	0
85	FOK		0	EZW	LORRY	1	#N/A	0
86	CEO		0	ZGP		0	103	1
87	XEJ		0	HXT		0	#N/A	0
88	OLK		0	VSK		0	#N/A	0
89	NUY		0	FYK		0	#N/A	0
90	NDY		0	AYB		0	#N/A	0
91	NVX		0	EWF		0	#N/A	0
92	XCR	LORRY	1	NFH	LORRY	1	#N/A	0
93	YRJ		0	NWJ		0	249	1
94	JCJ		0	VCL		0	#N/A	0
95	HVM		0	HUX		0	#N/A	0
96	CTV		0	OGZ		0	#N/A	0
97	YWA		0	XYZ	LORRY	1	#N/A	0
98	EVB		0	VAD		0	#N/A	0
99	CAS	LORRY	1	UUL		0	127	1
100	YPL		0	WZE		0	#N/A	0
101	FWB		0	HBG		0	#N/A	0
102	HYA		0	YON		0	#N/A	0
103	DAY	LORRY	1	CEO		0	#N/A	0
104	UWD		0	LHK		0	#N/A	0
105	ADB		0	LUT		0	#N/A	0
106	BKE		0	FXV		0	#N/A	0
107	OZA		0	HKJ		0	#N/A	0
108	PAM		0	AWD		0	#N/A	0
109	NBE		0	MUY		0	#N/A	0
110	VYP		0	BPX		0	#N/A	0
111	HTK		0	EDB		0	#N/A	0
112	HNF		0	RNJ		0	#N/A	0
113	YCT		0	HPA		0	#N/A	0
114	YLX		0	FNJ	LORRY	1	#N/A	0
115	OSO		0	OLJ		0	#N/A	0
116	OPA		0	TKT		0	#N/A	0
117	HYF		0	KNW		0	229	1
118	YEV		0	XDB		0	#N/A	0
119	EXV		0	XGB		0	#N/A	0
120	TPO		0	EGE		0	#N/A	0
121	CTO	BUS	0	AGU		0	#N/A	0
122	HSX		0	HKY		0	#N/A	0
123	KZS		0	JTX		0	#N/A	0
124	OGY		0	YRE		0	#N/A	0
125	KXT		0	BCV		0	#N/A	0
126	KNO		0	XAC		0	#N/A	0
127	ECC		0	CAS	LORRY	1	#N/A	0
128	KVL		0	ULT		0	#N/A	0
129	LKM		0	ETX		0	#N/A	0
130	GYT		0	MNE		0	#N/A	0
131	DOH		0	BMY		0	#N/A	0
132	GXY		0	AEX		0	#N/A	0
133	YCL	LORRY	1	YZX		0	#N/A	0
134	KRG		0	JJZ		0	#N/A	0
135	ZFO		0	CDE		0	#N/A	0
136	WBK		0	VAY		0	#N/A	0
137	VPM		0	PJV		0	171	1
138	YGH		0	VPD		0	#N/A	0
139	GHO		0	HSE		0	175	1
140	KKJ		0	MLL		0	#N/A	0
141	UGG		0	FVJ		0	#N/A	0
142	YDY		0	OAC		0	#N/A	0
143	MZT		0	RBV		0	#N/A	0
144	ZW		0	NXU		0	#N/A	0
145	AUA		0	VPP		0	#N/A	0
146	PFV		0	FYT		0	#N/A	0
147	SXP		0	LHW		0	#N/A	0
148	DMX		0	VHV		0	#N/A	0
149	FDC		0	TVL		0	#N/A	0
150	UOH		0	MJN		0	180	1
151	OTB		0	CPK		0	#N/A	0
152	FGN		0	OBE	LORRY	1	#N/A	0
153	CKO		0	SUU		0	#N/A	0
154	OAY		0	SXO		0	#N/A	0
155	XEM		0	LVX		0	#N/A	0
156	XVT		0	AOF		0	344	1
157	DOH		0	JYG		0	#N/A	0
158	ZGX		0	HHP		0	#N/A	0
159	UYD		0	NYX		0	#N/A	0
160	XVP		0	GZW		0	#N/A	0
161	UBG		0	GFU		0	#N/A	0
162	CYG		0	AOE		0	#N/A	0
163	SYH		0	MPX		0	#N/A	0
164	BPO		0	JCW		0	#N/A	0
165	DAY	LORRY	1	XUK		0	#N/A	0
166	ETK	#	0	CKJ		0	#N/A	0
167	FOH		0	JTX		0	#N/A	0
168	ZTG		0	YAP		0	#N/A	0
169	AZB		0	MRV		0	283	1

170	TAC		0	LTD		0	#N/A	0
171	OMD		0	VPM		0	#N/A	0
172	PKW		0	LZS		0	#N/A	0
173	WWN		0	HZT	MINIBUS	0	#N/A	0
174	SHV	LORRY	1	VAE		0	#N/A	0
175	PGJ		0	GHO		0	#N/A	0
176	EZF		0	TZV		0	#N/A	0
177	ZXJ		0	MVE		0	14	1
178	NVN		0	BOL	LORRY	1	#N/A	0
179	FCG	LORRY	1	JXA		0	#N/A	0
180	PVF		0	UOH		0	#N/A	0
181	YST		0	EKN		0	#N/A	0
182	SYA		0	OMC	LORRY	1	#N/A	0
183	LBE		0	CKD		0	#N/A	0
184	AMY		0	UAU		0	#N/A	0
185	RNO		0	WSE		0	#N/A	0
186	EUO		0	CKE		0	#N/A	0
187	TTE		0	963		0	#N/A	0
188	4962		0	YGO		0	#N/A	0
189	BMA		0	GAL		0	#N/A	0
190	NNL		0	ZRZ		0	248	1
191	AUE		0	OZH		0	#N/A	0
192	LWL		0	KBY		0	#N/A	0
193	BPE		0	CHX		0	#N/A	0
194	RXX		0	XVD	LORRY	1	#N/A	0
195	LNZ		0	WEV		0	#N/A	0
196	BUU		0	UBT		0	#N/A	0
197	SXW		0	EPF		0	#N/A	0
198	YYU		0	WHG		0	#N/A	0
199	NBZ		0	JMF		0	#N/A	0
200	OOY		0	XML		0	214	1
201	XGK		0	XKK		0	#N/A	0
202	TFG		0	RSY		0	#N/A	0
203	GXM		0	TRW		0	#N/A	0
204	WYC	LORRY	1	LKO		0	#N/A	0
205	FTA		0	EJJ		0	#N/A	0
206	EKU		0	YNR		0	#N/A	0
207	XOZ		0	496Z		0	#N/A	0
208	CAS	LORRY	1	XWA		0	127	1
209	OVA		0	SYT		0	#N/A	0
210	WJG		0	ZGT		0	#N/A	0
211	NWD		0	WLG		0	#N/A	0
212	DAF		0	FYK		0	#N/A	0
213	XEB		0	ZKE		0	#N/A	0
214	PJO		0	OOY		0	#N/A	0
215	EOR		0	OBK		0	#N/A	0
216	DTP		0	LXO		0	#N/A	0
217	MYV	LORRY	1	KKD		0	#N/A	0
218	NNH		0	DCE		0	#N/A	0
219	JCJ		0	ONY		0	#N/A	0
220	WWY	LORRY	1	EGY		0	#N/A	0
221	XKMN		0	BRV		0	#N/A	0
222	YFJ		0	LNK		0	#N/A	0
223	JXK		0	EVY		0	#N/A	0
224	HYA	LORRY	1	ZWP		0	#N/A	0
225	KOD		0	ZCF		0	#N/A	0
226	FSL		0	RXG		0	#N/A	0
227	LXO	LORRY	1	HGU		0	216	1
228	JXT		0	HXS		0	#N/A	0
229	JFC		0	HYF		0	#N/A	0
230	VUX		0	CAS	LORRY	1	#N/A	0
231	YOY		0	RZK		0	#N/A	0
232	LJU		0	SXS		0	81	1
233	LZD		0	VNW		0	#N/A	0
234	WKG		0	NYW		0	#N/A	0
235	HSS		0	UNW		0	#N/A	0
236	ZPS		0	ENR		0	#N/A	0
237	UUY		0	XUU		0	#N/A	0
238	BAP		0	MKU		0	#N/A	0
239	AVV		0	MXO		0	#N/A	0
240	CGZ		0	NRX		0	#N/A	0
241	EUO		0	BWD		0	#N/A	0
242	CFJ		0	HXX		0	359	1
243	NNH		0	EJD		0	#N/A	0
244	DKP		0	UCA		0	#N/A	0
245	WOX		0	MGB	LORRY	1	#N/A	0
246	FDD		0	NJK		0	#N/A	0
247	LLY		0	RXF		0	#N/A	0
248	ZTS		0	NNL		0	#N/A	0
249	VKS		0	YRJ		0	#N/A	0
250	AOX		0	PRX		0	#N/A	0
251	MUD		0	WAY		0	#N/A	0
252	JKV		0	BKL		0	#N/A	0
253	TKU		0	NUB		0	306	1
254	TTK		0	YSX		0	#N/A	0
255	WSN		0	ZKB		0	#N/A	0
256	CYP		0	UNJ		0	41	1

257	AZX	LORRY	1	POT		0	#N/A	0
258	KCF		0	SVP		0	#N/A	0
259	DSZ	LORRY	1	KCA		0	#N/A	0
260	TLZ		0	CHF		0	#N/A	0
261	WCL		0	WRK		0	#N/A	0
262	YUS		0	PZS		0	#N/A	0
263	VTT		0	FYY		0	#N/A	0
264	NMY		0	985J		0	#N/A	0
265	FPC		0	OCD		0	#N/A	0
266	EFD		0	GZN		0	#N/A	0
267	FKV	BUS	0	UPF		0	#N/A	0
268	EOJ		0	DSU		0	#N/A	0
269	JMV		0	6271		0	#N/A	0
270	ZKE		0	VVM		0	213	1
271	DGF		0	FNH		0	#N/A	0
272	HWE		0	UNH		0	#N/A	0
273	YZS		0	SGW		0	#N/A	0
274	HDC		0	ZKN	LORRY	1	#N/A	0
275	BHP		0	ZHL		0	#N/A	0
276	KLK		0	DPY		0	#N/A	0
277	FVY		0	WHL		0	#N/A	0
278	SFV		0	UYK		0	#N/A	0
279	HRO	LORRY	1	KXP		0	#N/A	0
280	SSU		0	LTN		0	#N/A	0
281	UWG		0	LJO		0	#N/A	0
282	KYH		0	PRL		0	#N/A	0
283	BWB		0	AZB		0	313	1
284	HRU		0	FHG		0	#N/A	0
285	NYC		0	HFE		0	#N/A	0
286	UNK		0	OSY		0	#N/A	0
287	VIK		0	OAK		0	#N/A	0
288	NRK		0	LDJ		0	#N/A	0
289	ONE		0	MAR		0	#N/A	0
290	OOA		0	YFU		0	320	1
291	WSZ	LORRY	1	RYW		0	#N/A	0
292	ZXM		0	EFO		0	#N/A	0
293	APX		0	OPE		0	#N/A	0
294	GVM		0	LTS		0	#N/A	0
295	GUA		0	OJO		0	#N/A	0
296	NKU		0	VCC		0	#N/A	0
297	TDO		0	YVS		0	#N/A	0
298	XFG		0	BZL		0	#N/A	0
299	PUF	LORRY	1	DFY		0	#N/A	0
300	KVE		0	BSZ		0	#N/A	0
301	XCS		0	XDF		0	#N/A	0
302	FKY		0	VUG		0	#N/A	0
303	XXV		0	DZD	LORRY	1	#N/A	0
304	YJE		0	KWJ		0	#N/A	0
305	RMV		0	KZW		0	#N/A	0
306	RNO		0	TKU		0	#N/A	0
307	SJU		0	KZT		0	#N/A	0
308	VJK		0	111		0	#N/A	0
309	JYR		0	XUD		0	338	1
310	NZJ		0	MRO		0	339	1
311	TVY		0	OEW		0	#N/A	0
312	KGF		0	KLZ		0	#N/A	0
313	KVG		0	BWB		0	#N/A	0
314	KHB		0	FLE		0	340	1
315	KKX		0	LWD		0	#N/A	0
316	HJX		0	LPU		0	#N/A	0
317	VAL		0	GLK		0	#N/A	0
318	WLJ		0	UNY		0	#N/A	0
319	IOS		0	ZTD		0	#N/A	0
320	FYN		0	OOA		0	#N/A	0
321	SBV		0	GGH		0	#N/A	0
322	URJ		0	686		0	#N/A	0
323	DTZ		0	LBU		0	#N/A	0
324	XOA		0	JAL		0	#N/A	0
325	GGV		0	MMO		0	#N/A	0
326	BXP		0	BXW		0	#N/A	0
327	KHD		0	GBE	LORRY	1	#N/A	0
328	YZN		0	ZJJ		0	#N/A	0
329	FCY		0	TWL		0	#N/A	0
330	LUT		0	ZBX		0	105	1
331	OUL		0	NYV		0	#N/A	0
332	XDS		0	SXY	LORRY	1	#N/A	0
333	JML		0	FXU		0	#N/A	0
334	LYV		0	FFL		0	#N/A	0
335	GAP		0	SHX		0	#N/A	0
336	FFD		0	JWE		0	#N/A	0
337	PZZ		0	WVX		0	#N/A	0
338	BCO		0	JYR		0	#N/A	0
339	776		0	NZJ	LORRY	1	#N/A	0
340	OOB		0	KHB		0	#N/A	0
341	XPM		0	MYP		0	#N/A	0
342	ZZF		0	XWL		0	#N/A	0
343	MWO		0	HWU		0	#N/A	0

344	FYU	0	XVT		0	#N/A	0
345	SSO	0	YFE		0	#N/A	0
346	LYW	0	YKJ		0	#N/A	0
347	SNF	0	SDV		0	#N/A	0
348	AKZ	0	NTO		0	#N/A	0
349	YZX	0	LKN		0	133	1
350	DHV	0	ULJ		0	#N/A	0
351	DDA	0	XMS		0	#N/A	1
352	KRF	0	SVO		0	#N/A	0
353	GWZ	0	DAP		0	#N/A	0
354	UAU	0	SAX		0	184	1
355	EWK	0	DOJ		0	#N/A	0
356	XFT	0	VZZ		0	#N/A	0
357	KAZ	0	LWH		0	#N/A	0
358	ZYZ	0	DFC		0	#N/A	0
359	OGM	0	CFJ		0	#N/A	0
360	PHZ	0	KDJ		0	379	1
361	FXT	0	TON		0	#N/A	0
362	NSX	0	ZDW		0	#N/A	0
363	YSZ	0	GBX		0	#N/A	0
364	RWL	0	XNK		0	#N/A	0
365	OXV	0	MHA		0	#N/A	0
366		0	BZD		0	#N/A	0
367		0	AZD		0	#N/A	0
368		0	HBB		0	#N/A	0
369		0	WTW		0	#N/A	0
370		0	KZV		0	#N/A	0
371		0	TWX		0	#N/A	0
372		0	RDF		0	#N/A	0
373		0	EUX		0	#N/A	0
374		0	KHF		0	#N/A	0
375		0	PKF		0	#N/A	0
376		0	CHA		0	#N/A	0
377		0	UAU		0	#N/A	0
378		0	KJE		0	#N/A	0
379		0	PHZ		0	#N/A	0
380		0	URF		0	#N/A	0
381		0	ACL		0	#N/A	0
382		0	WVD		0	#N/A	0
383		0	SWC		0	#N/A	0
384		0	FZS		0	#N/A	0
385		0	UNR		0	#N/A	0
386		0	TYO		0	#N/A	0
387		0	LFN		0	#N/A	0
388		0	GBO		0	#N/A	0
389		0	AHN		0	#N/A	0
390		0	OLA		0	#N/A	0
391		0	KFV		0	#N/A	0
392		0	HJV		0	#N/A	0
393		0	PBY		0	#N/A	0
394		0	JXV		0	#N/A	0
395		0	PER		0	#N/A	0
396		0	AEW		0	#N/A	0
397		0	NVM		0	#N/A	0
398		0	FKL		0	#N/A	0
399		0	BHA		0	#N/A	0
400		0	BUH		0	#N/A	0
401		0	SYZ		0	#N/A	0
402		0	BOH	LORRY	1	#N/A	0
403		0	EXR		0	#N/A	0
404		0	XAU		0	#N/A	0
405		0	LJK		0	#N/A	0
406		0	PKU		0	#N/A	0
407		0	VLK		0	#N/A	0
408		0	FRK		0	#N/A	0
409		0	NCY		0	#N/A	0
410		0	YTP		0	#N/A	0
411		0	DDA		0	#N/A	0
412		0	MXP		0	#N/A	0
413		0	SXV		0	#N/A	0
414							
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430							

	Fontwell 10.55-11.55	TYPE		Washington 11.15-12.20	Type		Match		
			Lorry Count			Lorry Count			Total Matches
			29			32			25
1	XTD		0	NPK		0	#N/A	0	
2	HHO		0	VOO		0	#N/A	0	
3	HTO		0	NNA		0	#N/A	0	
4	KWZ		0	XNZ		0	#N/A	0	
5	FVX		0	KHV		0	#N/A	0	
6	VWR		0	FLR		0	#N/A	0	
7	WLR		0	RKK		0	#N/A	0	
8	NYX		0	JGB		0	#N/A	0	
9	GMX		0	NHH		0	#N/A	0	
10	JWG		0	HFO		0	#N/A	0	
11	TFV		0	XSW		0	#N/A	0	
12	JDW		0	JDZ		0	336	1	
13	KNX		0	UDX		0	#N/A	0	
14	PVC		0	EBZ		0	#N/A	0	
15	BPX		0	FJA		0	#N/A	0	
16	RZH		0	VWJ		0	#N/A	0	
17	LTZ	LORRY	1	FFM		0	#N/A	0	
18	SMX		0	ZHP		0	#N/A	0	
19	YPL		0	OTN		0	#N/A	0	
20	KYA		0	NHN		0	#N/A	0	
21	YEV		0	TUB		0	86	1	
22	VLH		0	XDN		0	#N/A	0	
23	LTZ		0	VMZ	LORRY	1	#N/A	0	
24	EDG		0	CFW		0	32	1	
25	VNE		0	VTW		0	#N/A	0	
26	FCC		0	BZH		0	#N/A	0	
27	LHX		0	UWP		0	#N/A	0	
28	FWR		0	HNM		0	#N/A	0	
29	NJC		0	LPA		0	#N/A	0	
30	CZA		0	VZC		0	#N/A	0	
31	HLV	MINIBUS	0	ODG		0	#N/A	0	
32	VKP		0	EDG		0	#N/A	0	
33	MVM		0	MJB		0	#N/A	0	
34	ZRR		0	LCV		0	#N/A	0	
35	20		0	APW		0	#N/A	0	
36	KFC		0	PCX		0	#N/A	0	
37	NZY		0	NUY		0	#N/A	0	
38	PXF		0	HJC		0	#N/A	0	
39	FHC		0	GYR		0	#N/A	0	
40	ETF		0	GXZ		0	#N/A	0	
41	WEK		0	EVB		0	#N/A	0	
42	ZXT		0	LRU		0	#N/A	0	
43	PNK		0	UDN		0	#N/A	0	
44	FWB		0	XXF		0	#N/A	0	
45	OHX		0	FEM		0	#N/A	0	
46	EXC		0	VTZ	LORRY	1	#N/A	0	
47	RHO		0	PHR		0	#N/A	0	
48	POH		0	HBY	LORRY	1	#N/A	0	
49	ZLZ		0	MZV		0	#N/A	0	
50	KPF		0	FSD		0	#N/A	0	
51	KUY		0	GEY		0	#N/A	0	
52	VCW		0	MZU		0	#N/A	0	
53	AVR		0	YBL		0	#N/A	0	
54	AMT		0	LKV		0	#N/A	0	
55	MZV		0	AVT		0	49	1	
56	WXF		0	XNF		0	#N/A	0	
57	BVE		0	PYW		0	#N/A	0	
58	VNE	mINIBUS	0	DYU		0	#N/A	0	
59	POT		0	ZVC		0	#N/A	0	
60	UHA		0	TWA		0	#N/A	0	
61	FNF		0	VDF		0	#N/A	0	
62	UCN	LORRY	1	VZJ		0	#N/A	0	
63	CAS	LORRY	1	ZSF		0	73	1	
64	HAE		0	UAU		0	#N/A	0	
65	NFG		0	ZZW		0	#N/A	0	
66	FCD		0	DLJ		0	#N/A	0	
67	JVD		0	NUF		0	#N/A	0	
68	XCY		0	MZZ	LORRY	1	#N/A	0	
69	FDA		0	FUY		0	#N/A	0	
70	WZF		0	EKA		0	#N/A	0	
71	CX2		0	EPD		0	#N/A	0	
72	XBO		0	WNZ		0	#N/A	0	
73	KWK		0	CAS	LORRY	1	#N/A	0	
74	KFX		0	TBY		0	#N/A	0	
75	TCJ		0	UCC		0	#N/A	0	
76	WRU		0	VGZ		0	#N/A	0	
77	KKF		0	AKY	BUS	0	#N/A	0	
78	WFV		0	HCD		0	#N/A	0	

79	EEW		0	CVP		0	#N/A	0
80	UHZ		0	CUG		0	#N/A	0
81	TNL		0	YFM		0	#N/A	0
82	UEG		0	NKW		0	#N/A	0
83	PVD		0	LHN		0	#N/A	0
84	GGK		0	XYL		0	#N/A	0
85	OLA		0	KKX		0	#N/A	0
86	9484		0	YEV		0	#N/A	0
87	XWG		0	ZSW		0	#N/A	0
88	57VBT		0	AWP		0	#N/A	0
89	UVM		0	DVB		0	#N/A	0
90	JBY	LORRY	1	DVB	LORRY	1	#N/A	0
91	ZHL		0	AEM		0	#N/A	0
92	XMS		0	SKY	LORRY	1	#N/A	0
93	CHC		0	CCP		0	#N/A	0
94	NWD		0	UHX		0	#N/A	0
95	LUD		0	JHW		0	#N/A	0
96	HLE		0	EUC		0	#N/A	0
97	KNMJ		0	GVM		0	#N/A	0
98	AJS		0	YRG		0	107	1
99	DUU		0	CNJ		0	#N/A	0
100	ZFZ		0	LAO		0	#N/A	0
101	GVC		0	EHN	LORRY	1	#N/A	0
102	UUN		0	TGZ		0	#N/A	0
103	GLO		0	HXF		0	#N/A	0
104	VEY		0	PGX		0	#N/A	0
105	ZCF		0	KVG		0	#N/A	0
106	ENT		0	BDJ		0	#N/A	0
107	EVN		0	AJS		0	#N/A	0
108	AZJ		0	MYV	LORRY	1	#N/A	0
109	BOY		0	RWO		0	#N/A	0
110	VYV		0	KVZ		0	#N/A	0
111	XEE		0	UJO		0	163	1
112	WWE		0	DAY	LORRY	1	#N/A	0
113	DAY	LORRY	1	FHE		0	112	1
114	CFJ	LORRY	1	WSW		0	#N/A	0
115	KNB		0	UBX		0	#N/A	0
116	RKJ		0	LZW		0	#N/A	0
117	YNL		0	461W		0	#N/A	0
118	EZW		0	UYK	LORRY	1	#N/A	0
119	FSE		0	UXJ		0	#N/A	0
120	LOH		0	LYY		0	#N/A	0
121	XRL		0	ABO		0	#N/A	0
122	LBK		0	FKW		0	#N/A	0
123	VBX		0	EOV		0	#N/A	0
124	CHJ		0	8888		0	#N/A	0
125	ZFM		0	BAC		0	#N/A	0
126	DMV		0	KLC		0	#N/A	0
127	XCJ		0	LTE		0	#N/A	0
128	MJJ	lORRY	1	TKE		0	#N/A	0
129	VLF		0	SKJ	LORRY	1	#N/A	0
130	AXY		0	FMP		0	#N/A	0
131	LOF		0	EHY		0	#N/A	0
132	VRE		0	HYC		0	#N/A	0
133	GWO		0	AUD		0	#N/A	0
134	WKL		0	CSZ		0	171	1
135	VKA		0	DDZ		0	#N/A	0
136	CEU		0	LYS		0	#N/A	0
137	WJL		0	UPX		0	#N/A	0
138	MJF		0	TYT		0	#N/A	0
139	XVO		0	CYP		0	#N/A	0
140	JFZ		0	GXR		0	#N/A	0
141	YZX		0	YHP		0	#N/A	0
142	MOF		0	WCJ		0	#N/A	0
143	OHY		0	RPV		0	#N/A	0
144	UDP		0	DAY	LORRY	1	#N/A	0
145	BEX		0	DAY	LORRY	1	#N/A	0
146	BFM		0	TGZ		0	#N/A	0
147	CYT	lORRY	1	PZZ		0	#N/A	0
148	YDX		0	YYZ		0	#N/A	0
149	CZE		0	FAA		0	#N/A	0
150	DJZ		0	GUA		0	#N/A	0
151	NVM		0	OFU		0	#N/A	0
152	SMX		0	ZJJ		0	#N/A	0
153	KXB		0	HMO		0	#N/A	0
154	ENP		0	XJW		0	#N/A	0
155	XEE		0	YDA		0	163	1
156	TFF		0	XFR	LORRY	1	#N/A	0
157	HNL	lORRY	1	EAK		0	165	1
158	VRO		0	LJY		0	#N/A	0
159	VGU		0	YGN		0	#N/A	0
160	ZXV		0	FWM		0	#N/A	0
161	DFY		0	BSX		0	#N/A	0

162	HDJ		0	YOD		0	#N/A	0
163	OTV		0	XEE		0	#N/A	0
164	HDC		0	YCH		0	#N/A	0
165	XHA		0	HNL	LORRY	1	#N/A	0
166	XDC		0	JWJ		0	#N/A	0
167	BVM		0	JPX		0	#N/A	0
168	LOH		0	MWZ	LORRY	1	#N/A	0
169	FYE		0	YLD		0	#N/A	0
170	XJJ		0	PHE		0	#N/A	0
171	CAO		0	WKL		0	#N/A	0
172	OCW		0	JBU		0	#N/A	0
173	RGX		0	YUY		0	#N/A	0
174	AHJ		0	UZM		0	#N/A	0
175	KER		0	HFL		0	#N/A	0
176	DTC		0	SKV		0	#N/A	0
177	UXG		0	XKV		0	#N/A	0
178	NXC		0	XNS		0	#N/A	0
179	RDY		0	MZT		0	#N/A	0
180	LHB		0	AZF		0	#N/A	0
181	LWO		0	MXD		0	#N/A	0
182	HKW		0	MZF		0	#N/A	0
183	FPY		0	HTD		0	#N/A	0
184	TYF		0	OLC		0	#N/A	0
185	TGX		0	DUY		0	#N/A	0
186	OLR		0	EFJ		0	#N/A	0
187	XEA		0	UMO		0	#N/A	0
188	WOV		0	VZW		0	#N/A	0
189	YMR		0	KNO		0	#N/A	0
190	VHR	LORRY	1	PAB		0	#N/A	0
191	XUA		0	OS		0	#N/A	0
192	KFN		0	12.W		0	#N/A	0
193	SKN		0	ULE		0	#N/A	0
194	EGE	LORRY	1	XPJ		0	#N/A	0
195	S2		0	LWS		0	#N/A	0
196	UMO		0	SFF		0	187	1
197	CYK		0	YXU		0	#N/A	0
198	GKJ		0	YWN		0	#N/A	0
199	WHL		0	ONA		0	#N/A	0
200	NRZ		0	AUX		0	#N/A	0
201	TVW		0	VPT		0	#N/A	0
202	KNO		0	RGZ		0	189	1
203	VLE		0	ZWA		0	#N/A	0
204	YBX		0	SSO		0	#N/A	0
205	BXU		0	LHJ		0	#N/A	0
206	HVW		0	GUA		0	#N/A	0
207	ZDS		0	BPE		0	#N/A	0
208	YVH		0	ZXJ		0	#N/A	0
209	YPX	LORRY	1	YBG		0	#N/A	0
210	LVD		0	KTB		0	#N/A	0
211	NFO		0	CVJ		0	#N/A	0
212	FLB		0	1QV		0	#N/A	0
213	URX		0	MWO		0	#N/A	0
214	XLX		0	VTT		0	#N/A	0
215	LBG		0	FLV		0	#N/A	0
216	MVN		0	GWY		0	#N/A	0
217	BVK		0	EZC		0	#N/A	0
218	OOD		0	NNR	LORRY	1	#N/A	0
219	TON	LORRY	1	YTB		0	#N/A	0
220	LKZ		0	HRX		0	#N/A	0
221	MVP		0	KWV		0	#N/A	0
222	KUH		0	RPX		0	#N/A	0
223	MAR		0	CTO	BUS	0	#N/A	0
224	VRC		0	ZWH		0	#N/A	0
225	YPK		0	HLW		0	#N/A	0
226	WBF		0	ZRY	LORRY	1	#N/A	0
227	ONY		0	EUD		0	#N/A	0
228	EFB		0	NDF		0	#N/A	0
229	781		0	DTZ		0	#N/A	0
230	UEV		0	WPO		0	#N/A	0
231	WBL		0	SZX		0	#N/A	0
232	AOW		0	NHE		0	#N/A	0
233	LFV		0	NPC	LORRY	1	#N/A	0
234	SZF		0	ZRY		0	#N/A	0
235	VXM		0	SSZ		0	#N/A	0
236	TKO		0	DWA		0	#N/A	0
237	KZT		0	XBH		0	#N/A	0
238	ZMO	LORRY	1	FZZ		0	#N/A	0
239	WFR		0	MZF		0	#N/A	0
240	AUM		0	PGE		0	#N/A	0
241	JCW		0	VDT		0	#N/A	0
242	ODN		0	FWN		0	#N/A	0
243	ENJ		0	MUL		0	#N/A	0
244	UKL		0	HRO	LORRY	1	#N/A	0

245	MXO		0	LFS		0	#N/A	0
246	FUG		0	AHL		0	#N/A	0
247	BNU		0	FME		0	#N/A	0
248	WPJ		0	LNX		0	#N/A	0
249	SZV	LORRY	1	LFK		0	#N/A	0
250	WKP	LORRY	1	XEL		0	#N/A	0
251	CHF		0	SYA		0	#N/A	0
252	GAX		0	BVD		0	#N/A	0
253	GOA		0	ADO		0	#N/A	0
254	VXS		0	PLY	LORRY	1	#N/A	0
255	WXM		0	OBD		0	#N/A	0
256	TRZ		0	FGK		0	#N/A	0
257	JAU		0	GWY		0	#N/A	0
258	ASO	LORRY	1	EWJ		0	#N/A	0
259	KWD		0	EDA		0	#N/A	0
260	PZU		0	ESF		0	#N/A	0
261	VPX		0	UKJ		0	#N/A	0
262	PCY		0	XLF		0	#N/A	0
263	FNH		0	TTJ		0	#N/A	0
264	ASX		0	FKT		0	#N/A	0
265	CVT		0	OOV		0	#N/A	0
266	WGF		0	IOS		0	#N/A	0
267	OAW		0	ZZS		0	#N/A	0
268	YXV		0	VME		0	#N/A	0
269	CJO		0	CMT		0	#N/A	0
270	LNZ		0	XDW		0	#N/A	0
271	PTX		0	RWU		0	#N/A	0
272	BNU		0	UFR		0	#N/A	0
273	HZH		0	LBJ		0	#N/A	0
274	UTU		0	UGD		0	#N/A	0
275	LXA		0	LHR		0	345	1
276	DRZ		0	NYZ		0	#N/A	0
277	RHN		0	LPK		0	#N/A	0
278	NXM		0	OXV		0	#N/A	0
279	KTF		0	BUH		0	#N/A	0
280	NFC		0	YCL	LORRY	1	#N/A	0
281	RUJ		0	ONZ		0	#N/A	0
282	RWV		0	OCZ		0	#N/A	0
283	DYV		0	MLN		0	#N/A	0
284	VSA		0	FJK	LORRY	1	#N/A	0
285	SPM		0	XBU		0	#N/A	0
286	JYV		0	ADU		0	#N/A	0
287	PTY		0	CMS		0	#N/A	0
288	HUV		0	TZE		0	#N/A	0
289	CXC		0	XFG		0	#N/A	0
290	AYP	LORRY	1	CKF		0	#N/A	0
291	VCU		0	YNG		0	#N/A	0
292	WNR		0	LBA		0	#N/A	0
293	BEC	BUS	0	ZWP		0	#N/A	0
294	ELH		0	AVO	BUS	0	#N/A	0
295	OGH		0	EFV		0	#N/A	0
296	OFB		0	LJC		0	#N/A	0
297	OLT		0	MEU		0	#N/A	0
298	JEN		0	SJO		0	#N/A	0
299	HFZ		0	UBG		0	#N/A	0
300	JBL	LORRY	1	ZGM		0	#N/A	0
301	FFW		0	HE		0	#N/A	0
302	YRR		0	DXH		0	#N/A	0
303	KNH		0	YGH		0	#N/A	0
304	OXV		0	LFT		0	278	1
305	UCA		0	PZA		0	#N/A	0
306	BZN		0	MHD		0	#N/A	0
307	PVE		0	NXN		0	#N/A	0
308	LHR		0	NVD		0	275	1
309	ADV		0	BZM	LORRY	1	#N/A	0
310	RZJ		0	XLM		0	#N/A	0
311	RGY		0	BFF		0	#N/A	0
312	DPL		0	YBR		0	#N/A	0
313	TXO		0	FKZ		0	329	1
314	OCN		0	HXY	LORRY	1	#N/A	0
315	DBX		0	ZDA		0	#N/A	0
316	WVM		0	DAY	LORRY	1	#N/A	0
317	LCW		0	BEJ		0	#N/A	0
318	KPL		0	AKN		0	#N/A	0
319	OXM		0	YJA		0	#N/A	0
320	7S		0	URJ		0	#N/A	0
321	NRK		0	LMA		0	#N/A	0
322	YNG		0	BJU		0	291	1
323	OBJ		0	EPN		0	#N/A	0
324	PWE		0	RNO		0	#N/A	0
325	ZKN		0	DSS		0	#N/A	0
326	LBA		0	PVY		0	292	1
327	OFW		0	CVX		0	#N/A	0

328	ULL		0	VFX		0	#N/A	0
329	NCY		0	TXO		0	#N/A	0
330	VWE		0	FGM		0	#N/A	0
331	ERV		0	XYO		0	#N/A	0
332	6015		0	RVN		0	#N/A	0
333	KNK		0	SJU		0	#N/A	0
334	BOH	LORRY	1	ZRV		0	#N/A	0
335	CLU		0	AAF		0	#N/A	0
336	ZNG		0	JDW		0	#N/A	0
337	ZCF		0	NTA	LORRY	1	#N/A	0
338	YZX		0	WTN		0	#N/A	0
339	FLE		0	YSO		0	#N/A	0
340	PNJ		0	KPZ		0	#N/A	0
341	SWO		0	YEV		0	#N/A	0
342	FSN		0	ORV		0	#N/A	0
343	BGF		0	MGC		0	#N/A	0
344	YEL		0	XFK		0	#N/A	0
345	BYR	LORRY	1	LXA		0	#N/A	0
346	LFW		0	HHX		0	#N/A	0
347	KWL		0	PPK		0	#N/A	0
348	KVF		0	ZHN		0	#N/A	0
349	WPA		0	STX		0	#N/A	0
350	RYH		0	KFE		0	#N/A	0
351	KTK		0	GYV		0	#N/A	0
352	JDZ	LORRY	1	TTF		0	12	1
353	CMV		0	ADZ		0	#N/A	0
354	DJJ		0	DLX		0	#N/A	0
355	SGY		0	VFR	LORRY	1	#N/A	0
356	LPY		0	ULO		0	#N/A	0
357	FGC		0	CFX		0	#N/A	0
358	BNU		0	EXO		0	#N/A	0
359	SGZ		0	MKA		0	#N/A	0
360	XYP	LORRY	1	CHX		0	365	1
361	AHS		0	KUF		0	#N/A	0
362	SMO		0	FVL		0	#N/A	0
363	GH		0	BWH		0	#N/A	0
364	ZUV		0	YMT		0	#N/A	0
365	VBD		0	XYP	LORRY	1	#N/A	0
366	KSX		0	PUE		0	#N/A	0
367	LMU		0	RWF		0	#N/A	0
368	GJ		0	AOU		0	#N/A	0
369	EKE	LORRY	1	GFA		0	#N/A	0
370	JWC		0	MWZ		0	#N/A	0
371	YGU		0	XJG		0	#N/A	0
372	JXN		0	SDO		0	#N/A	0
373	CHH		0	PFC		0	#N/A	0
374	FCX	LORRY	1	NVX		0	#N/A	0
375	WXP		0	GHB		0	#N/A	0
376	GFA	LORRY	1	GOO		0	369	1
377	OOY		0	CXA		0	#N/A	0
378	UFZ		0	RNO		0	#N/A	0
379	NLN		0	FMP		0	#N/A	0
380	KTF		0	GSU		0	#N/A	0
381	EWR		0	OBD		0	#N/A	0
382	OBD	LORRY	1	AVV		0	255	1
383	RXF		0	YNM	LORRY	1	#N/A	0
384	SDO		0	KWW		0	372	1
385	KLS		0	KVA		0	#N/A	0
386	MKG		0	ABV		0	#N/A	0
387	RBY		0	NFV		0	#N/A	0
388	BZP		0	NUY		0	#N/A	0
389	SVC		0	UWV		0	#N/A	0
390	LXG		0	DKD		0	#N/A	0
391	OZP		0	FNM		0	#N/A	0
392	NTK		0	PJO		0	#N/A	0
393	GBX		0	FXF		0	#N/A	0
394	YKX		0	WTE		0	#N/A	0
395	LPP		0	JUT		0	#N/A	0
396	LFN		0	BLY		0	#N/A	0
397	XWO		0	PPK		0	#N/A	0
398	OJC		0	EXJ		0	#N/A	0
399	GSU		0	UPA		0	380	1
400	HVZ		0	APJ	LORRY	1	#N/A	0
401	CG	LORRY	1	APZ		0	#N/A	0
402	YBY		0			0	#N/A	0
403	CJK		0			0	#N/A	0
404	MGY	LORRY	1			0	#N/A	0
405	FUA		0			0	#N/A	0
406								
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Arundel Bypass Neighbourhood Committee

Response to Highways England's A27 Arundel Bypass consultation 2017

ABNC Evidence Section E:
Opposition to Option 5A

Contents

1. The 'Save Binsted' demonstration
2. Speech at the demonstration
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6. Opposition from the South Downs National Park
7. Conclusion
8. Petition (now over 2500 signatures, 16.10.17)

'Binsted is a rare haven of peace and tranquillity, to destroy this would be an act of absolute sabotage.' (Quote from an ABNC supporter's letter)

'Options 3 and 5A are clearly not viable due to their outrageous impact on habitats and species.' (Quote from Sussex Wildlife Trust consultation response)

'Option 5A is anathema to Walberton Parish Council: It destroys Binsted village.' (Quote from Walberton Parish Council's consultation response)

1. The 'Save Binsted' demonstration

The 'Save Binsted' demonstration on 8 October was organised by ABNC, with the help of 28 volunteer marshals, including walk marshals and traffic marshals, from Binsted, Walberton and Tortington. Attendees included residents from Binsted, Walberton, Yapton, Fontwell, Slindon, Arundel and further afield, mostly within Arun Disctrict, but with some coming specially from further afield and from London. The demonstration was attended by BBC South today, ITV Meridian, two other film crews and several press journalists. See the end of this article for some links to news articles and videos. According to Dr Tony Whitbread of the Sussex Wildlife Trust it was the largest anti-road demonstration since the 1990s

Below is an illustrated version of an article by Camilla Lambert, chair of the Binsted Arts Festival, for Walberton Parish News November 2017.

On Sunday 8 October 2017, over 400 people raised their voices at the start of a walk along footpaths over the Binsted fields, and into Binsted woods, to see where Highways England's option 5A could slice through a well-loved landscape and hitherto peaceful haven for wildlife. Together they chanted 'No way 5A', and waved red placards to the sky. They were hoping that all Sussex, and especially the planners in Highways England, were listening to their plea.

Mike Tristram, local business man and lead organiser of the demonstration for the Arundel Bypass Neighbourhood Committee, kicked off proceedings by letting the crowd know about the way the essential nature of Binsted has been seriously misrepresented by Highways England in its consultation documents – the background to the 'Foul Play on 5A' placards.

For instance, the impact on Binsted's community is left out; Highways England say 5A is '500m north' of Binsted – but three houses at Binsted Park are 75m from the road where it is on an embankment 7

to 9 metres high; the impact on Binsted Woods is left out; the beautiful parkland at Binsted Park, which would be destroyed by 5A, is not only omitted but its name is used for other things, and a photo labelled 'Binsted Park' is of a tarmac road elsewhere; and Highways England have only used older records in their environmental impact assessments, from a time before the incredible richness of Binsted's wildlife had been properly surveyed.

Such errors have led County and District councillors to support Option 5A in the belief that not much of value would be destroyed. Those attending the demonstration and walking in the sunlight across peaceful fields thought otherwise. I heard people gasp in barely suppressed astonishment as they walked past a 7 metre high scaffold and pictured an embankment of that height carrying a dual carriageway with cars and lorries speeding along noisily.

When the march stopped in the centre of Binsted Park they were told in more detail by several speakers involved in documenting the rich biodiversity of the area of what would be lost should this route go ahead.

Dr Tony Whitbread of the Sussex Wildlife Trust spoke of the way road planning never learns the lessons of the past: 'We've been here before,' he said, 'Bigger roads don't solve congestion - in the long run they just add to it.'

Dr Dawn Scott, resident of neighbouring Walberton and a mammalian biologist who appears on BBC Springwatch, explained how her researches in Binsted on the wealth of wildlife made her fearful of the damage that a new by-pass would cause. It would separate wildlife from their foraging grounds, sending rare species, now struggling to survive, into a downward spiral towards extinction in Sussex.

David Sawyer, Chairman of the South Downs Society, spoke of the importance of protecting this unique part of the National Park landscape for future generations.

Above: Dr Dawn Scott speaks in Binsted Park; below: Dr Tony Whitbread, Chief Executive of the Sussex Wildlife Trust; Luke Wishart, Binsted's main landowner, whose farm would be made unviable by Option 5A.

Below: Kia Trainor, head of CPRE Sussex, who also spoke to radio and television about the damage that Option 5A would do to the countryside.

Binsted residents young and old gave their support to the demonstration.

The walk continued along Binsted Lane and back to the Flint Barn. There was a noticeable buzz of concern, and, from some, anger that such losses should be contemplated. The overall message that came over loud and clear was 'We are ready to fight'.

Below: the demonstrators arriving at the enormous oak tree in Binsted Park to hear speeches. Binsted Park is in the path of Option 5A. Its destruction is hidden by Highways England's consultation materials because they misuse its name for other places, show part of its surrounding woodland as white space on maps, and wrongly state in a table it is 'outside' the scheme area.

Below: a historic photo of a celebration in Binsted Park in the mid-1880s, from the archive kept by a resident of Binsted Park, a descendant of the family who created the Park in about 1800.

Below: children play in Binsted Park on the route of Option 5A during the demonstration.

The scaffolding tower 7 metres high showed where an embankment that high for Option 5A would cross into Copythorn Field, the central agricultural fields of the old Binsted Parish. Across Binsted Park, Option 5A would be on a similar 7 metre embankment, but it would need an even higher embankment, 9 metres high, to cross the wooded stream valley known as The Shaw between Binsted Park and Copythorn field – hence the wording on the sign. Both Binsted Park and Copythorn Field are within the National Park.

The stark image above gives some idea of the reality of Option 5A – it would be an appallingly destructive transformation of a beautiful, historic, peaceful, much loved area into a hell of noise and pollution, no longer a haven for wildlife, no longer an inspiration for so many community activities, and no longer a place where people come to walk for mental recuperation, 'solace', and to feel whole again through the integrity of the landscape.

The impact on the Special Qualities of the National Park would be worse with 5A than with any other option. For all these reasons the opposition to it is strong, and growing.

For news articles about the demonstration see www.arundelbypass.co.uk.

Some of those listed with links are:

9.10.17 The News, Portsmouth: Hundreds Join in A27 Rally (+video)

8.10.17 Chichester Observer: video and article: Hundreds Join Anti-5A Rally

8.10.17 ITV Meridian News: Hundreds Protest over Arundel Bypass

(www.itv.com/news/meridian/update/2017-10-08/hundreds-protest-over-arundel-bypass)

6.10.17 Spirit FM: WATCH: Campaigners to march against Arundel Bypass 'Travesty'

5.10.17 CPRE Press Statement: The Arundel Bypass – a 'silver bullet' to tackle congestion or an expensive way to destroy iconic countryside?

2. Speech at the demonstration

Mike Tristram of ABNC included the following points in his speech to the 'Save Binsted' demonstration. First, he described the mis-statements by Highways England referred to in the placards saying 'Foul Play on 5A':

'Highways England failed to tell the truth about Binsted when they put Option 5A into their consultation. They have researched this route option badly and presented it in a false light to consultees. Let me give you just a few examples.

1. First, Highways England launched the consultation with a Press Release in which they said that 5A goes 'between the National Park and Binsted Woods', from which many have concluded it is the best route because it avoids both. It goes through both.
2. Second, Highways England failed even to mention Binsted in their 'impact on communities' document, and they stated that 5A goes 500m north of Binsted village. False. It winds its way through our spread-out, Saxon-style village, including going less than 75m from 3 homes in Binsted Park.
3. Third, Highways England stated that Binsted Park was outside the impact zone, and iillustrated it as a tarmac road on Tortington Common. In a minute you will visit and see that Option 5A goes straight through this beautiful place.
4. Fourth, Highways England have produced unconvincing figures claiming to show greater benefits with 5A. These do not bear examination.
5. Fifth, Highways England have given out totally wrong messages about the environmental impacts of 5A. Much of Binsted's high quality woodland does not appear on their maps. Highways England have only used older records from when the 5A area was poorly surveyed.

> The fact is that Option 5A causes more damage, to more protected wildlife species, and to more important and irreplaceable habitats, than both the other options.

'Highways England have misled West Sussex County Council, Arun District Council, and the public in general.'

He then described other groups who are supporting ABNC in objecting to Option 5A.

'And it's not just us who stand here, or our supporters numbering 2500 and rising. The South Downs National Park authority is not fooled. Nor are the environmental organisations who are supporting us: the South Downs Society, the Sussex Wildlife Trust, Butterfly Conservation, the Ramblers Association, and many others. So many of you coming shows that this is not just a nimby issue for the 38 dwellings in Binsted. This battle is about what matters to us all in life, and about what is going to be lastingly important, for future generations, in this part of Sussex.

'On our walk, as soon as you leave the Strawberry Fair fields and cross the footbridge, you will be inside the South Downs National Park. You will see the Park's shared identity logo carved into a yew bench beside the village waymarker. You will see lovely views over rolling fields, hedges and streams to the woods. Where you see placards at the field edges, that is where Option 5A would penetrate the landscape, mostly on a 20 foot embankment. It is the worst option Highways England could choose for its impact on farming, history, rural community life, wildlife and natural beauty.'

3. Opposition from conservation groups

a) Butterfly Conservation

'Butterfly Conservation' (www.sussex-butterflies.co.uk, President Sir David Attenborough) is strongly against both Option 5A and Option 3. In summary, they state:

> 'Having thoroughly reviewed the plans to improve the A27 at Arundel, including site visits to assess the potential impacts of Options 1, 3 and 5A, Butterfly Conservation wishes to register its strongest possible objection to the proposals for routes 3 and 5A, based on the unacceptable and irreparable environmental damage they would cause.
>
> 'Butterfly Conservation also recognises that Option 1 would cause significant environmental damage, albeit at a much reduced level when compared to Options 3 and 5A. Butterfly Conservation is supportive of the additional, wide single-lane option referred to as the 'New Purple' route by Arundel A27 Forum, which follows the line of Option 1 but causes less environmental damage, being more restricted in its length and land-take.'

Butterfly Conservation confirms the importance of areas not designated as Ancient Woodland, and links into the countryside, which would be severely impacted by 5A

Their statement about Option 5A recognises the importance of the areas of woodland that are not designated as Ancient Woodland (and hence are simply omitted on many of Highways England's maps), particularly as a breeding area for Purple Emperor butterflies, and also the 'dispersal corridors' from the woodland into the countryside:

> 'Option 5A would involve the loss of c.6 hectares of ancient woodland. The loss of other areas of woodland, which although relatively small and set in more open countryside (e.g.

> The Shaw, Binsted Park), would also negatively impact some species of Lepidoptera, removing important foodplants including Wych Elm, English Oak and sallow. Areas such as this currently provide important nurseries, vital in supporting the populations of some species found in the larger area of woodland to the north, including the Purple Emperor.
>
> 'However, the environmental damage affecting Lepidoptera, some of which are of high conservation concern, would not be restricted to habitat loss alone. This route would disrupt the system of hedgerows and ditches, which woodland species of butterfly and moth use as dispersal corridors when moving through the wider landscape. These movements are critical in supporting a healthy metapopulation structure.
>
> 'BC also recognises the similar, negative impact on other faunal groups, including bats, Hazel Dormouse and Water Vole.'

Butterfly Conservation question the consultation materials including Cost Benefit calculations

The Butterfly Conservation objection also objects to failings and bias in the consultation materials. First they disagree with the scoring of all three options as 'Major Adverse' for effects on nature conservation:

> 'Bearing in mind the very different potential impacts on Lepidoptera, and other fauna and flora, BC is surprised to see, and fundamentally disagrees with, the equal categorisation of Options 1, 3 and 5A under the section 'Nature Conservation' in Highways England's 'Environmental appraisal' (Consultation Brochure pp.28-29). This has the effect of 'flattening' the perceived potential impacts on 'Nature Conservation' posed by the three options.'

On the Cost Benefit calculations, they add:

> 'In Highways England's 'Costs and Benefits' section (p.30) of the Consultation Brochure, the 'Most likely cost' attributed to Options 1 (£135m), Option 3 (£260m) and Option 5 (£250m) is used to generate 'Benefit to Cost' ratios of 3.6 (best), 2.0 (worst) and 2.6 respectively. All are categorised as being of 'High' value for money, with the threshold for 'High' being 2.0. However, this process does not take into account the potential costs of mitigation measures, the scale and nature of which cannot be determined at this time. Butterfly Conservation considers that these additional costs are likely to be substantially higher for Options 3 and 5A, further increasing the relative value for money of Option 1.'

Butterfly Conservation agree with ABNC that the consultation is biased

Their final comment is 'This inconsistent approach appears, in every case, to demonstrate a bias, favouring Options 3 and 5A over Option 1'. ABNC see the consultation's bias as mainly favouring Option 5A.

b) Sussex Wildlife Trust

Sussex Wildlife Trust consider Options 3 and 5A have an 'outrageous' impact on habitats and species

The Sussex Wildlife Trust's attitude to the bypass plans, as expressed on its website (11 October 2017, is that 'Options 3 and 5A are clearly not viable due to their outrageous impact on habitats and

species. Option 1, in its current form is excessively destructive, however there is potential to minimise this risk through design alterations.'

They comment that the options 'include new stretches of dual carriageway and road widening schemes that destroy ancient woodlands and smother vulnerable and rare chalk stream habitat', and continue:

'Sussex Wildlife Trust is concerned that:

- £250 million would be spent destroying irreplaceable habitat to save only a few minutes on journey time
- The proposals fail to present sufficient detailed information on the impact on wildlife
- The proposals include inaccurate information, poor interpretation and have not made use of the most up-to-date environmental data.'

Sussex Wildlife Trust agree with ABNC that the consultation is poorly conducted and ask their supporters to ask for a new consultation

They ask people to:

- 'State your concerns about the poorly conducted consultation process
- Object outright to options 3 and 5A
- Object to option 1 in its current form
- Ask for a new consultation that fully incorporates the transport hierarchy over a wider area of the A27, so concerns are properly addressed and the environment is valued appropriately.'

The Transport Hierarchy they refer to was suggested in 2013 by the Institute of Mechanical Engineers (www.imeche.org/policy-and-press/reports/detail/transport-hierarchy):

Figure 1: The Transport Hierarchy

MORE SUSTAINABLE

Priority 1	Minimise demand	Manage the reasons why transport is needed and the context in which transport demand is derived, to deliver the same access to services and activities with less powered/motorised transport.
Priority 2	Enable modal shift	Enable the choice of transport modes with the lowest environmental impacts, and enable easier changes between modes.
Priority 3	Optimise system efficiency	Increase all efficiency measures of transport modes and their use, particularly in terms of gCO_2/km for passengers and gCO_2/tkm for freight.
Priority 4	Increase capacity	After optimisation of the first three steps, any capacity increases that are required should be prioritised to the most efficient and sustainable modes.

LESS SUSTAINABLE

It was adopted by the Department of Transport in a simpler form as quoted in the South Downs National Park Authority's A27 position statement, 2014:

'The DfT travel hierarchy is also therefore vital in ensuring that all reasonable options have been fully considered alongside proposals for new infrastructure schemes, i.e. measures which:

- Reduce the need to travel
- Enable switching to more sustainable modes of transport
- Improve management of existing networks.'

c) Campaign to Protect Rural England (CPRE)

CPRE challenged the current government thinking about the economic benefits of road schemes in its report, 'End of the Road?', published March 2017, which reveals that 'road-building is failing to provide the congestion relief and economic boost promised, while devastating the environment. It directly challenges government claims that 'economic gains from road investment are beyond doubt': that road-building will lead to 'mile a minute' journeys; and that the impact on the environment will be limited 'as far as possible'. The report shows how road building over the past two decades has repeatedly failed to live up to similar aims.'

The report is based on a study which examined 86 official studies of completed road schemes.

CPRE sees the Arundel Bypass proposals as 'highly damaging' and a 'missed opportunity'. CPRE Sussex states on its website that

> 'The Arundel Bypass consultation is a missed opportunity to do something really innovative and forward-thinking to reduce congestion and improve air quality. The proposals are highly damaging to the natural environment and the setting of the National Park and Arundel. The recent 'End of the Road? Challenging the road-building consensus' report by the CPRE found that road-building is failing to provide the congestion relief and economic boost promised, while devastating the environment.
>
> 'We believe that there is a lack of joined up thinking by Government in respect of current road policy and this is reflected in the proposals for a bypass at Arundel. A new big road is based on outdated practice. The consultation brochure for the Arundel bypass justifies this road by stating that other options for travel infrastructure are limited. We are very disappointed that the proposals for improving walking and cycling are so thin on the ground. It is a wasted opportunity for the objectives of the scheme to be so narrowly focussed on just building a new bypass at Arundel.
>
> 'Other more cost effective options should be explored. We believe that modelling should have been carried out for smaller scale road improvements in combination with co-ordinated investment in public transport, walking and cycling.'

(www.cpresussex.org.uk/campaigns/transport/roads/item/2848-arundel-bypass-options-are-outdated-thinking)

CPRE has now drafted a response to the consultation (dated 10 October 2017) which sees Options 3 and 5A as far more damaging than Option 1 to dark night skies; diverse, inspirational landscapes and breathtaking views; a rich variety of wildlife and habitats including rare and internationally important species; and tranquil and unspoilt places. It sees Options 3 and 5A as equally damaging. It contains this conclusion:

We believe that all 3 Options, as presented in the proposals, are unacceptable in their current form due to their negative impact on the environment. We also believe that road building alone will not solve congestion on the A27 – it will merely shuffle the traffic along to the next pinch point. CPRE

Sussex believes that we need to create a more holistic transport strategy for the A27 corridor which includes investment in rail and other infrastructure to reduce the need to travel by car. If road improvements are taken forward as part of a wider strategy we would like to see an improved version of Option 1 which has the least negative impacts on the South Downs National Park and its special qualities, mature woodland (most of which is ancient semi-natural woodland), the Arun floodplain, tranquillity and dark night skies, which are highly valued and cannot be replaced. Option 1 already offers a much better benefit to cost ratio than Options 3 and 5A.'

d) Joint letter from NGOs

The Chief Executives of the Campaign for Better Transport, the Campaign for National Parks, CPRE, Friends of the Earth, Greenpeace, the Open Spaces Society, the RSPB, the Wildlife Trusts, and the Woodland Trust have written a joint letter to Chris Grayling, the Secretary of State for Transport, saying that they are concerned that 'all three options in the current public consultation would involve unacceptable development within the South Downs National Park and the loss of a significant amount of ancient woodland.'

They add: 'No option has been presented which avoids this significant harm which is a major oversight and in contradiction of the RIS 1 objective of delivering no net loss of biodiversity by 2020. We are concerned that this sets a dangerous precedent and goes against Government guidance to avoid major development in National Parks and to avoid routing traffic through them. It is in stark contrast to the announcement on the A27 East of Lewes where a Selmeston bypass was recently dropped not least because of its impact on the South Downs National Park.

'We believe there is a positive alternative way forward and this should be explored. We understand that local groups in and around Arundel are working to identify alternative options that would relieve the worst bottlenecks on the A27, while protecting priceless national assets.

'We would urge you to instruct Highways England to expand the options on offer to include much less damaging alternatives and for the Department for Transport to provide strategic solutions to travel along the Sussex Coast which are less roads focussed.'

In their final paragraph quoted they are supporting the 'Single Purple Route' option being put forward by the Arundel A27 Forum.

4. Opposition from local groups and Parish Councils

a) Arundel SCATE

Arundel SCATE, affiliated to South Coast Alliance on Transport and the Environment, believes infrastructure measures are needed to address traffic congestion at Arundel and along the south coast. It also believes that wildlife and the landscape around Arundel and the wider area must be conserved for future generations. Its Position Statement appears on the website www.a27arundel.org/highways-england-consultation:

'Arundel SCATE is wholly opposed to Option 5A and Option 3, both of which cut across sections of the South Downs National Park.

Option 5A will irrevocably damage historic Binsted, its lively community and its rich wildlife.

Option 3 will destroy part of the most significant area of irreplaceable ancient woodland on the south coast. It also exceeds the agreed budget.

Both options will wipe out populations of rare and protected species, destroy valuable woodland and damage part of an important wetland area. Both are costly. Both will increase traffic levels in the area and exacerbate congestion issues at Chichester and Worthing. Both will seriously damage an important local amenity and businesses. We believe these options will also destroy town centre trade and attract retail and housing 'infill' development, as has happened elsewhere.

'We are encouraged to see the inclusion of Option 1, a shorter, near-offline, 40mph road, in the public consultation. The route is in alignment with the single carriageway 'New Purple' route which we have long supported, and also provides the best value for money. However, we are opposed to the dual carriageway design of Option 1 as being detrimental to the town, causing unnecessary countryside damage and generating excessive traffic.'

b) Walberton Parish Council

In its Consultation Evidence, Walberton Parish Council lists the following among its concerns:

'Community impact: the severe negative of splitting the parish community (Option 5A) and the diminution in community cohesion and sense of place. This extends to the loss of amenity for private and residential and commercial and agricultural properties directly and indirectly affected, with parishioners' landholdings divided. This is clearly of least concern under Option 1.

'Environmental impact: the harm and the ecological damage caused to ancient woodland areas and to other irreplaceable and important habitats and species, and the loss of open space and wooded amenity for walkers, horse riders, cyclists and others.

'Professional surveys by MAVES show an exceptional biodiversity and habitats network in the wider affected landscape in the Binsted and Tortington areas, which is greater for Option 5A than for either Option 3 or Option 1. This extends to damage to parish infrastructure and its landscape with visual impact, noise and disturbance, and loss of air quality and amenity. In environmental terms Option 1 has the least negative impact and Option 5A the greatest negative impact. Some of the ecological impacts are in respect of issues with which parish councillors are not fully conversant, and WPC takes its lead from MAVES' technical studies. MAVES data is to be submitted to H.E. separately and we believe the greatest harm comes from Option 5A and the least from Option 1.'

This statement has now been confirmed by the Impact Comparison Table, assessing the impacts on habitats and protected species of all three route Options, which now forms section C1 of ABNC's consultation response. It shows Option 5A to be the most damaging option.

The Parish Council adds: 'One little remarked-upon feature is that Option 5A is largely an embankmented scheme, in some places at up to roof height, whereas Option 3 is a scheme that uses cuttings and is therefore visually much less intrusive and is a potentially quieter scheme.'

After expressing qualified support for Option 3, the Parish Council sums up its attitude to 5A:

'Option 5A is anathema to WPC:

1. It destroys Binsted village - quite unnecessarily so in our view when Option 1 exists - and has negative effects on traffic flows on local rural lanes and negative effects such as noise and disturbance, visual impact, loss of air quality, loss of amenity, and the imposition of traffic delays on better-used parish roads.
2. It does the greatest harm to the environment, and causes the most ecological damage to ancient woodland areas and the loss of open space and wooded amenity for walkers, horse riders, cyclists and our successors living in this place.
3. It damages our community cohesion and sense of place by splitting the parish in two.
4. It is significantly more intrusive, and noisy and light-polluting than other options.
5. WPC is not in a position to contest the point, but it seems to us that Option 5A and Option 3 fall foul of the NNNPS, as H.E. highlight in the Consultation document.
6. Having studied the data, WPC does not believe that it benefits the SDNP and the alternate Storrington route, and therefore it has the worst BCR of the options on offer. Given its starting cost, it also seems unlikely to be a pragmatic choice because of the likelihood of its being over-budget once the full cost of mitigation is taken into account.'

c) Other Parish Councils

Yapton and Slindon Parish Councils have voted to oppose Option 5A and support Option 3. Lyminster and Crossbush Parish Council have stated that they are concerned about the significantly adverse ecological and environmental impacts that both Option 3 and Option 5A would bring.

5. Opposition from Campaign for Better Transport

The Campaign for Better Transport has produced a well-argued response to the consultation. Its overall conclusions are:

'Overall, we feel that the consultation is flawed and needs to be re-run with a full range of options, including ones that do not cause significant harm to the South Downs National Park and do not result in the loss of ancient woodland.

'Government guidance is clear that investment in the strategic road network should be aimed at steering traffic away from National Parks not towards them as this will do. A lower cost and lower impact solution is available, but if a dual carriageway is insisted on, then the road should be tunnelled to minimise its impact. Anything less would be a tragedy and a dereliction of environmental stewardship and could set a dangerous precedent in other National Parks.'

a) Limited scope and inaccuracy of consultation materials: the consultation needs to be run again with accurate information and a full range of options

The Campaign for Better Transport is conerned both about the limited scope of the consultation, and about the quality and accuracy of the information provided. Like the Sussex Wildlife Trust, it asks for the consultation to be re-run. It points out:

'Local groups have questioned the accuracy of reports alongside the consultation. For example, the ecological report for Option 5A appears completely at odds with what the Mid Arun Valley Environmental Survey (MAVES) has found after it commissioned a report from ecological consultant Jackie Thompson of Wildlife Splash.

If this is true for option 5A it could easily be true for the other options as well. This undermines the consultation process which needs to be re-run again with accurate information and a full range of options.'

b) Objection to damage to the South Downs National Park from all three options

CBT states that 'We do not believe that the scheme justifies the harm that all three options will cause the South Downs National Park, which is meant to have the highest form of planning protection. They would represent major development within the National Park and Government guidance[1] is to avoid such damaging developments and "any investment in trunk roads should be directed to developing routes for long distance traffic which avoid the Parks".

'Yet, alternative options, including a mix of lower impact road building allied with demand management and sustainable transport measures, have not been properly considered. Equally, this road scheme and other road capacity expansion along the A27 corridor would increase traffic alongside and through the National Park, undermining its special qualities and statutory purposes.

'This is why we have written to the Secretary of State, the Rt Hon Chris Grayling MP, along with 8 other transport and conservation groups, expressing our concern about this scheme.

'Not only will the scheme cause considerable damage to the landscape and setting of the National Park, but it will also destroy the tranquillity and undermine the recreational opportunities of this part of the National Park.'

c) Objection to loss of Ancient Woodland from all three options

CBT points out that 'All three options cause considerable loss of ancient woodland and while options 1 and 5A would involve the loss of a smaller area of woodland, they are all unacceptable, and as the report commissioned by MAVES pointed out it is not just about area of ancient woodland but also its quality.

'Highways England is meant to aim to achieve no net loss of biodiversity by 2020, so it should not be contemplating the loss of ancient woodland being suggested here. This is a non-renewable resource which has been severely depleted in recent history.'

d) Damage to the Arun valley from all three options

CBT further objects to the impact on the Arun Valley from visual intrusion and noise from a dual carriageway bypass, and points out that 'It would also shatter the peace of the Arun Valley which is a relatively tranquil area, much loved by local residents. The path on the western side of the river is

[1] Paragraph 85, English National Parks and the Broads – UK Government Vision and Circular 2010 (Defra)

particularly well used for recreational and relaxation purposes. With the new road, this experience would be severely degraded, if not lost.'

e) CBT's preferred approach

CBT believes that a much stronger focus should be given to:

- reducing the need to travel
- investing in public transport – the coastal railway (which is severely underfunded) and more bus services which are properly integrated with the trains, park and ride (where appropriate), etc.
- investing in better walking and cycling links such as to Ford Station and across to Littlehampton[2]
- demand management measures such as workplace parking in nearby towns and cities
- addressing specific local safety issues
- getting HGVs to pay their true costs for using the road network

f) Support for a low-impact Option 1

CBT 'would be supportive of a single carriageway bypass which starts at an improved Crossbush junction and heads across the flood plain, south of the railway line to link in with Ford roundabout. This would resolve most if not all the issues around Arundel. It would bypass the main hold-ups caused by the badly designed Crossbush junction, the pedestrian crossing by the station and Causeway roundabout. It would leave Ford roundabout in the middle of two sections of free-flowing road and so traffic should flow fairly smoothly.

'This is in effect a low impact option 1. We believe that if this was constructed alongside a range of sustainable transport and demand management measures, this would lead to the best long-term outcomes.

'Option 1 is already the cheapest option and the one with the best cost benefit ratio. The cost of this new stretch of road (a low impact option 1) would be even cheaper while still offering virtually all the benefits and therefore would offer the best cost benefit ratio and value for money.

g) Questioning the traffic modelling which shows a greater benefit for 5A

CBT gives a clear exposition of faults in the traffic modelling presented in the consultation documents. 'For example, it shows that option 5A would result in 2,000 more vehicles a day using the A27 east of Fontwell compared to option 3 in 2041. Given that these two options are near identical in traffic terms between Fontwell and Crossbush, this does not seem realistic.

'Equally, it is claimed that option 5A would lead to 4,000 vehicles a day less using the A29 (in 2041) compared to option 3. Again, given that these options in traffic terms are near identical, this difference does not seem justified. It also appears to contradict the figures for the A27, where there is only a 2,000 vehicles a day difference in traffic between the two options. So where have 2,000 vehicles a day gone if they haven't used the A29 or diverted onto the A27? There appears no sensible answer and therefore points to the modelling and assumptions underpinning it being wrong.

[2] Improving local transport helps the economy – experience from the Local Sustainable Transport Fund

'We also object to the modelling assumption that traffic will continue to grow as projected. Traffic growth is not a given as has been shown over the years and if this issue was properly addressed (by managing demand) the benefits of any road construction might actually be realised. What is also of concern is that no assessment has been made on traffic and congestion that the induced traffic would cause in surrounding towns and cities. As it stands, the calculated benefits, averaging out at only around a 4 minute saving in 2023, are not that great and could easily be lost elsewhere on the network by the extra traffic that is generated by this road construction.

'In addition, no assessment has been made of the cumulative impact that increasing road capacity along the A27 will have on traffic levels, both on the A27 and on surrounding areas. The additional induced traffic that this will result in will further negate any perceived benefits as traffic and congestion rise in surrounding towns and cities, most likely wiping out any marginal gains made. It will also draw even more traffic into and alongside the National Park, contrary to Government guidance as noted in paragraph 1.3 above.

h) Support for a tunnel

CBT argues that 'The South Downs is designated a National Park because the landscape is of national importance. It is worth safeguarding in its own right, not because some road may or may not be economically significant. As the Guidance states: "In exceptional cases where new road capacity were deemed necessary, a thorough assessment would be needed on the loss in environmental value resulting from any new infrastructure. This would need to be accompanied by measures to minimise any damage and where possible measures to enhance other aspects of the environment…"[3]

'Measures to minimise any damage would be a tunnel, as only a tunnel would limit the significant landscape and ecological impact of the new road. However, even then some compensatory measures would still be required and the design of the tunnel, it's portals and approaches would need careful consideration, as would the impact of any new junctions. Noise pollution would also need addressing.'

6. Opposition from the South Downs National Park

The South Downs National Park objects to all three Options.

a) Planning objections

Part of its reasoning is that the scheme does not comply with planning policy. In its Report 'Response to Highways England consultation for route options for the proposed A27 Arundel Bypass', Agenda Item 13B, Report PR17/17, 19 September 2017, it states (3.2-3) that:

'All 3 scheme options are considered to fail the major development test as set out in the NPPF (para 116) and the National Network National Planning Policy Statement (paras 5.150-5.155). An alternative scheme which is technically and physically achievable and does not lie within the SDNP has been discounted from the route option consultation on the grounds of costs. These costs have not been fully disclosed.'

b) Insufficient information

[3] Paragraph 86, English National Parks and the Broads – UK Government Vision and Circular 2010 (Defra)

Another reason for its objection decision is that not enough information has been provided for proper assessment of the proposals in terms of alternative route options outside the SDNP; the feasibility of compensatory measures for Ancient Woodland; mitigation of impacts; the structure that would cross the Arun valley for 3 and 5A; the implications of all three proposals on the river environment and function; the effect on Amberley Wildbrooks; the impacts and duration of the construction process on the SDNP; the process for sourcing, removing and storing the large amounts of fill required; the impact of the route options on traffic movements through the National Park beyond the immediate study area, and in connection with other A27 schemes; and the impact on the recently discovered Chichester To Arundel Roman Road.

c) Impact on the National Park's Special Qualities

Under 'Landscape Impacts', the SDNP states (6.32) 'These physical and experiential changes [the embankments and cuttings just described where 5A goes through the landscape of Tortington, Binsted and Walberton] associated with the proposed road improvement option 5A would impact significantly on the SDNP and its setting. The movement of vehicles and road noise introduced into this landscape can be regarded as an erosion of the high degree of tranquillity and stillness that are noted as key features of the area. …As such, there is signification potential for this landscape change within the setting of the NP to compromise the special qualities of the SDNP's landscape'.

Since the western section of Option 5A is wholly within the SDNP except for one small portion of one field, it is possible that part of this was drafted about the previous 'Binsted Option' ('Option B' of the 2015 Feasibility Study) which was 'within the setting' of the National Park rather than actually within it. This September SDNP Response is a draft and the final response may be updated so that this is corrected. Even the option outside the SDNP was considered to potentially compromise the Special Qualities of the SDNP landscape.[4]

d) Appendix assesses the impact on the Special Qualities

The draft response is accompanied by several Appendices. Appendix 11 assesses in a table the impact of all three Options on the SDNP's Special Qualities.

Unlike Highways England, which does not include Binsted Park in its consultation materials and obscures the fact that 5A goes straight through it with a series of remarkable errors, including a mis-captioned photograph, the SDNP consider 5A would have 'significant detrimental impacts on Binsted Park (historic parkscape)' (Appendix 11, 'Cultural Heritage', Special Quality 6). See ABNC, Evidence A, Chapters 3, 4 and 9, for further discussion of the effect of 5A on Binsted Park – as affecting views, tranquillity, and cultural heritage.

The table shows there is a 'High Adverse' impact on Landscape (Special Qualities 1, 3) from 5A, partly by 'creation of new road alignment within Wooded Estate Downland' (which is what the SDNP calls the wooded area south of the A27), and also 'associated with the loss of ancient woodland, other more recent plantations, designed parkscape, field patterns and hedgerows in the setting of, and within the SDNP'.

The table shows there is a 'High Adverse' impact on Nature Conservation (Special Quality 2) from 5A: 'Significant adverse impact on biodiversity: protected sites, semi-natural habitat extent, quality and connectivity, and populations of European protected native species'.

[4] The final SDNP response, accessed on their website on 15.10.17, contains the same statement at Agenda Item 10 Report NPA 20/17 Appendix 1 Annex 3, 2.31 and 2.32.

For a detailed description of how the western end of 5A through Binsted would affect all 7 of the National Park Special Qualities, see ABNC Evidence A, *passim.*

7. Conclusion

All the groups and organisations listed above oppose Option 5A.

Most conservation organisations (Butterfly Conservation, Sussex Wildlife Trust, CPRE, NGO's letter) oppose both 3 and 5A, with qualified support for Option 1, i.e. support for a solution such as the single-carriageway New Purple Route.

Of local organisations, ASCATE (the Arundel group affiliated to SCATE) and Lyminster and Crossbush Parish Councils also oppose 3 and 5A, with either full or partial support for a modified version of Option 1, i.e. the New Purple Route.

Campaign for Better Transport opposes all three options, though it has signed the NGO's letter which gives qualified support to Option 1. The South Downs National Park opposes all three options.

Some Parish Councils – Walberton, Yapton and Slindon – oppose Option 5A but support Option 3 in some form.

Butterfly Conservation, Walberton Parish Council and Campaign for Better Transport criticise the traffic figures given by Highways England as being unconvincing. WPC and Campaign for Better Transport see them as unconvincingly favourable to Option 5A while Butterfly Conservation see the consultation as biased in favour of both 3 and 5A.

Walberton Parish Council call 5A 'Anathema'. Sussex Wildlife Trust see 3 and 5A as 'outrageous'. We can only concur.

This petition has collected
2508 signatures
using the online tools at iPetitions.com

Printed on 2017-10-16

A27 Arundel Bypass

About this petition

Highways England are consulting on options at Arundel from 22nd August to 16th October 2017.

We petition the Secretary of State for Transport, the South Downs National Park Authority,Highways England, Nick Herbert MP, West Sussex County Council, Arun District Council, Arundel Town Council and Walberton Parish Council, to:

1. REJECT routes for the Arundel bypass through Binsted village and its countryside.
   [Consultation Option 5A]
2. RECOMMEND that other options, less damaging to countryside and villages, should be considered, eg a shorter bypass
   [Consultation Options 1 or 3 , or modified proposals]

Reasons: The historic village of Binsted is set in wooded countryside in the parish of Walberton, West Sussex. Partly within the National Park, it is a haven for wildlife, with an active community and rural businesses. Many visitors value Binsted for quiet recreation. The Binsted option would sever Binsted's community, and destroy its beauty and tranquillity.

It would also damage the historic village and landscape of Tortington near Arundel.

After signing our petition, please support us by:

1. Signing up as an ABNC supporter: info@arundelbypass.co.uk
2. Following us on www.twitter.com/arundelbypass
3. Liking our Facebook page www.facebook.com/arundelbypass
4. and above all
   Responding to the public consultation urging that Binsted should be protected:
   Click here to complete Highways England's response form

To find out more about the Bypass options:

- Click here for the Arundel Bypass Neighbourhood Committee's website
- Click here for the Arundel A27 Forum's website
- Click here for Arundel SCATE's website

To find out more about the rural communities affected:

- Click here to read about Binsted Village, its active community and businesses
- Click here to read about the natural and historic environment of the area (Maves)
- Click here to read about the parish of Walberton, Binsted & Fontwell
- Click here to read about the Tortington Local Community

The last public consultation on the Arundel bypass on which votes were counted was in 1987. The

total number of voters then was 981. Today, more voices - including your voice - need to be heard. Please share with your friends and encourage them to join you in signing.

This petition attracted 2,508 signatories. The number of signatures on the petition has not been included in the total of responses received within the Report of Public Consultation as only the number of completed questionnaires are included in the final analysed figures. However, this petition has been included in the analysis of the consultation and the issues raised in it are dealt with in Chapter 9 of the Report on Public Consultation.

Contact details of the signatories are not included within this appendix due to data protection reasons.

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

highways england

A27
Arundel Bypass
Report on public consultation

Appendix D7.3

Spring 2018
Appendix D7.3 – Stakeholder responses
Community groups (part 3)

The OneArundel A27 Bypass Support Group

Highways England A27 Arundel Bypass Public Consultation

Response from The OneArundel A27 Bypass Support Group

October 2017

The OneArundel A27 Bypass Support Group

[redacted]

12th October 2017

[redacted]

The Highways England A27 Arundel Bypass Proposals – Public Consultation Response

I am Chairman of the OneArundel A27 Bypass Support Group which comprises a group of like-minded individuals who support the essential and long-overdue proposal for the building of an off-line, dual carriageway A27 Arundel bypass. We are aware that the A27 is already one of the most unreliable all-purpose trunk roads in England, and that at Arundel the bottleneck causes congestion, delays, a high accident rate, air pollution, diversions onto unsuitable routes, and it cuts the town into two halves. Thus we and our 600-plus signed-up supporters believe that the delivery of an effective solution in the shape of a bypass will benefit local businesses and residents, as well serving national and county-wide interests.

I therefore welcome the opportunity to comment on the Highways England public consultation document which sets out the options for improving the A27 at Arundel by replacing the existing single carriageway road with a new dual carriageway, linking together the two existing dual carriageway sections on either side of the town, and set out our Group's views in the attached comprehensive response document.

In essence, we believe that there is a clear need for a bypass on the A27 at Arundel, and that such a new road is an essential infrastructure requirement in the national interest. In respect of the three route Options we recommend that Option 1 should be rejected as unsuitable and that, whilst both Option 3 and Option 5A have considerable environmental disadvantages especially in relation to the SDNP, we believe that Option 3 is clearly the worst of the two, and that Option 5A should be adopted as the route for the Arundel Bypass.

I hope you find our comments and views helpful, and we look forward to seeing your proposed 'preferred route' in due course.

Yours sincerely,

[redacted]

Chairman, The OneArundel A27 Bypass Support Group

The OneArundel A27 Bypass Support Group

The Highways England A27 Arundel Bypass Proposals

Response to the Public Consultation Exercise (22 Aug 17 to 16 Oct 17)

by

The OneArundel A27 Bypass Support Group

Introduction

On 22 August 2017 Highways England published a public consultation document setting out the options for improving the A27 national trunk road at Arundel in West Sussex by replacing the existing single carriageway road with a new dual carriageway, linking together the two existing dual carriageway sections on either side of the town.

The consultation document provided details of three route options for the A27 at Arundel, together with information about the key benefits and impacts of each option, and invited comments aimed at helping Highways England to decide on a preferred option.

The purpose of this response by the OneArundel A27 Bypass Support Group is to respond to the consultation exercise, to emphasise the need for an A27 bypass at Arundel, to consider the pros and cons of each of the three options, Option 1, Option3 and Option 5A, and to set out the reasons why OneArundel believes that Option 5A should be selected as the preferred route for the bypass.

The OneArundel A27 Bypass Support Group

OneArundel comprises a group of like-minded individuals who support the essential and long-overdue proposal for the building of an off-line, dual carriageway A27 Arundel bypass, and we welcome the Government's commitment to its early provision. We established the Group in April 2017 in order to represent the silent majority who have aspired to see a solution to the local traffic congestion for many years, and especially in order to counter the increasingly vocal national and local anti-road, anti-car and anti-bypass groups who were seeking to dominate centre-stage in the debate.

We are aware that the A27 is already one of the most unreliable all-purpose trunk roads in England, and that at Arundel the bottleneck causes congestion, delays, a high accident rate, air pollution, diversions onto unsuitable routes, and it cuts the town into two halves. Thus we and our 600-plus signed-up supporters believe that the delivery of an effective solution in the shape of a bypass will benefit local businesses and residents, as well serving national and county-wide interests, illustrations of which are shown in Annexes A and B. We therefore resolved to work together with other interested individuals, businesses and organisations to support the work of Highways England, with the aim of being fully ready to participate in the current public consultation exercise.

Our opening position, in the absence of knowledge about any other options likely to be put forward for consideration by Highways England, was to support what was then called the pink/blue route (now Option 3), which was the 'Preferred Route' delineated by the Department for Transport in 1993 and which Highways England had been instructed to include as their baseline option in the current exercise. However, as will be seen, new facts are now available and, as a result, OneArundel has revised its position and now supports Option 5A.

The Purpose of this Response

The purpose of this response is primarily to answer two major questions:

a. First, does Arundel need a bypass?

b. Second, if so, which is the best Option of the three suggested by Highways England (Nos. 1, 3 or 5A)?

The Need for a Bypass at Arundel

Whilst for a variety of reasons it has not proved possible to build a bypass on the A27 at Arundel, the need for such a road has existed for well over 30 years, and the reasons for that need have not changed in principle.

The first formal consultation exercise began in 1987, and was based on the fact that:

> *The existing A27 at Arundel is mainly single carriageway with poor alignment and visibility, steep gradients and at-grade junctions. Traffic is heavy and congestion occurs.*

After protracted consultations in the late 1980s and early 1990s, the Department of Transport published a formal 'Statement of the Secretary of State's Decision of the Preferred Route for the A27 Arundel Bypass' in July 1993, stating that the Secretary of State had decided that the bypass should be built on what was defined as the 'pink/blue' route, and that the start of construction would depend on the completion of statutory procedures and the availability of funds. The project was then included in the Government's Future Roads Programme, before being remitted for further study by the new Government in the late 1990s.

The Government-funded South Coast Multi-Modal Study (SoCoMMS) took place in 2002 and, after its review of the need for a bypass at Arundel, it concluded that the key issues in the Arundel area were:

- Congestion on the A27 at Arundel gave rise to very heavy traffic in local villages and other areas.

- Traffic levels on the single carriageway section through Arundel [we*re*] equivalent to [*the*] neighbouring dual carriageway.

- Most A27 traffic was passing through Arundel.

- The traffic flow was already in excess of Highways Agency 'congestion reference flow'.

- Safety issues on the A27. The accident rate was twice the national average rate for the type of road and four times the national average for dual carriageways.

- Severance was caused by high traffic flows on the A27 through Arundel.

- There was poor accessibility to Littlehampton on the A284 north-south road.

SoCoMMS therefore recommended that the Government's list of 'Targeted Road-based Improvements' should include an Arundel bypass, with [*a*] recommendation that [*the*] previous preferred route (pink-blue) was taken forward. Subsequently, and despite being supported by DoT officials, this recommendation was personally cancelled at the very last minute by the Secretary of State on environmental grounds as a result of strong lobbying by Defra, the Countryside Agency and various anti-road groups. Nevertheless the overall national need for such a bypass did not go away.

Seven years later, the GOSE-sponsored South East Plan which set out the 'Regional Spatial Strategy for the South East of England' and which was published in May 2009, included statements in Section 17, covering the "Sussex Coast", which said that:

- [*There was a need to*] build upon and help deliver major improvements to the strategic transport infrastructure and services both to reduce its peripherality and to improve accessibility within the sub-region.

- Key measures include … delivering improvements to east-west transport links by road … to improve accessibility, facilitate strategic development opportunities and enable the better functioning of overlapping local labour and housing markets.

- Better east-west transport links, especially the A27 … will improve complementary connections with other key sub-regions and accessibility within the sub-region.

- Key issues to be addressed [*are the*] highway capacity issues on the A27 on the A27/A259 at Arundel and Worthing.

Also, the associated SEEDA 'Regional Economic Strategy 2006-2016: A framework for Sustainable Prosperity' reinforced these needs by stating that:

- To address congestion and avoid the tipping point that will undermine the region's competitiveness, we need to focus on solving bottlenecks in the infrastructure systems.

- [*There was a need to*] reduce road congestion, [*and to*] invest in transport to support strategic economic corridors [*of which a*] specific priority [*was*] the South Coast (including the A27 at Arundel).

Then in 2015 the Department for Transport published its A27 Corridor Feasibility Study, the 'Summary' section of which confirmed that it was:

One of six studies undertaken by the Department for Transport to look at problems and identify potential solutions to tackle some of the most notorious and long-standing road hot spots in the country.

The aim of the A27 feasibility study, which took place from spring to Autumn 2014, was to identify the opportunities and understand the case for future investment solutions on the A27 corridor, particularly at Arundel and Worthing, that were deliverable, affordable and offered value for money.

The study analysed the current and future performance of road traffic on the A27 corridor and, as far as Arundel was concerned, it established that:

- Over 60% of work-related commuter journeys in the coastal area are made by road.

- Goods vehicles represent more than 15% of the daily traffic flows along the A27, and a third of this is heavy goods traffic

- For most of its 67 mile length the A27 is dual carriageway. Four stretches of road remain single carriageway [*including*] at Arundel. Such sections of road tend to experience peak hour congestion and poor time reliability.

- These single carriageway sections are further constrained by congestion resulting from limited capacity at at-grade junctions [*including two at Arundel*] at the Ford Road Roundabout and at Crossbush Junction.

The study's conclusion in respect of an A27 Arundel bypass was that the analysis showed that a new bypass at Arundel could generate journey time and accident savings and could have beneficial impacts on journey time reliability. As a result, the Government announced in December 2014, as part of its Road Investment Strategy, that it had earmarked £250 million for a new dual carriageway bypass on the A27 at Arundel to link together the two existing sections of the road on either side of the town. Highways England was directed to take the project forward, and its starting point was to be the previous preferred route (pink/blue), subject to consultation with the South Downs National Park Authority, local government and the public on this, and alternative options. Hence the current Highways England public consultation exercise.

<u>The Highways England Reasons for an A27 Arundel Bypass</u>

Turning now to the Highways England public consultation exercise, the first question is:

"Does Arundel need a Bypass"?

The national and local reasons for needing such a bypass are clearly set out on pages 6 and 7 of the HE Consultation Document, as well as on page 9 of the HE supporting document "Traffic Forecasting Report", and they include:

- The A27 is a strategically important corridor on the south coast which is used by both long distance strategic traffic and local traffic alike. The Arundel section is one of a

number of bottlenecks which causes delay and variable journey times due to the single carriageway alignment and the number of junctions.

- There are existing capacity constraints at Arundel due to the single carriageway section through Arundel, worsened by constrained capacity at the Ford Road roundabout and Crossbush junctions.

- The current demand exceeds the theoretical capacity of a single carriageway road in Arundel.

- Future growth will result in the demand further exceeding capacity through Arundel, and [*unless improved*] this section of the A27 will act as a constraint to the planned growth in housing and employment in the corridor.

- The A27 results in severance through the town of Arundel.

- Two-thirds of the traffic is through-traffic, whilst the remaining third is local.

- At Arundel, the A27 is already operating at 100%-150% capacity. Due to population growth and increased economic activity in the region there will be more traffic using the A27 through Arundel in the future.

- The single carriageway section and junctions through Arundel do not cope with existing traffic. This often results in long queues of traffic approaching Arundel. Due to congestion, some longer distance traffic diverts away from the A27 to alternative routes which are less suited to high volumes of traffic. To the north, this includes the B2139 through the South Downs National Park and local villages and towns (Houghton, Amberley and Storrington). The traffic disrupts the otherwise tranquil nature of the SDNP and affects the quality of life of those living alongside the route.

- There are an above average number of accidents on the A27 between Yapton Lane and Crossbush.

- Without improvement, the congestion and delay on the A27 through Arundel will increase in the future.

Also, the associated HE "Traffic Forecasting Report" concludes with the words:

> *Therefore it is clear from the modelling results that a bypass is required to provide the network improvements and reduce delay and improve travel time.*

In summary, Highways England has confirmed that improving the A27 at Arundel would:

- Considerably reduce the existing queues and delays.

- Improve journey times, air quality and road safety.

- Remove traffic from less suitable routes within the South Downs National Park.

- Help businesses to reduce their costs, support expansion and provide new employment opportunities.

- Support the growth of tourism.

These are conclusions which clearly show there is a strong national and regional imperative for the provision of an A27 bypass at Arundel, as has been the case ever since the first consultation exercise began in 1987. The only factor that has changed in the past 30 years is that traffic has increased and the congestion has become worse as time has passed, and it is forecast to get even worse in the future. Thus they emphasise that the need for a bypass at Arundel is driven more by factors external to Arundel, rather than by local factors, and they are fully supported by the OneArundel A27 Bypass Support Group.

The answer to the consultation question is therefore that Arundel needs a bypass, and that such a new road is an essential infrastructure requirement in the national interest.

The Highways England Options

Highways England has proposed three dual carriageway route Options for consideration:

a. Option 1 – through Arundel town via the Ford Road roundabout.

b. Option 3 – The 1993 pink/blue route through the SDNP, inc.Tortington Common.

c. Option 5A – Along the southern edge of the SDNP north of Binsted village.

Option 1

Option 1 would involve the building of a new dual-carriageway road from Crossbush to the bridge by the Ford Road roundabout, a new single-carriageway bridge over the river alongside the existing bridge, and the conversion of the single-carriageway Hospital Hill into a new dual-carriageway road until it meets the existing dual-carriageway just to the west of The White Swan Hotel.

There are a number of facts which suggest, at first sight, that Option 1 should be given serious consideration. They are:

- It is the cheapest Option - £135m

- It is the shortest route

- It gives the best value for money (Benefit to Cost Ratio) – 3.6

- It has the least adverse impact on the South Downs National Park

- It would result of the loss of the least amount of Ancient Woodland – 5 hectares

On the other hand, there are a considerable number of disadvantages, these include:

- Option 1 would continue to divide the town at the Ford Road roundabout. It does not meet the specific and important scheme objective of reducing the community severance caused by the A27 through Arundel.

- The Ford Road roundabout would be controlled by traffic lights, so ensuring stop-start traffic The volume of traffic using the Ford Road roundabout would increase by 62% (from 28,600 to 46,200 vpd).

- Noise levels and pollution in the vicinity of the Ford Road roundabout would increase.

- From the traffic point of view this is the worst performing of the three Options.

- Option 1 would increase the amount of traffic using the A27 in the SDNP north of Binstead Wood and Tortington Common by 16%.

- Option 1 diverts the least amount of traffic from rat-running in the SDNP (only 19%).

- Option 1 fails to take account of the physical limitations of Hospital Hill, with its poor alignment and visibility and steep gradients - as highlighted in the 1993 Preferred Route Statement.

- Option 1 does not take into account the projected increase in traffic on Ford Road itself as a result of ADC's recent proposal for a major housing development at Ford comprising at least 1,500 new homes.

- Option 1 would have a major detrimental impact on those living close to the Ford Road roundabout and Hospital Hill, especially in Fitzalan Road, Wheelwrights Close, the west end of Maltravers Street, Surrey Street, lower Torton Hill, Canada Road and Jarvis Road. It would also impact badly on the Riding Stables in Park Place, which might be forced to close.

- Option 1 could exacerbate the flood risk to properties in the vicinity of the Ford Road roundabout. This is already the area at greatest surface water flood risk in Arundel, and the new bridge and its connection to the roundabout would need to be built directly over the course of Spring Ditch, which is one of the most important flood-related watercourses in this vicinity of the town.

- Option 1 fails to acknowledge the poor physical state of the existing A27 bridge over the River Arun, which itself may need major renovation or replacement, or the fact that the sheet steel piling (SSP) on the river wall under the west side of the bridge is already in a poor state (EA Grade 4) and will need to be replaced within 10 to 20 years.

- With Option 1, there are likely to be major problems on the Hospital Hill section of the dual carriageway for vehicles and pedestrians wishing to access and exit Jarvis Road, Tortington Lane, Park Farm, Arundel Cricket Club, The White Swan Hotel and, especially, Arundel Hospital. Walking to and from the Hospital may well become a matter of life and death. This brings the prospect of additional accidents as well as reduced road safety. This Option might also force the closure of The White Swan Hotel.

- The proposed aerial footbridge over the Ford Road Roundabout would be hideously intrusive and impact very badly on the visual entrance into and the historic setting of Arundel. Also, because of the extended spiral access at each end it is unlikely to be heavily used and will therefore not achieve its aim.

- It seems that the well-used bridge underpass may be closed.

- During the necessarily expended construction period there would be a lengthy and large increase in traffic disruption, which would bring its own additional noise and air pollution. Details of possible construction problems are set out in Annex C.

- In the event of this new road being blocked by either an accident or the need for maintenance, there would be no practical local diversion available other than through the narrow town centre.

- It seems very likely that Option 1 would increase the amount of rat running through both the Torton Hill area and Arundel High Street as drivers would continue to seek to avoid the Ford Road roundabout, especially at peak times.

- It would not resolve the problem of HGVs using Ford Road, a problem that according to WSCC can only be properly resolved by the construction of a bypass which includes an access from Ford Road where it is crossed by a new bridge.

In summary, although Option 1 may be the cheapest Option and have some superficially attractive advantages, in practice it is likely to the very worst Option, especially as it would involve more than 46,000 vpd using the Ford Road roundabout compared with only some 28,000 vpd now (which is quite bad enough). Also, it is the worst option for alleviating the traffic which rat-runs north/south through the SDNP to avoid Arundel's congestion.

OneArundel therefore recommends that Option 1 should be rejected as unsuitable. It is a very bad idea, and we do not wish the A27 to continue to run through the town.

Option 3 or Option 5A?

Option 3 (the old pink/blue route) would be a new offline dual carriageway linking Crossbush junction with the existing A27 very close to Havenwood Park to the west of Arundel. It would go through the South Downs National Park, including through about 24 hectares of Ancient Woodland at Tortington Common.

Option 5A would be a new offline dual carriageway linking Crossbush junction with the existing A27 in the vicinity of the Yapton Lane junction to the west of Arundel. It would go through farmland along the southern edge of the South Downs National Park, as well as about 6 hectares of Ancient Woodland to the north of the small hamlet of Binsted near Walberton village.

OneArundel has assessed which of Options 3 or 5A, neither of which would involve the demolition of any dwellings, is best for Arundel. There are advantages and disadvantages to both Options, but having previously been a strong supporter of the Government's original 1993 pink/blue Preferred Route, OneArundel has changed its view, and we are now convinced that Option 5A is the best of the two routes for the building of a dual carriageway off-line A27 bypass at Arundel.

The reasons why we have reached this conclusion are as follows:

- Whilst Option 5A is slightly longer than Option 3, and whilst Option 3 would cost £260m, Option 5A would be slightly cheaper and cost £250m.

- Option 3 has a Benefit to Cost Ratio (BCR) of 2.0, whilst Option 5A has a better BCR of 2.6.

- In terms of value for money, Option 5A is better than Option 3.

- Option 3 would divert 23% of the traffic currently rat-running through the SDNP on the A29 and the A284 (a total of minus 3,300 vpd). However Option 5A would divert 36% of this traffic (a total of minus 4,300 vpd).

- Option 5A would reduce the amount of traffic using the current A27 in the SDNP to the west of Arundel and to the north of Binstead Wood and Tortington Common in the vicinity of The White Swan Hotel by 90%.

- The modelling results demonstrate that, in terms of overall network summary statistics and from a traffic perspective, Option 5A is the best performing network for Arundel. It is better than either Option1 or Option 3.

- Both Option 3 and Option 5A impact adversely on the South Downs National Park, as well as the local Ancient Woodland. Both have significant though similar environmental constraints, and both need to be given special consideration under national planning policy.

- Option 3 would result in the destruction of 24 hectares of Ancient Woodland, whereas Option 5A would result in the destruction of only 6 hectares of Ancient Woodland.

- Option 3 would compromise the ecological integrity of the Binsted Wood Local Wildlife Site (LWS).

Additionally, there is a need to take account of five significant changes which have occurred since 1993 when the pink/blue route was designated as the Government's Preferred Route. These changes are:

- The designation of the South Downs National Park which includes Tortington Common to the south of the current A27.

- The redefinition of Ancient Woodland, which now includes the re-planted Tortington Common, as well as Binsted Wood.

- The designation as a local wildlife site of Binsted Wood, Tortington Common and Stewards Copse (close to Arundel) as the Binsted Wood Area of Special Nature Conservation Interest (SNCI).

- The publication of the National Planning Policy Framework (NPPF) which gives emphasis to the protection of National Parks and Ancient Woodland.

- The publication of the National Networks National Policy Statement (NNNPS) which governs nationally significant road and rail infrastructure projects, as is the case with this A27 Arundel Bypass proposal.

Of these, the most important change is the designation of the SDNP and the need for Highways England to respect the SDNP and its special qualities in its decision making. The SDNP is a nationally designated landscape, and HE has a statutory duty to have regard to the purposes of the National Park. The SDNPA is therefore a key consultee with regard to the Arundel Bypass proposal. This means that the views and recommendations of the SDNPA cannot be put aside lightly by those who have to take the final decision concerning the route of the Bypass.

The key issues are that any road building in a National Park must be in the national interest, and that no alternatives are possible.

Thus a recent statement by the Director of Countryside Policy and Management at the SDNPA is particularly relevant, viz:

> *All public bodies, including Highways England, must have regard to the purposes of National Parks as they go about their work. National planning guidance states that 'major development (which would include building or widening trunk roads) in a National Park is unacceptable unless there is an overriding national interest and no alternatives are possible. All the routes proposed would go through parts of the National Park and we will be assessing their relative impacts upon it. The SDNPA has a clear position statement on the approach it will adopt to all proposals for upgrading sections of the A27 and this has guided all our work on this issue.*

The local Ancient Woodland, which now includes Tortington Common as well as Binsted Wood and Stewards Copse, and which is located within the SDNP, is protected by national planning policy and, as such, any destruction can be expected to be resisted by Defra, Natural England, and especially by the SDNPA. It is therefore likely that the strongest arguments against the proposed Arundel Bypass will be deployed in respect of Option 3, with its take of 24 ha of Ancient Woodland, as opposed to Option 5A with its take of just 6 ha.

The opinions and recommendations of the SDNPA are quite rightly very important, and these are reinforced by the draft Policies in the emerging SDNP Local Plan (September 2017), viz:

- Strategic Policy SD42: Development proposals for new infrastructure will only be permitted where it represents the least environmentally harmful option reasonably available

- Strategic Policy SD9.2.c: Development proposals that will result in any adverse effect on the integrity of any Local Site which cannot be either avoided or adequately mitigated will be refused, unless exceptional circumstances outweighing the adverse effects are clearly demonstrated

- Strategic Policy SD9.2.d: Development proposals which result in the loss or deterioration of irreplaceable habitats, including ancient woodland, will be refused unless the need for, and benefits of, the development in that location clearly outweigh the loss

Additionally, the SDNPA has published an A27 Position Statement which governs the Authority's approach to proposals for widening or building new roads through the National Park, the presumption being that any proposal must be in the national interest and must minimise the adverse impact on the SDNP.

As far as the NNNPS is concerned, there are two policies which impact directly on HE's A27 Arundel Bypass proposals:

- Para 5.32 requires the Secretary of State to not grant consent for any development that would result in the loss or deterioration of irreplaceable habitats including ancient woodland
- Paras 5.150-5.152 say that the Secretary of State should refuse development consent in National Parks except in exceptional circumstances and where it can be demonstrated that it is in the public interest

On the basis that the need for a bypass at Arundel is essential in the national interest and that there is no suitable an affordable alternative route which would no impact adversely on the SDNP, we have assessed which of Options 3 or 5A is most likely to receive the least opposition, especially from the SDNPA. Having previously been a strong supporter of the Government's original pink/blue Preferred Route, OneArundel is now convinced that if an A27 Bypass is to be provided at Arundel, then Option 5A is the best of the three route Options that have been put forward by Highways England.

OneArundel therefore gives Option 5A its strong support.

Additional Points for Consideration by Highways England

There are four additional points of concern which OneArundel would like to bring to the attention of Highways England:

a. Ford Road. OneArundel is disappointed to note that no account seems to have been taken by Highways England to take account of the amount of traffic on Ford Road, either now or in the future. This traffic already causes difficulties at the northern (Arundel) end of Ford Road, and these are likely to be exascerbated in the future when major housing developments take place on Ford Airfield. It is therefore surprising that Options 3 and 5A fail to include a junction with the Ford Road, thus enabling traffic to access and exit the A27 to the south of Arundel, thus ensuring that such traffic would have easy accesses to the trunk road without having to use the already over-stretched Ford Road roundabout in Arundel.

b. The Route of Option 5A. One of the obvious disadvantages of Option 5A is that the detailed route, as presently illustrated in the consultation paperwork, passes very close to a small number of houses in the hamlet of Binsted. OneArundel therefore recommends that consideration should be given to moving the route of Option 5A through the SDNP slightly to the north, but still within the corridor of flexibility

available to Highways England. This might then alleviate some of the concerns about the impact of Option 5A in the Walberton/Binsted area.

c. Bridge Design. OneArundel has considerable concern about the visual impact of the new bridges proposed for the crossing of the River Arun and its flood plain to the south of the town under each of the Options, and is keen to ensure that the design of any new bridge is of the highest visual standard. Additionally, it is essential that any new bridge has no detrimental impact on the flood risk to Arundel, especially from the south of the town.

d. Yapton Lane. It seems possible, if Option 5A is the selected route for the new bypass, and especially if the latter has no junction with Ford Road, that additional traffic may use the north end of Yapton Lane as an entry/exit point onto and off the A27 to the west of Arundel. However, the B 2132 (Yapton Lane) may not be suitable for such increased usage, particularly by HGVs, and in conjunction with the local highways authority (WSCC) consideration may therefore need to be given to upgrading this road to a higher standard.

Conclusion

The OneArundel A27 Bypass Support Group welcomes the opportunity to respond to the Highways England consultation concerning the need for improvements on the a27 trunk road at Arundel in West Sussex.

We have carefully considered the consultation questions, and believe that it is clear that there is a need for a bypass on the A27 at Arundel, and that such a new road is an essential infrastructure requirement in the national interest.

In respect of the three route Options put forward by Highways England, OneArundel recommends that Option 1 should be rejected as unsuitable, particularly as the A27 would to continue to run through the town. Both Option 3 and Option 5A have considerable environmental disadvantages, especially in relation to the SDNP. However, of the two, Option 3 is clearly the worst, and OneArundel therefore recommends that Option 5A should be adopted as the route for the Arundel Bypass.

Finally, we are fully aware of the negative implications of building a new road in the SDNP and of the associated statutory restrictions. However, on the basis that there is a national requirement for this bypass and that, as highlighted on page 40 of your Consultation Document, there is no suitable and affordable alternative route which avoids the SDNP, we believe that the Option 5A route along the southern boundary of the SDNP is fully justified in the circumstances.

Annex A: The Need for an Arundel Bypass – Individual Comments

Annex B: The Need for an Arundel Bypass – Business Comments

Annex C: The Construction of Option 1

Annex A

The OneArundel A27 Bypass Support Group

Individual Comments

A Few of the Comments from Social Media (6 June 2017)

“Myself and my husband are totally for the bypass. We live in Warningcamp, I work in Arundel and my husband in Chichester, and we are fed up being stuck in traffic jams whichever way we try to get anywhere”.

"Please just get on and make it happen".

"I have travelled between Worthing and Fontwell for well over 30 years and it now takes me longer than before the duel carriageway sections were put in! I dread to think how long I have spent queuing to get through Arundel. I never understood why the bypass was never completed in the first place. I can see no down-side to your proposed route, the sooner it is completed the better for everyone using the road and living in the area. Good luck and let’s get this done as soon as possible".

"In 2000 it was quite possible to drive from Chichester to Arundel at any time of the day with fairly minimal delay. Now for long periods of the day a decision has to be made at Fontwell whether to come home via Whiteways Lodge to avoid lengthy queues. Delays coming from Worthing direction are even worse and need no elaboration.....We need a solution now! A definitive bypass as proposed is in the interest of both the people of Arundel and surrounding villages, and of the growing and increasingly frustrated thousands bottled up along the South Coastal plain. We in the town should stop being so selfish and think much more about the latter’s needs and, indeed, of those trying to transit through our region."

“I have believed that a by-pass was necessary ever since we arrived in Arundel 21 years ago. You just have to come home from Worthing on a Friday afternoon to see the need for it. People saying that it will increase traffic are just talking nonsense. Traffic will increase anyway, and we are all responsible for it since we use our cars rather than public transport (where it exists). People who are against it are just selfish. So let the professionals chose the best route and do it as soon as possible”.

“The bypass would be welcomed by many of us who live beyond the boundaries of Arundel. It would improve travelling along the coast and make Arundel more accessible to us all in Sussex”

"The chaos of the A27 at the moment is harming businesses, stopping regeneration and driving holiday makers mad – no repeat visits. As a Blue Badge tourist guide I travel all over the South East. There are few areas as badly served as ours. I have to plan an extra half hour to arrive anywhere on time for my clients”.

"My grandchildren live in London and they come to stay with me in Arundel during half terms and holidays. I like to take them walking in the countryside. They stayed with me recently and I wanted to take them to see the bluebells at The Dover. I found myself having

to decide whether it was worth leaving Arundel to have to drive on the A27. Having picked them up at the Pease Pottage Services and driven home to Arundel, the prospect of getting back on to the A27 was such a depressing thought that we never saw the bluebells. What a sad situation! Another thing: Whenever I drive back from Chichester I usually now go via Whiteways."

"How long will we have to put up with an antiquated road system? Friends who have been visiting from overseas for many years just can't understand. They are now asking whether it will be built in our lifetime! Let's get on with it please for all the reasons you have outlined."

"I travel regularly to Chichester and Bournemouth, and the traffic queues generated by the road from Crossbush to the west side of Arundel are appalling. I live locally and the traffic is a major consideration when deciding where to take visitors during the summer months. I am sure this is something many of us think about and must impact on tourist trade to the town and the viability of the shops trading there - I have noticed a number of stores closing down and the number of shops that seem to change ownership over a short period of time. I am all in favour of a new road - it just has to be better for our area"

"Just to say "Congratulations" on setting up OneArundel, which we most definitely need to group together all those who favour not only a proper bypass for Arundel but also the only sensible route. Now after all these years, there is a very real chance of seeing this happen. We must all campaign hard and avoid at ALL costs the terrible mess that Chichester got in with their consultations, resulting in the Minister withdrawing the money. This simply must not happen in Arundel."

<u>Feedback from Visitors to Arundel (24 July 2017)</u>

Visitors to Arundel from both near and far are the lifeblood of the traders in Town, local businesses are already worried for their future.

A lively local economy adds to the vibrancy and vitality of the town enjoyed by residents as well as providing employment opportunities.

Here are some recent customer comments overheard in the Arundel Antiquities shop in Tarrant Street.

"We don't come into Arundel at weekends because the A27 is too jammed."

"We never come to Arundel when there is anything on nearby as the traffic jams are too long."

"Bank Holidays are too busy to get into Arundel. So now we just shop in Rustington."

"We haven't got time to queue to get into Arundel So now we rarely bother."

"We haven't been to Arundel for a long while. It takes so long to get here with the A27 traffic".

A Perspective on the Need for a Bypass from Outside Arundel (26 July 2017)

“I live in Rackham and travel between here and Rustington on a regular basis so experiencing the awful congestion around Crossbush. I therefore fully support a bypass for Arundel.

A particular problem currently caused by the bottleneck at Arundel is that a large number of vehicles leave the A27 at Shoreham and travel via Steyning, Storrington and Amberley to Fontwell where they re-join the A27.

This causes serious traffic problems on the B2139, which goes through the heart of the South Downs National Park (indeed the additional traffic in Storrington makes it one of the most polluted small towns in the country).

Also the high volume of traffic on the B2139 makes it a very dangerous road. Please can we have an Arundel bypass soon”.

Well Made Points Supporting a Bypass at Arundel (15 August 2017)

“I am a concerned resident who has lived in the area for over 40 years.

I fully support the aim of getting a proper completion of the missing link in the half-built Arundel by-pass.

The A27 is THE main east-west strategic highway for the south coast, and as such is a vital national, regional as well as local route.

The economic costs of the current delays, to say nothing of the massive environmental pollution caused by static and stop-start car and lorry engines is a scandal.

Rat- running through Downland towns and villages to avoid the daily blockages merely compound and spread the problem.

We must not fall into the same trap as Chichester 6 months ago, or Worthing 20 years ago, when failure to agree on the solution or route led to cancellation of anything being done."

A Pollution and Rat-Running Warning against any Online Solution at Arundel by a Resident Living Close to the A27 (16 August 2017)

“We live at the bottom of Torton Hill near the Ford Road roundabout.

The pollution from stationary traffic far outweighs the environmental impact of building a new road.

We cannot see how the current road can be improved sufficiently to offset the current traffic issues we face.

At the moment drivers are using Canada Road as a rat-run to avoid the congestion and it is only a matter of time before someone is hurt as drivers are not adhering to the speed limits.

If there is anything that we can do to support the bypass option then please don't hesitate to ask".

A View on a Bypass at Arundel from a Storrington Resident (31 August 2017)

"A bypass is vital to the area surrounding Arundel. At present traffic avoiding delays at Arundel is diverting through the countryside and villages to the north of the town.

The air pollution in Storrington has been at illegal levels for years and, despite promises, nobody has managed to reduce it, yet many hundreds of new houses are being built in the area.

So far no road improvements have been completed to cope with these problems.

The Arundel Bypass will remove some of this traffic and pollution and will be a very welcome start to the improvements.

Some sort of notification to the residents of Storrington, many of whom are totally unaware of these proposals, would greatly enhance the support for an Arundel bypass.

I cannot see that the proposed Option 1 will be beneficial to the local residents going through the centre of the built-up area. Instead, Options 3 or 5A must be more beneficial".

Annex B

The OneArundel A27 Bypass Support Group

Business Comments

Arundel Chamber of Commerce Supports Bypass (14 April 2017)

Arundel Chamber of Commerce are overwhelmingly in favour of an offline bypass said Chairman Ian Fenwick. Access to the town is already affected by long delays and queues all year round. Other concerns he listed were rat running through the town and pollution.

Poor A27 Throttling Business say Rinkit Ltd (19 April 2017)

Since 2008 Rinkit Ltd has sold products across the UK and Europe from their base in Littlehampton. They started on Amazon and eBay, and now have two warehouses based in Littlehampton and another in Fareham.

Directors Rob Lowe and Richard Goss support an offline bypass at Arundel and say:

"In the ever changing e-commerce marketplace customers are demanding later and later cut off times for same day shipping. Whilst Littlehampton has many attractions for companies it is geographically a struggle for a company such as ours.

However, this problem is exacerbated by the poor road infrastructure throttling traffic in and out of the town and onto the A27. As a result of this courier companies push for earlier and earlier collections to avoid peak hours of traffic where their lorry can be idle on the Lyminster Road for anything up to an hour.

Sadly unless the infrastructure is developed to support local businesses then thriving companies such as ours will be forced to relocate resulting in a loss of over 30 jobs in the Littlehampton area."

Bowers and Wilkins Support a Bypass at Arundel (16 May 2017)

Geoff Edwards, Executive Vice President UK Operations for Bowers & Wilkins has said:

"We wholly support the need for the Arundel Bypass as part of the overall improvement of the A27.

As a major employer in the area the congestion on the A27 affects not only the key supply route to and from the Southampton docks.

In addition, several of our employees have to commute along this corridor to and from work or to visit suppliers and the delays caused at the Arundel and other pinch points is an unnecessary stress and level of unpredictability for them."

Roberts Transport (Sussex) Support a Bypass at Arundel (1 June) 2017

Roberts Transport (Sussex) Ltd is a family run road transport/distribution and warehousing company based in Brighton (East Sussex) and Littlehampton (West Sussex). The company started out as an 'Owner Driver' operation in 2006 in a Sole Trader entity with one 44 tonne truck. In 2011 with four 44 tonne trucks, a van and a motorbike, the decision was taken to transfer to a Limited Company.

Managing Director Dave Roberts says

"We are fully behind the campaign being led by OneArundel to support the Government in finding a solution to the congestion on the A27 at Arundel. A bypass appears to be the best option to get transport moving in the South East. It will help to improve the living standards of the people who live locally, and it will allow my business to provide a smoother and quicker level of service."

Arundel Wine Society Support the Arundel Bypass (3 July 2017)

Richard Esling, founder and director of Arundel Wine Society, Sussex Wine Academy, WineWyse and Business Strategy Consulting says:

"We give full support to the Arundel bypass"

R T Page Support a Bypass at Arundel (4 July 2017)

RT Page is a family run warehouse and logistics company founded in 1946. They operate throughout the UK.

Mr R. C. Page, Director of R. T. Page & Sons Ltd said

"You certainly have the support of our company"

He continued "We have operated transport in the area for over seventy years and, have been frustrated repeatedly, by the various minority lobbies' and some Governments, who collectively, over the years, have delayed or stopped the construction of the bypass."

Mr Page added "We would like to be reassured that the connections from the proposed new bypass to the South East would be enhanced at the time of construction."

Local Taxi Driver and Regular User of A27 supports a Bypass (24 July 2017)

A local taxi driver has sent OneArundel this quote:

As a professional taxi driver, I fully support this campaign and firmly reject the alternatives being put forward by the local NIMBYs.

The ideas they have will not solve the problem. I am frequently delayed by the ever increasing traffic in the area.

This causes major problems getting our customers, many of whom are tourists, to their destinations on time.

I also agree that people are put off of coming to Arundel because of the traffic problems. It's about time this new road was built.

Smartphone Screen Repair need a Bypass at Arundel (2 August 2017)

The directors of this Littlehampton firm depend on reliable and jam free roads for their business.

They say: "At Smartphone Screen Repair we offer a collection and delivery service to customers across Sussex, but this is severely adversely affected by the congestion on the A27 at Arundel.

We believe that an Arundel bypass would make a massive difference to the efficiency of local business. Furthermore it would contribute to the overall improvement of the A27 across the county.

Reliability is essential to business."

Arundel First Friday Supports a Bypass at Arundel (3 August 2017)

"Arundel First Friday holds regular networking meetings in the town that attracts business people from across West Sussex.

We are frequently told that people are arriving late, or not at all, because of the congestion on the A27, and the problem is so bad that many do not even bother to try any more.

Arundel First Friday Business Networking fully supports OneArundel and the need for the Arundel bypass".

Arundel Brewery Think an A27 Bypass at Arundel would Benefit Everyone (7 August 2017)

Samantha Walker, Director of Arundel Brewery is concerned not only with the effect on her business of traffic delays but also on the economy of the whole town as well. She says:

"Arundel Brewery's customers need to be able to rely on deliveries arriving on time, but this is often made extremely difficult by the constant congestion on the A27 on either side of Arundel.

The severe delays must also put many visitors off from visiting Arundel itself, because of the difficulty getting here.

For a town with one of the highest proportions of independent shops and restaurants in the country, that is not good news. Therefore, the sooner a bypass is built the better. We welcome the work of the OneArundel Bypass Support Group."

Medisort Supports a Bypass at Arundel (15 August 2017)

Medisort, was founded in 2009 to provide high quality processing and logistics from their base in Littlehampton. Medisort has a number of vehicles in operation at any one time, ranging from 3.5 tonne vehicles to Articulated 44 tonne bin exchange lorries.

Director Stuart Brittle said:

"I support the campaign to deliver the Arundel Bypass.

The daily congestion along the A27 at Crossbush has a serious effect on productivity of my clinical waste collection drivers. If a solution is not found in the near future, then I may be forced to move away from the south coast and take the 44 good quality, full time jobs I provide here with me."

Antiquities Supports a Bypass at Arundel (15 August 2017)

For twenty-five years Antiquities has served a local, national and international clientele, all drawn to this family run business's effortless blend of ornate elegance, industrial chic, country charm and daring old world glamour.

Directors, Ian and Christina Fenwick say:

"At long last an opportunity to get our long overdue by pass. Access to the town is stifled by long traffic queues on a daily basis, weekends and Bank Holidays.

Many customers say that they won't even attempt to come to Arundel because it takes too long. Visitors frequently state they will not return as they can't face the traffic on the A27 approaches.

The amount of air pollution we get from the A27 queues is a hazard to everyone. Whatever happens, we must have a bypass.

A through route outside the town is by far the most logical, and the option of just widening the existing road would 'kill' the town for years while work is undertaken....so do please support a better option....Antiquities and the majority of our customers do ".

Annex C

The OneArundel Bypass Support Group

The Construction of Option 1

Informal Advice from the Chairman of a National Civil Engineering Company who lives in Arundel **(**20 September 2017)

I recommend that you please consider the following points:

1. The construction period is expected to be 3 years. If Option 1 is taken, as the build is largely on-line (ie on the line of the existing A27), it will be extremely disruptive and have an adverse impact for the travelling public and local residents alike.

2. Traffic management for Option 1 will be complex, creating a level of confusion, indecision and consequently an attenuated delay in traffic flow:

    a. This will have a negative impact on travel times and on air quality.

    b. People will avoid using this stretch of the A27 increasing the burden on local routes that are not designed to take a higher level of traffic.

    c. This will have a damaging effect on the economy of Arundel as there will be fewer shoppers and tourists during the construction phase.

    d. Over three years this will become habit, and people will avoid Arundel even after completion.

    e. Narrow running will increase the risk of accidents for vehicles, cyclists and pedestrians.

    f. Pedestrian crossing points will be limited adding to inconvenience.

    g. Multiple interfaces will need constant management and control but will still be exposed to failures in public or contractor behaviours in managing or complying with those controls. Unauthorised vehicles entering the works area are an ever-present risk in highway construction and are surprisingly common. This will impact the Highways England “aiming for zero” (health and safety strategy) and “raising the bar” initiatives.

3. Although Option 1 is a shorter route it will not necessarily be quicker to build. The existing route has been used as a conduit for existing utility services for many years (gas, water, sewage, power, telecoms, etc). Some will be known and many will be unknown and uncharted. These will have to be located diverted, or upgraded. This process is complex and will extend programme periods, cost and disruption. Onsite works will likely require

temporary traffic light control working due to the limited width of the working corridor and the need to cross the carriageway.

4. The construction corridor in Option 1 is narrow and construction productivity will be low. There will be a greater impact on the travelling public because of the movement of the construction interface. Some of the work may need to be carried out at night to enable road closures/single file traffic. Total road closure may be required for certain activities (such as installation of a new bridge over the River Arun.

5. Option 1 will not be as serviceable or maintenance free as a new solution. As the construction will be carried out in "bite size" pieces to maintain traffic flow, there will be considerably more interfaces and potential for weaknesses.

6. Option 1 will not remove the fundamental and conflicting traffic flows or subsequent potential for congestion. The Liss roundabout on the A3 which would be similar to the Ford road roundabout has significant tailbacks at peak times.

7. Option 1 will be least safe for road users as there is an "at grade" roundabout at the Ford Road roundabout. Options 3 and 5A will have grade separated intersections at the start and finish points which are safer.

8. Options 3 and 5A would be built almost entirely off-line and would be therefore be faster, safer, and much less disruptive to the travelling public and local residents (unless you live on the route of either of these options), and the construction workforce. Additionally these Options would result in less air pollution during the build.

9. Option 1 delivers £164,000,000 fewer benefits that Option 5A and £36,000,000 fewer than Option 3. Overall benefit of Option 5A is £650,000,000 (2.6 x £250M).

10. Under Option 1, the air quality in Arundel would worsen by 62%, whereas under Option 5A it would improve by 62% (in line with traffic numbers).

A27 Arundel Bypass

Comments of the South Downs Society

These are the comments of the South Downs Society, the **national park society** for the South Downs National Park.

We would stress at the outset that the current **consultation is fundamentally flawed** – as with recent consultations at other sections of the A27 – by being restricted to the remit of Highways England to the trunk road network. While some effort has been deployed on linking the proposed works to the wider networks of highways, rights of way and pedestrian and cycling desire lines, the overall transport and traffic issues facing Arundel, its surrounds and the rest of the south coast corridor are not addressed and will inevitably be impacted adversely. The proposals are aimed at bypassing an existing congested bypass to the intended advantage of through traffic, not at contributing to improving access to and from Arundel or the national park.

The consultation material acknowledges but does not adequately address the inevitable element of **induced traffic**. Whatever option is favoured as an outcome of the current work and consultation, there will be an increase in traffic encouraged to use the A27, adding to the existing problems, including poor air quality, at places like Chichester and Worthing/Lancing (where "solutions" are not imminent) and modal shift from rail to road (contrary to government transport policy). The increased threat to the **national park** from the growth of traffic along the A27, raising expectations of further road building in or adjacent to the park, and the additional contributions to "greenhouse gases" and climate change, are of great concern.

That said, the Society recognises the congestion issues at Crossbush, particularly for westbound traffic and is not opposed in principle to alleviating those problems provided any measures are compatible with the statutory purposes of national park designation and the duty on Highways England under Section 62 of the Environment Act 1995 to have regard to them.

The Society's appraisal of the route options will be based chiefly on the potential impact, for good or ill, in both short and long term, on the national park. In particular, the **special qualities** of the park, identified following extensive public consultation and participation, are at the heart of the planning consideration of any development proposals.

In summary these are:

** Diverse, inspirational landscapes and breathtaking views*
** Rich variety of wildlife and habitats*
** Tranquil and unspoilt places*
** An environment shaped by farming*
** Great opportunities for recreation and learning*
** Well conserved historical features and rich cultural heritage*
** Distinctive towns and villages, with community pride*

The South Downs National Park Authority has carried out various assessments of the impact of the scheme options on these **special qualities** of the national park. In general these provide detailed confirmation of Highways England's own assessment – that the environmental impact of all three options is substantially adverse. The Society fully endorses these findings.

Option 5A

The Society understands that, following our representations, a revised press release was issued by HE correcting its assertion that option 5A "passes between the national park and ancient woodland". The route does of course take a route **through** both the national park and ancient woodland, as well as the village of Binsted.

Unfortunately some respondents to the consultation may be unaware of this glaring inaccuracy and their comments on the environmental impacts may be inadvertently softened accordingly.

Nevertheless, local groups and residents have submitted and published a good deal of information on the wildlife, landscape, community and cultural impacts of this option, sufficient to avoid any belief that this option can be anything other than hugely detrimental to the **special qualities** of the national park, a national designation and planning imperative that would require a major justification – including lack of more acceptable alternatives – if it were to be pursued. This Society fully endorses these detailed findings.

Indeed, Highways England's consultation material identifies as **"major adverse"** in its own Environmental Appraisal the impact of option 5A on cultural heritage, landscape, nature conservation, geology and soils, "materials" and road drainage and the water environment. The EA also identifies a "permanent adverse effect on people, communities, farming and recreational businesses located south of Arundel". The EA identifies as the only "moderate to slight benefit" the prospect of improvement to air quality due to reduction of congestion at Crossbush and other points along the A27, but qualifies this by acknowledging that there will be a worsening of air quality at other locations. The EA fails to acknowledge the additional contribution to greenhouse gases from the overall increase in traffic along the A27 promoted by the various bypass options, including the additional traffic which will be experienced at the notorious areas of congestion on the Chichester bypass and at Worthing/Lancing as a direct result of improving traffic flow at Arundel.

As an organisation whose focus is the conservation and enhancement of the special qualities of the national park and their quiet enjoyment, **the South Downs Society strongly objects to option 5A.**

Option 3

Option 3 suffers from a similar Environmental Appraisal to option 5A. The EA identifies as **"major adverse"** the impact of option 3 on cultural heritage, landscape, nature conservation, geology and soils, materials, road drainage and water environment. It

identifies as “slight-moderate adverse” the “effect on people, communities, farming and recreational businesses located south of Arundel”. Identified as the only “moderate to slight benefit” is the prospect of improvement to air quality due to reduction of congestion at Crossbush and other points along the A27, but qualifies this by acknowledging that there will be a worsening of air quality at other locations.

As an organisation whose focus is the conservation and enhancement of the special qualities of the national park and their quiet enjoyment, **the South Downs Society strongly objects to option 3.**

Option 1

Option 1 clearly performs much the best in Highways England’s Environmental Appraisal of the route options. The impact on cultural heritage and nature conservation is described as **“major adverse”** while the impact in the areas of landscape, geology and soils, materials, noise and vibration, people and communities, road drainage and water environment are identified as **“slight-moderate adverse”.**

Much of the negative environmental impact arising from option 1 stems from the continuation of “improvement” works west from the Ford Road junction and into the national park.

Variations on option 1 have been put forward, in part following the alignment of route 1 but with wide single carriageway rather than double, a modest speed limit of, say, 40 mph and with different junction arrangements at Ford Road, facilitating journeys on foot or bicycle to and from the town centre and the national park. Such measures would appear to be consistent with those recently announced by HE on the A27 between Lewes and Polegate. There was strong public support in advance of the consultation for the inclusion of such variations – generally known as the “new purple route” -- amongst the options to be appraised and their omission reduces the value and validity of the current exercise.

Such an option would appear to offer a significant reduction in the current congestion at Crossbush and other points along the road but without the major environmental damage identified for the three options selected. In addition, such an option seems less likely to induce the extra traffic levels that are inevitable from the proposed “expressway” options with all the associated increased congestion at Chichester, Worthing/Lancing and elsewhere, the highly undesirable modal shift from rail to road, and the increase in greenhouse gases and contribution to climate change.

Conclusions

The South Downs Society **agrees with Highways England’s Environmental Appraisal**, that all of the options put forward would be **very damaging environmentally**, and especially to the **South Downs National Park.**

The consultation underplays the implications of the induced traffic arising inevitably from the proposals, the inevitably short term nature of any traffic benefits at Arundel as new traffic is encouraged to use this road, and the additional congestion which will be caused at points east and west on the A27.

The Society believes that, on the basis of the evidence so far provided, a Planning Inspector could not reach a conclusion that the tests in Paragraph 116 of the NPPF had been satisfied with regard to any of the options under consideration.

While the Society **objects to all three options** because of their acknowledged major adverse environmental impact, **options 5A and 3 score considerably worse than option 1.**

In addition to performing less poorly in environmental terms, we note from the documentation that **option 1 provides easily the best benefit to cost ratio.**

The Society would urge **fuller consideration** of what is referred to in the consultation documents as the wide single carriageway **"new purple route".** No adequate reasons are provided for rejecting it.

This response comes from The Wiggonholt Association, a registered charity (no. 1129002) and company limited by guarantee, whose objects include the protection of the built and natural environment of West Sussex.

1. The Arundel By-pass is part of the government's 2015-20 Road Investment Strategy for upgrading the country's road network to make it fit for the 21st Century. According to the Highways England consultation document, the A27 round Arundel is already operating at 100-150% of capacity and the situation can only get worse. Because of the resulting congestion and delays some long-distance traffic is being diverted away from the A27 to other roads north and south of the Downs which were not designed to cope with the volume of traffic. The document specifically mentions the case of traffic diverted along the A283 to Storrington, then down the B2139 past Amberley and over a very narrow bridge at Houghton before joining the A29 at the top of the hill.

2. Wiggonholt is a small hamlet situated on the south side of the A283 mid-way between Storrington and Pulborough. The Wiggonholt Association is thus well aware of the negative impact of through traffic on the A283/B2139 route, in particular the noise and vibration of HGV's along Storrington High Street which gets regularly congested at certain times of day. There is a further consideration, namely the very high levels of air pollution from vehicle emissions which have led to Storrington High Street being classified as an Air Quality Management Area. Unfortunately the traffic-calming and other measures being considered are unlikely to reduce the volume of vehicle emissions, more than 80% of which come from long-distance through-traffic, particularly of HGV's.

3. For the Wiggonholt Association the crucial consideration is how far the three options put out for consultation by Highways England would reduce traffic along the A283/B2139/A29 route. In the absence of estimates for the A283 and the B2139 the figures given in the consultation document for the A29 will have to serve as a proxy. On that basis we evaluate the three options as follows:

- **Option 1** would cost half as much as the other two and would consequently have the highest cost-benefit ratio (CBR) of 3.6. It would also have the least impact on the landscape and the SDNP. However the estimated reduction in traffic down the A29 would be minimal (5%). It would therefore fail to improve significantly the flow of traffic along the A27 and to alleviate the pressure on traffic to seek alternative routes.

- **Options 3 and 5A** would cost considerably more (£260 and £250 million respectively) and would have a lower CBR (2.0 and 2.6 respectively). Both routes would also go through the National Park and involve the loss of ancient woodland (rather more in the case of Option 3). However there is a clear difference in the estimated reduction in traffic using the A29 (23% for Option 3 as against 36% for Option 5A).

The Wiggonholt Association accordingly has a preference for Option 5A.

4. We are aware that major infrastructure developments such as new trunk roads will only be permitted in a National Park where they are essential in the national interest and there is no alternative. This is clearly the case as regards the Arundel By-pass which is part of the government's national road strategy (see above). In the light of the documentation submitted by Highways England we consider that **Option 5A** represents the least damaging option to the built

environment reasonably available (see Strategic Policy SD42 in the emerging South Downs Local Plan). However a difficult choice is imposed by the inevitable damage to the natural environment presented by this option. Our secondary choice would therefore be **Option 1.**

The Wiggonholt Association
(whose registered office is)
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If you need help accessing this or any other Highways England information, please call **0300 123 5000** and we will help you.

A27
Arundel Bypass
Report on public consultation

Appendix D8

Spring 2018
Appendix D8 – Stakeholder responses
Religious groups

St Mary's Binsted

St Mary's Vicarage, The Street, Walberton,
Arundel, W. Sussex BN18 0PQ

12 October, 2017

Dear Sir

A27 Consultation Option 5A

We are writing to you as the rector and churchwardens of St Mary's Binsted regarding the current consultation for the A27 Arundel bypass.

We wish to express our objection to Option 5A on the following grounds.

It would put a dual carriageway within 400 metres of the church on an embankment 6 metres high. This will turn the setting of the church and its active burial ground from one of peace and tranquillity to one of urban noise and pollution, making quiet contemplation impossible.

The church is a 12th century grade II listed building and is an important centre of village life. Binsted being a small community, the church can only survive by attracting people from outside the parish to the annual Strawberry Fayre which raises funds for the upkeep and repair of the building. The flint barn and field used for the fayre will be about 2-300 metres from the proposed road. The fayre is unlikely to survive in such close proximity to the road and this in turn will jeopardise the church's future.

More generally, the church and the village as a whole, survives by attracting people into it for recreation, worship and business. Binsted will lose its unique atmosphere and cease to be an attractive place for visitors, for example from Walberton next door. The National Park south of the present A27 will have a huge unattractive obstacle between it and its most frequent local users. We note that Option 5A actually runs through more new National Park land than Option 3 and should be rejected.

Finally the road will sever the village twice once at each end of Binsted Lane cutting off important houses from the church which is the centre of the Village and its life. They will no longer feel part of Binsted.

Yours sincerely

Pell Frischmann

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Highways England
Freepost A27 Arundel

11th October 2017

Highways England – A27 Arundel Bypass Public Consultation

We write on behalf of our client, The Church Commissioners for England (the Commissioners) in response to the A27 Arundel Bypass Consultation. The Commissioners control significant landholdings within the area which would potential benefit from improvements to the A27 have recently promoted a number of strategic allocation sites through the Arun District Local Plan.

The Commissioners are therefore supportive of the proposed identification of the A27 Arundel Bypass by Highways England within the 2015-2020 Road Investment Strategy. As the only east-west trunk road south of the M25 it is essential that this critical corridor is upgraded to serve both the existing coastal communities and the significant proposed investment in new developments throughout the area.

We fully agree with the aims of the scheme to:

- Considerably reduce existing queues and delays
- Improve journey times, air quality and road safety
- Support expansion and provide new employment opportunities
- Improve journey time reliability along the A27

In terms of the options for the A27 Arundel Bypass alignment whilst there are three options which meet the criteria of being 'affordable, offer value for money and help achieve the project objectives, we would like to express our support for both Option 3 and Option 5A which we believe deliver the greatest benefits for both the existing communities and the long-term development ambitions for the area.

We are concerned that Option 1 is compromised by the inclusion of non grade-separated junctions such as that at Ford Road roundabout which introduce both delay and potential congestion hotspots leading to less reliable journey times.

We are grateful for the opportunity to express our support for this regionally significant project for which we offer our full support.

Yours sincerely

On behalf of **Pell Frischmann**

Director, Transport Planning

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

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Arundel Bypass
Report on public consultation

Appendix E

Spring 2018
Appendix E – Stakeholder responses
Objection emails - template

WOODLAND TRUST

Dear Highways England,

I am concerned that you have proposed a new A27 bypass around Arundel where the three options under consideration all destroy ancient woodland.

Ancient woodland is a precious habitat, something that has taken centuries to evolve. It is an important home for wildlife and cannot be recreated or replaced.

I object to the three proposals you have put forward because they would see ancient woods and trees destroyed. Option 3 is particularly damaging, threatening 24 hectares of irreplaceable woodland habitat and must not be progressed.

Please think again about this bypass and if you believe an intervention is needed, make sure that it protects ancient woodland.

There is rare and valuable wildlife in these woods and threatened plant species too. Road solutions should always work in harmony with the natural environment and not against it.

We bend over backwards to protect buildings of cultural importance, but our ancient woodlands are inexplicably treated differently. They are equally important in a historical context, but also provide irreplaceable homes for our dwindling & threatened wildlife. They must be protected at all costs - once they're gone, they're gone forever.

FRIENDS OF THE EARTH

Dear Highways England,

I object to all 3 routes (options 1, 3 & 5a) because of the irreversible damage they would cause to the South Downs National Park and ancient woodland in the area.

I am very concerned not to see any low impact options as part of this consultation. I believe that a single carriageway version of option 1 would address the worst bottleneck issues, without causing the harm of the dual carriageway proposals.

I would like to see a new scheme that reduces traffic in the area and increases the use of public transport, walking and cycling.

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